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Editors

Second International Handbook of Educational Change

SECOND INTERNATIONAL HANDBOOK OF EDUCATIONAL CHANGE

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Second International Handbook of Educational Change

PART 1

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Introduction: Ten Years of Change

Ten years ago, generational researchers Strauss and Howe (1997) anticipated a great disruption when our world would take a great turning. After three earlier turnings that defined a time of prosperity, optimism, security, pragmatism, and social conservatism in the 1950s; a period of cultural and spiritual awakening in the 1960s and 1970s; and an era of individualism, self-centeredness, and general unraveling in the 1980s and 1990s, Strauss and Howe predicted a Fourth Turning which, they claimed, will be as dramatic as the last Fourth Turning in the Great Depression of the 1930s. This turning, they argue, brings economic collapse and financial ruin, insecurity and conflict, and a shaking of society to its very foundations, with the emergence of structures, cultures, and politics, as well as value and belief systems that are profoundly different on the other side. At the Fourth Turning, people start to turn outward again, beyond themselves, in search of the spirituality, sustenance, and support that can connect them once more to their fellow women and men.

Although the Fourth Turning is borne of crisis, it beckons with the prospect of great transformations and opportunities. Yet it does not show what these are. This is a defining moment for all of us. In the midst of a great global disruption when economies are collapsing, insecurity is everywhere and some are even saying that globalization is going into reverse, it is a time in economic and educational life either to pare down our budgets, reduce our ambitions, turn in on ourselves, and keep outsiders at bay or to embark on a new course that can lead us toward a better place, a new high point of inclusiveness, security, and prosperity. Education is an essential part of the second path.

It is time, now more than ever, for a New Way of educational change that is suited to the dramatically new problems and challenges we are encountering. This New Way should build on the best of what we have learned from the Old Ways of the past, including those of the past decade, without retreating to or reinventing the worst of them. It should look abroad for intelligent alternatives and be especially alert to those educational and economic successes that also express and advance democratic and humanitarian values. It should attend to the advancement of the economy and the restoration of prosperity but not at the price of other educational elements that contribute to the development of personal integrity, social democracy, and human decency. It has to be concerned with the furtherance of economic profit yet also with the advancement of the human spirit.

Ten Years After

This second edition of the *Handbook* contains chapters that show us the possibilities for positive change. The chapters within it come from leading researchers on educational change from around the world. What has happened to the field of educational change across this 10-year period that has brought us well into the twenty-first century? Have we seen great breakthroughs and synergies of strategy and impact along with impressive new results? Or, have educational reform strategies been just as much a part of the great unraveling of overconfidence and overreach as have the bursting bubbles of speculative investment and uncontrolled indebtedness?

As the editors, and as researchers of educational change in several countries over three decades, we believe that educational change and reform strategies and their accompanying research directions have become bigger, tighter, harder, and flatter.

These trends are evident in the grand designs of political reform strategies and also in the ways that professional communities in schools have developed and done their work. These very directions that have brought us to this defining moment of educational change, however, are not the ones that will get us productively beyond it, and so the second part of this introduction sets out some anticipated and alternative directions for the future.

Bigger

Following years of frustration developing promising innovations that existed only as outliers and failed to spread, of watching pilot projects be replicated only poorly when their designs were then mandated across a system, and of seeing that early implementation of changes rarely turned into full-blown, widespread and effort-less institutionalization, educational reformers began to look at more coordinated system-wide designs for reform – and research money increasingly followed them. School-based and classroom-based change was out; large-scale reform was in.

The earliest efforts were most evident in England and to some extent in Australia and New Zealand in the early 1990s. This was partly a response to the incoherence and inconsistency of preceding decades, but also an ideological onslaught on the educational establishment, as they were called, of teachers and university education professors who were deemed to be responsible for the unfocussed approaches to educational progressivism that politicians and the business community along with an increasingly irritated public associated with the economic decline of the 1980s. The mechanisms of change to bring about this ideological shift were the introduction of market competition and league tables of performance between schools, a return to traditional models of curriculum and teaching through closely prescribed curriculum contents and standards sometimes accompanied by scripted and paced models of literacy and mathematics instruction, pervasive systems of educational testing that were tied to the curriculum basics and to the criteria for market competition, and intrusive systems of surveillance by external inspection. All these were linked with

high-stakes consequences of public exposure, administrative intervention, and even enforced closure for schools that performed badly.

Some years later, these basic principles and practices were largely replicated in the US federal reform strategy of No Child Left Behind with its similar emphasis on test scores, competition between schools and other education providers, and severe consequences for schools that failed to meet the legislation's compressed time lines for improvement.

Research findings reflected mounting professional and also public dissatisfaction with the limitations of this large-scale model, in terms of overemphasis on basics, teaching to the test, concentrating only on those borderline students who could offer hope of quick test-score gains, problems of recruitment and retention among teachers and leaders, and a tendency for initial test-score gains to reach an early plateau. In response, while other reformers and their research-driven supporters stayed with the large-scale reform agenda, they also looked for other sources of inspiration to improve it.

The trailblazing work of New York District 2 under the inspirational leadership of Anthony Alvarado was a key influence here. Approvingly advocated by Elmore and Burney (1997), this model of district-wide change developed a clearer, stronger, and more pedagogically constructive focus on instruction backed up by high-quality materials, a network of high-quality instructional literacy coaches, a concentration on turning principals into instructional leaders who were also required to discuss their learning and difficulties together, a system of monitoring and inspection using administrative "walk-throughs," and a clear link to transparent test-score results.

Efforts to undertake direct transplantations of this model – like all attempts to clone educational changes exactly – proved disappointing as Mary Kay Stein, Lee Hubbard, and Bud Mehan have demonstrated on the attempt to implement the District 2 model in San Diego under conditions of lesser resources, greater scope, a different political climate, and shorter time lines (Stein, Hubbard, & Mehan, 2004). But principles and practices derived from District 2 started to surface among other large-scale reform advocates who wanted better and more lasting results, a closer connection to pedagogy and instruction and better ways to engage and support teachers and leaders in the change effort.

In England, there was a similar trend during the second term of the Blair government, when there was a concerted policy effort to personalize learning, build a stronger focus on enhancing teacher professionalism, make assessment and accountability more formative, and build stronger forms of collaboration between schools (Hopkins, 2007). So although Sir Michael Barber's (2007) delivery strategy tightened the national focus around literacy and numeracy, it also increased levels of support for teachers in terms of materials, finance, and technical coaching and paid increasing attention to leadership development, especially through the establishment of a National College for School Leadership.

In Ontario, continuing commitment to test-based educational accountability was supplemented by a range of system-wide initiatives that built capacity for improvement and provided professional support. Alongside the idea borrowed from England

of making tested literacy and numeracy linked to political targets for improved performance the centrepiece of its reform strategy, the province added thousands of new teaching positions to reduce class sizes in the primary grades and “student success teachers” were designated in every high school to assure that each student would be well known and supported by at least one school staff member.

At its core, the Ontario strategy focused capacity-building at the school and district levels through the support of a Literacy Numeracy Secretariat and used achievement results as a nonpunitive but specific stimulant for further reform. Like New York District 2 and England, large teams of consultants and coaches worked alongside teachers with the support of quality materials. Teacher unions were allocated \$5 million to spend on professional development, successful practices were networked across schools, and underperforming schools were encouraged but not compelled to seek assistance from government support teams and higher achieving peers.

Tighter

Proponents of large-scale reform models that also offer increased support, capacity-building, and professional involvement claim that in general, bigger has been better. Authoritative independent evaluations of the Ontario experience are just starting to emerge, but the evidence from England is uneven although the trends remain positive.

In any walk of life, the more that control and intervention are orchestrated from the top, the tighter the focus must become in terms of what has to be controlled. The wider the scope of action, the more that trust, decision-making, and responsibility must be devolved downwards – what is known as the principle of subsidiarity. There are simply never enough resources to permit close control of everything from above.

The answer to this conundrum among large-scale reformers has been to establish a tight focus for control and intervention. Hence, the growing consensus has been to concentrate policy efforts, curriculum development, instructional training, intervention strategies, and improvement plans on raising test scores and narrowing achievement gaps in the tested basics of literacy and numeracy (mathematics) along with secondary school examination results.

For a while, these strategies have increased consistency across the system, heightened the sense of urgency about rectifying underachievement and mobilized support to do so, and sometimes secured public reassurance as well as political credibility in relation to the standards agenda. Early improvements are rarely sustained, though, and their validity is often contested on the grounds that results are achieved by teaching to the test and by initially low test baselines through deliberately poor preparation and hasty implementation which is only then followed by training and support – so that what appears to be an improvement is actually a recovery.

The greatest problem of the tight focus on tested and standardized basics, though, is that the efforts and activity of teachers and schools concentrate overwhelmingly on these high-stakes areas and neglect developing a curriculum or a pedagogy

that will prepare students with the twenty-first century skills and capacities that are essential if we are to transform our economies and communities into creative, competitive, and inclusive knowledge societies. At the very beginning of the century, the Organization for Economic Cooperation and Development (OECD, 2001) advocated a shift in educational reform strategy toward developing these new competences and capacities. Hargreaves (2003) built on its argument and set out the case for knowledge society schools that emphasized the skills of creativity, innovation, flexibility, problem-solving, and teamwork that would fuel entrepreneurial initiative and that also promoted the skills and dispositions of inclusiveness, emotional development, community-building, and cosmopolitan awareness that are integral to social democracy. Wagner's (2009) book on *The Global Achievement Gap* also echoes the advocacy for twenty-first century corporate skills. A high-profile US Commission convened by the National Center for Education and the Economy (New Commission on the Skills of the American Workforce, 2007) that includes leading superintendents, CEOs, and two former Secretaries of Education also complains that America's obsession with tested, standardized basics is destroying its capacity to be economically creative and competitive.

The most assessment-obsessed Anglo-American nations, the United Kingdom and the United States, actually rank last and next to last on UNICEF's (2007) 21-country list of child well-being. A formidably funded and influential review of UK primary education at Cambridge University (BBC, 2009) concludes that England's reform directions have stripped innovation, creativity, and the most basic needs of child exploration and development out of young children's curriculum as all teachers' energy has been targeted toward government tests. Even the UK government's own review body points to some of the same conclusions (BBC, 2009).

In the face of global economic collapse, the dubious path of narrow standardization is now one that only educational and economic ostriches and lemmings will follow as they blindly race over the edge of an economic precipice. The ironic effect of international interest in large-scale reform is that it has exposed how the countries and systems that have actually been most successful educationally and economically are ones that provide greater flexibility and innovation in teaching and learning, that invest greater trust in their highly qualified teachers, that value curriculum breadth, and that do not try to orchestrate everything tightly from the top (Darling-Hammond, 2008; McKinsey, 2007).

High performing Singapore emphasizes "Teach Less, Learn More" and mandates 10% "white space" for teachers to bring individual initiative and creativity into their teaching. Finland – the world leader on results in the Program for International Student Assessment (PISA) tests of sophisticated, applied knowledge in mathematics, science, and literacy, as well as on international ratings of economic competitiveness – avoids national standardized tests altogether and reaches high levels of achievement by attracting highly qualified teachers with supportive working conditions, strong degrees of professional trust, and an inspiring mission of inclusion and creativity (Hargreaves, Halasz, & Pont, 2008). The Canadian province of Alberta, which tucks in just behind Finland in international PISA rankings, has secured its success, in part, by partnering with the teacher's union to develop a

9-year initiative in school-developed innovation (the Alberta Initiative for School Improvement) that involves 90% of the province's schools.

Even in the Anglo-Saxon nations, the tide of narrow standardization appears to be in retreat. Many parents and teachers in England object to young children being the most tested in the world, that country's government has put an end to all standardized testing in secondary schools, and Wales has abolished national testing altogether up to age 14 (Hargreaves & Shirley, 2009). We are at the end of a decade of large-scale limitations. The question is, What might come next?

Harder

The decade of large-scale reform has also been a decade in which evidence has replaced experience; hard data have pushed aside soft intuition and judgment. Data-driven instruction and improvement have become de rigeur elements of Anglo-American approaches to educational reform.

At first, data on student performance in examinations and standardized tests were used as crude ways to rank schools publicly and competitively, inform parent choice, pit the strong against the weak, and shame the poorest and weakest performers into pulling their socks up. Later, many countries worked at making the database more sophisticated. Progress measures were developed so schools could compare present performance to past achievement, and achievement results were contextualized in relation to the kinds of communities in which they were located. Schools could compare themselves against similarly placed peers and contact ones that were performing more strongly to access help and assistance. Many schools then started to use data to drive improvement internally. Departments were compared with departments, boys with girls, majority with minority students, second language learners with others, and so on – so that teachers could identify where they needed to concentrate their efforts and make timely interventions. Achievement data were also shared with individual students in regular one-to-one meetings to manage and monitor their progress and set goals with them for the future.

Data-driven improvement has become an integral part of the movement to develop schools into being professional learning communities (PLCs), where teachers use data and other evidence to inquire into their practice and its effects on students and make needed improvements together to address the shortcomings that they find. In the best or most advanced PLCs, a wide range of quantitative and qualitative data are used as a regular and effortless part of collective practice to inquire continuously into practice in the classroom, department, or entire school so as to keep improving in order to raise standards of achievement (Datnow, Park, & Wohlstetter, 2007).

While these developments have undoubtedly concentrated teachers' energy and efforts on identifying and responding to struggling students and groups of students who need their help the most, the enthusiastic adoption of data-driven instruction and improvement has also introduced some risks and drawbacks.

First, instead of merely respecting the value of data and objective evidence as opposed to subjective intuition, schools and systems have sometimes come to revere

it above all else. In sport, Lewis (2004) has demonstrated how the Oakland A's baseball team made the playoffs each year on a low budget simply by taking the statistic that most predicted season-long success – how often a batter reaches first base – as a basis for recruiting new players, even when those players did not intuitively strike coaches as being the most athletically likely prospects. By comparison, work on how organizations, including sports teams, achieve performance above expectations has pointed to inadvisable and ineffective ways that clubs push players to improve performance by setting targets for how many digitally tracked steps they take during a game, for example (the players simply cheat by taking more steps on the sidelines) (Hargreaves & Shirley, 2009). And Lewis (2009) again has put the other side of the evidence-based argument by highlighting one of the United States most successful pro-basketball players who consistently lifts team performance when he comes on court but whose highly complex and subtle contribution cannot be measured by any existing statistics. Sometimes the objective evidence is a good counter against intuitive judgment, but sometimes it is also insufficient, unhelpful, or just plain wrong. Experience and evidence need to be discussed in dialogue together without privileging one over the other.

Second, the quest for more and more detailed data to guide every action and decision can become obsessive and excessive. The origin of this approach is in the business practice of World Class Manufacturing which is actually a methodology of improving quality by disaggregating every part of the production process into miniscule, granular data and detail so that attention is paid relentlessly to improving every tiny aspect of that process. Numerous targets set yearly, monthly, and even weekly have red, green, or amber lights attached to them as indicators of whether or not they need real-time attention. Increasingly, frequent management of student progress and school improvement by constantly disaggregating data and targeting interventions in real time to underperforming groups or subjects represents the application of this philosophy to education. This data-driven intervention strategy can nip performance problems in the bud, but it can also divert teachers' attention and energy on to short-term tasks in easily measurable indicators of achievement and away from longer-term engagement with teaching, learning, and students within more complex sets of lasting relationships.

Third, while the best, most mature PLCs integrate and embed evidence-informed inquiry into the daily work of teaching across the curriculum, the imposition of top-down high-stakes assessments in narrowly defined basic areas such as literacy and numeracy drive many PLCs into taking a much narrower and more artificial focus. In practice, although the scope for PLCs is wide, most studies show that a majority of their activity concentrates on teachers looking at spreadsheets of student test scores together after busy days at work, then devising swift solutions to bring about the rapid improvements that will keep the forces of accountability at bay (Datnow et al., 2007; McLaughlin & Talbert, 2006).

While business and sporting organizations take metrics and indicators of improvement very seriously, there is little dispute among staff about the validity of those metrics in relation to what the organizations are trying to achieve – customer satisfaction, or the degree of stickiness that customers show in staying with a company's Web site, for example. In an age that needs to embrace innovation and

creativity, the test-score metrics by which educational performance is measured are not appropriate to knowledge society goals or to many valuable educational goals more widely. So the practice ends up being distorted to fit the cheap and available metrics of test scores, rather than metrics being designed which are widely agreed as being valid in reflecting the deeper and broader goals of high-quality practice.

Flatter

In education, the work is increasingly flat. The aim is to narrow achievement gaps – to intervene so that girls catch up to boys, for example, and then so that boys can catch up to girls. These are worthy goals, but not when they are pursued relentlessly so that when any gap opens up, the immediate response is to close it. This creates a myth of the gapless school where all and any gaps, like orthodontically perfect and characterless smiles, are the target for immediate attention and elimination.

In the 1960s, Young (1958) wrote a fable on *The Rise of the Meritocracy*. It depicted a society in which the goals of meritocracy had been perfectly realized – one in which everyone reached their potential and was rewarded accordingly. The result was that in a society which continued to value and reward occupations unevenly, everyone came to the often-depressing conclusion that what they got or didn't get was entirely what they deserved – a pure and incontrovertible reflection of the talents and abilities they had been allocated at birth.

Ten Years More

In most of the Anglo-American group of nations, the last 10 years have been marked by high-stakes and large-scale attention to tested basics and secondary school examinations, in which objective test-score data drive increasingly detailed and granular efforts at improvement in an attempt to close all gaps wherever they appear. It is increasingly clear that these emphases cannot develop or deliver the essential learnings that are integral to the creative and innovative knowledge societies that are our best bet for extricating ourselves from the collapse of the existing global economy.

So what directions and developments might educational change policy, practice, and research take instead? We offer the following suggestions:

First, the collapse of the global economy will grab people's attention into adopting educationally driven strategies like those of Finland in turning round to become successful and competitive knowledge economies. Standardization will go into decline and innovation will emerge in its place. At first, this will appear as supplements to the existing diet of standardization – in after-school curriculum activities, or sheltered time for creativity or interdisciplinary studies within an otherwise standardized environment. But eventually, policymakers will have to concede that innovation and creativity require different, more flexible conditions of teaching, learning, and leadership than those that have prevailed in the managerial era of test-driven and data-obsessed educational reform. At the same time, as part and parcel

of the pursuit of innovation, evidence-informed decision making will result in the consolidation of high-yield instructional strategies. The development of the teaching profession will entail incorporating a growing body of sound practice and knowledge. Around these ideas we will need to learn once more how to spread innovation through networks, relationships, and interaction and to do this more effectively than in the 1960s and 1970s.

Second, at the end of the age of materialism and of “selfish” forms of capitalism (James, 2008), we will ask bigger questions about the goals of education – about how we are preparing the next generations. Technical preoccupations with narrowing achievement gaps in the tested basics and vague allusions to developing “world class schools” that are actually importations of the technically driven principles of World Class Manufacturing, will give way to goals that embrace the forms of innovation and creativity, and the identification of effective practices that are essential for advanced knowledge economies, and the virtues of empathy and community service that are integral to more “selfless” forms of capitalism.

Third, we will or should witness the decline of the district and of district-driven reform. This will be replaced by districts fostering the creation and spread of promising practices. Teachers can only really learn once they get outside their own classrooms and connect with other teachers. This is one of the essential principles behind PLCs. Likewise, schools can only really learn when they connect with other schools – including ones outside their own immediate district. Many districts are too small to enable that learning. Others are hierarchical, bureaucratic, excessively politicized and controlling – with connections to other cities and districts being orchestrated and patrolled only by the most senior district staff who then filter what their own staff should be permitted to learn. A learning society requires schools that can connect with and learn from other schools beyond the confines and bureaucratic controls of their own districts. Without these developments, schools will become increasingly isolated and anachronistic – ill-equipped to prepare their students and themselves with the flexible learning and adaptation to change that are vital to twenty-first century economies. For this reason, face-to-face and virtual school networks that stretch across and between districts can and should become a key research and reform priority in the coming decade.

Fourth, the greater proportion of effects on student achievement comes from outside the school. Yet, being afraid to challenge parent electors about their practices and responsibilities with their children at home, policymakers have concentrated almost all their improvement efforts on the school alone – trying to improve performance within what is actually the lesser variable of influence on student achievement. The end of materialism, however, is now bringing community spirit and community responsibility back in. The highest performing nations like Finland, Singapore, the Netherlands, and Russia maintain high achievement by supporting their children in families and communities as well as in schools. Policy developments that combine district leadership with responsibility for other children’s services in England are an attempt to move in the same direction. So are extended day schools, full-service schools, and community schools in other countries. In the coming decade, we will learn and commit to the idea that the strongest

and most effective schools are the schools that work with and affect the communities that affect them – schools where educational leaders are also effective community leaders. This will signal an end to the misdirected assumption that all responsibility for improvement falls exclusively on the shoulders of teachers and their schools.

Fifth, management that assists the delivery and implementation of policies will give way to leadership that can build innovative professional communities. Especially challenging here will not be the task of preparing new leaders but of converting existing ones who had been appointed and had learned to survive in conditions of competition and managerialism. How to change managers responsible for faithful delivery into leaders capable of inspiring self-initiated innovation and creativity will be one of the major strategic and research tasks in the era of post-materialism and post-standardization.

Sixth, as the boomer generation retires and moves on from teaching and leading, it will be replaced by the more direct and demanding generational successors of Generation X and even more of Generation Y – sometimes called the Millennial generation (Howe & Strauss, 2000). This generation, now in its 1920s, is already introducing ideas and incorporating technologies that are closer to the cultures of today's children and youth. But it is when this generation move into leadership in great numbers toward the end of this next decade that Millennial leadership styles – more swift, assertive, direct, team-based, task-centered, and technologically savvy – will finally bring about the classroom and organizational transformations that are necessary for twenty-first century schools. A key research priority in the coming years should be on the nature and needs of the Millennial generation in teaching and leadership within our schools.

Last, global conditions of economic collapse call for greater prudence in educational spending. With financial support for learning and teaching in jeopardy, it is demonstrably no longer prudent or sustainable to finance pervasive systems of standardized testing of all students across many curriculum areas, at multiple age points by a census. Effective corporations only test samples of their products in order to ensure quality control. It is bad business and a waste of profit to test more than this. We will need to grasp that this principle also applies to education as many countries like high-performing Finland and New Zealand already accept. The excuse that industrial products don't have parents but students do as a justification for testing everyone is already on the wane with parent opposition to testing in Britain already leading to its abandonment in Wales and reductions in its scope and impact in England. Standardizing testing by census is a financial and political indulgence we can no longer afford and one that electors are increasingly opposed to. It is time to research, develop, and implement strategies of assessment that are equally accountable but economically less expensive.

The coming era of educational change needs to be an era of reduced commitments to grandiose designs and granular micromanagement of top-down reform in favor of an age of innovation and inspiration in a post-materialist world where people are increasingly prepared to look to each other in building a more hopeful and innovative society together, rather than acquisitively and self-indulgently looking only to their own families and themselves. As the Millennial generation moves into

leadership, it will eventually bring about these transformations almost naturally – it is the responsibility of the rest of us in the coming years to reflect on our past policy excesses of top–down control and prepare the ground in a post-materialist and post-standardized system and society for those who will follow.

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Part I
Theories of Change

Better Schools Through Better Knowledge? New Understanding, New Uncertainty

Karen Seashore Louis

As I pointed out in the first edition of this handbook, theories of knowledge utilization and educational improvement have been closely linked since Havelock's (1969) classic literature review. This connection is also apparent in practice. On the one hand, school improvement depends on the implementation of new ideas – in the form of both programs and policies – about school organization and instruction; on the other, the refinement of theories about knowledge use depends on having schools that serve as natural loci of experimentation and change. Over the past several decades, explicit attention to dissemination and knowledge utilization have dropped from the agenda of most scholars interested in school reform and have been replaced with related but new concerns, ranging from the spread of comprehensive models to organizational learning. The purpose of this chapter is to review theories that may help to connect research on knowledge utilization with research on educational improvement. The analysis presented here assumes that the reader is familiar with the broad outlines of both school improvement and school effectiveness research (Hopkins, 2001; Sammons, 1999; Schmoker, 1999; Teddlie & Reynolds, 2000), but less familiar with research traditions related to knowledge utilization.

In the first section of this chapter, I briefly review the “state of the art” in knowledge utilization theory, and discuss how it is connected to both school effectiveness and improvement research streams. I will briefly discuss why the dominant and the challenging paradigms for knowledge utilization are not adequate to explain observed phenomena relating to knowledge flow and use in education. In the second section, I examine emerging perspectives that have the potential for altering the way in which we analyze and interpret the observed phenomena discussed in the first section. Most of the examples used in this chapter are based on research carried out in the United States, but as I note throughout, they appear to be applicable in European Union and OECD countries.

In reviewing new ideas that contribute to our understanding of knowledge utilization, it is critical that we maintain the thoroughly interdisciplinary base of this field.

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While various writers may approach the problem of putting knowledge to work for the betterment of individuals – and/or societies – with different lenses, major reviews of the field, such as Rogers (1983) or Glaser, Abelson & Garrison (1983), demonstrate that high quality research and ideas come from disciplines ranging from agriculture to political science. The most recent review focuses on the use of behavioral and social science and draws on a wide range of experts from the media, public interest groups, and others whose focus is on dissemination (Welch-Ross & Fasig, 2007). This chapter cannot, of course, range as broadly as these synthetic reviews, and since my objective is primarily to stimulate thinking about theory, I will confine myself to a few viewpoints from political, historical, organizational, and cognitive learning theory. In each case, I will briefly illustrate how the knowledge utilization perspective is reflected in current school improvement or school reform issues.

I then turn to some elements of an intersection between knowledge utilization theories and school improvement theories that may drive us forward to a synthetic model of dissemination and utilization (D&U) that represents a paradigm shift rather than a paradigm revolution (Kuhn, 1970). Some suggestions about practical implications will also be made.

State of the Art

In 1997, when the first edition of this handbook went to press, it was the beginning of an era that posed serious challenges to the way in which educational researchers thought about change. The era of research-dissemination-diffusion-utilization (RDDU), which assumed a linear relationship between the production of new knowledge and its appearance in practice, was sharply challenged by more constructivist ideas about the relationship between knowledge production and knowledge use. Although this body of research was never as simplistic as latter-day critics contend, many studies led to the conclusion that there was no simple, direct line between knowledge production and utilization, the assumption of unidirectionality in influence dominated both policy and practice (Havelock, 1969).

Renewed D&U Theory: Bringing the “User” Back in

Huberman’s review of the “state of the art” in the mid-1990s began with the accepted assumption that there is a “gap” between research knowledge and practitioner knowledge that can be bridged with calculated interventions. (See Huberman, 1994, whose work was carried out in the United States and Switzerland) Early efforts to do so have long been viewed as hyper-rational due to their assumptions that (1) the flow of knowledge should be largely one-way, from the research community to the practice community; and (2) that more sophisticated forms of knowledge packaging and communication strategies would reduce, if not eliminate, the “gap” between what was known and what people did. Huberman noted the many challenges to a rational

model of knowledge use but chose to review the subtleties of the existing paradigm, arguing that five factors explained why some knowledge becomes common practice in schools, while other new ideas are rejected. These include:

- *the context of research*, including characteristics of the knowledge base and the motivation of the researcher to disseminate to practitioners;
- *the user's context*, including factors ranging from perceived needs to the perception of the value of the research information;
- *"linkage mechanisms"* between researchers and practitioners during the production and utilization phases;
- *the impacts of context and linkages on resources*, including attention, time, and acceptability of the research; and
- *the amount of effort* expended creating an appropriate environment for use, which includes both the amount and quality of dissemination effort, the "usability" of the knowledge, and the quality of planning and execution in the school or district.

Huberman focused on the role of reciprocally influential relationships in the process of knowledge utilization (Huberman, 1999), but his perspective is consistent with the main lines of dissemination research during the 1980s and 1990s, which emphasizes the dispersion of knowledge to multiple sites of practice. This perspective was reflected in programs and initiatives in a number of contexts, particularly those that emerged from the school effectiveness research tradition. For example, beginning in the late 1970s in the United States, there were a number of efforts by regional educational laboratories and individual entrepreneurs to develop research-to-practice models that translated the results of the effective schools and effective teacher research into training and support programs for local schools. Similar experiments involving collaboration between schools, trainers, and researchers were conducted in other countries (e.g., the middle schools reform efforts in the Netherlands). Thus, Huberman's review makes a bridge to alternative perspectives by emphasizing the importance of mutual influence. Huberman notes that researchers and practitioners may have a reciprocal influence on each other and suggests that the need for sustained interactivity to promote research/knowledge utilization is consistent with some elements of the contemporary constructivist approach to teaching. The latter asserts that practitioner knowledge is constructed, largely by individuals, both through reflective practice (Schön, 1983) and through more disciplined inquiry, such as action research (Carr & Kemmis, 1986; Cochran-Smith & Lytle, 1999b).¹

Even with the modest adjustments posited by the need for mutual interaction, policymakers in most countries continue to believe that, with proper sticks and carrots, schools can be encouraged (or required) to become better consumers of

¹Huberman also notes that the constructivist teaching models emphasize the need for knowledge from "outside sources," whether generated by research or through teacher inquiry, to be filtered through an interpretive individual lens.

“good research results” and programs or policies that they believe are research-based. In the United States and other countries, efforts to develop “comprehensive” school reforms that combine a research base and technical assistance for change have consumed considerable resources and energy on the part of governments, private agencies, universities, and schools. The literacy and numeracy initiatives in England stand out as clear examples of efforts to create systems change through knowledge use (Brown, Askew, Millett, & Rhodes, 2003). Still, evidence continues to mount that the “packaging” of ideas into user-friendly modules continues to reveal that there is never enough knowledge in the package to eliminate problems in use (Hatch & White, 2002) and that “co-construction” of knowledge, combined with shifting policies and resources outside the school, creates further complications and erosion of effort (Datnow, 2002). This seems to be characteristic of not only schools, but other public agencies (Landry, Lamar, & Amara, 2003).

Postmodernist Challenges to Traditional Thinking²

In 1997, the greatest challenge on the horizon seemed to be from “postmodernist theory” that provided a sharp critique of the renewed conceptual framework presented in Huberman’s review (Watkins, 1994). Watkins begins with the observation that teachers construct knowledge as they go about their work, particularly when they engage in professional discussions around their own practice. Like many constructivists, he then goes on to equate daily efforts to solve classroom problems with research – research that is highly contextualized because it is grounded in experience. The school’s process may appear nonlinear and random to outsiders, but constructivists accept that all knowledge is “local” (Geertz, 1983), contested, and partial and political (influenced by the interests of those who develop or use it).

The extreme assumption – that research knowledge is not useful to teachers – has been largely abandoned. However, given the weak results of formal R,D,D and U efforts, many researchers on both sides of the Atlantic agree that it is simply good practice to have educational practitioners involved in debating, selecting, and co-constructing practice implications (Ainscow, 2005; Cochran-Smith & Lytle, 1999a), or a modified form of postmodernism. One clear example is in policy initiatives in Europe, Canada, England, and New Zealand and Australia that attempt to foster learning communities among principals and teachers under the assumption that the right combination of reflective discussions, research-based knowledge, and motivation will lead to school improvements (ETF, N.D; Jackson, Cordingley, & Hannon, 2006; Stoll & Louis, 2007).

²Andy Hargreaves notes that one may whole-heartedly agree that we live in a postmodern era, defined by a radical shift in the nature of economies, employment, and social relations, and disagree with many of the propositions put forward by self-style postmodern thinkers (personal communication).

The notion that local invention in response to local conditions is also part of the persistent policy thrust in several countries toward deconcentration and decentralization. The “charter schools movement” in the United States, for example, is promoted as an antidote to centrally managed effectiveness programs that don’t work. Proponents of charter schools, which are typically new schools founded by groups of teachers and parents, assume that improving educational performance requires invention at the lowest level, not the diffusion of centrally developed and approved ideas. This assumption has driven public-policy options in many countries, ranging from Sweden to New Zealand, based on the belief that the role of central governments is to set standards, and the role of local agencies is to figure out how to meet them.

Organizational Learning

Another wrinkle added to the knowledge utilization puzzle in the 1990s emerged from the influence of Peter Senge’s work on organizational learning (Senge, 1994). The idea of organizational learning drew on a deeper knowledge base in the management literature, which pointed out, for example, that there were real differences between change that was induced by nondeliberate and random adaptation and change as a result of collective learning (Fiol & Lyles, 1985), and that learning implied both a set of conceptual frameworks through which information was processed and required the ability to learn from multiple sources (Levitt & March, 1988). Senge’s contribution was to look at how organizational conditions shaped deliberate consideration of new ideas. In addition, there was immediate interest, based on his and others’ work, in applying the idea that organizations can learn – from experiences and knowledge produced outside their boundaries to public agencies, including schools (Busenberg, 2001; Mahler, 1997; Senge, McCabe, Lucas, & Kleiner, 2000).

The importance of organizational learning as a challenge to the traditional D&U model is threefold.

Outside vs. inside knowledge. Like the postmodernist perspective, the organizational learning perspective presents a challenge to the notion of knowledge as something created outside of the school and then “implemented.” Knowledge comes from multiple sources, includes experience as well as research. Thus, research (expert knowledge) becomes one competing resource and needs to be factored in with other sources such as (Huber, 1991, p. 88):

- drawing on knowledge available at the organization’s birth (what other similar organizations have done),
- learning from experience,
- learning by observing other organizations,
- grafting on to itself the components that possess knowledge needed but not possessed by the organization, and

- noticing or searching for information about the organization's environment and performance.

Only the last two of these categories have the potential for including formal research-based knowledge.

Ambiguous quality standards. Unlike the first two perspectives, no source of knowledge is inherently privileged over other sources, whether change occurs as a result of considering new information is dependent on the particular circumstances in which the organization finds itself (Morris & Moore, 2000; van de Ven & Polley, 1992). For example, organizations that are experiencing a strong threat may be more inclined to “learn” rather than to “adapt” – if they change at all. In addition, organizations that are in an early phase of a major change process may be more likely to engage in intuitive experimentation, leading later to more purposive search and analysis that might be more clearly indicative of collective learning.

The centrality of process. The organizational learning framework, unlike the renewed D&U model or postmodernism, raises important questions around the culture of the organization along multiple dimensions, including the presence of multiple processes for dealing with new information. Experience matters, but organizations can't learn if they don't have a “learning culture” that includes features such as a willingness to experiment or improvise, cooperative rather than competitive teams or subunits, and processes for reflection and turning consensus into action (Edmondson, 2002; Huber, 1991; Miner, Bassoff, & Moorman, 2001; Pisano, Bohmer, & Edmondson, 2001).

A Critique of Postmodernism

The debates between “objectivist modernists” and “constructivist postmodernists” are based in competing assumptions about science and the nature of knowledge, in which both groups fail to reflect on the conditions of inquiry or practice that are related to the knowledge use in schools. There are also some similarities between the two: both focus on the nature of knowledge and assume, for the most part, that formal knowledge is currently produced by researchers, and knowledge utilization, whether formal or informal, takes place in the work of practice.³ In other words, as Huberman posits, there is “a gap.” In fact, both also acknowledge that the picture is more complex but have not built a theoretical base that incorporates the complexity that they acknowledge.

Postmodernism appears, on the surface, to be more flawed than the revisionist versions of traditional theory. Most basic scientists have long ago given up the straw man of radical empiricism, while it is hard to imagine most practitioners accepting the contention that their classroom practice is guided only by their

³See Dunn and Holzner (1988) for a postmodernist perspective on dissemination that is explicit about this assumption.

own interpreted experience. Furthermore, some observational empirical evidence suggests that, although there is a gap between what researchers think they know and how users and practitioners of various sorts behave, there is also considerable activity around knowledge utilization that does not obviously involve dark efforts to impose ideas on a passive audience.

The organizational learning perspective is appealing for a variety of reasons. It focuses clearly on the “research consumer” as a collective body, and thus fits neatly with our assumption that “the school is the unit of change” (Cuban, 1990; Fullan, 1985; Spillane & Louis, 2002). In addition, it is flexible, and allows us to think about what constitutes knowledge and knowing using our now well-embedded constructivist lenses. All in all, it feels more contemporary. It is not, however, without limitations. First, it provides us with weak guidelines for assessing what constitutes “good” knowledge for improvement. In a school setting this is a particular drawback, because judgments are always being made about the quality of what is “known” in education, whether the topic concerns the best way of teaching mathematics or the best way of assessing student learning. Thus, the organizational learning perspective has an abstract quality that bears in only a limited way on the complex, high pressure world of practicing educators. A second drawback is the limited research base: We don’t know how different kinds of knowledge actually fit into the change decisions that are made by schools, nor what the implications are of the variations in knowledge for the improvement of outcomes.

An Increasing Emphasis on “Scientific Knowledge” for Policy Decisions

One thing is clear: None of the controversies surrounding theories of knowledge use have damaged “science” at all. Around the world, governments are placing more rather than less emphasis on the importance of rigorous research and “evidence-based” innovation in education, and scholars are also calling for more high quality designs, both quantitative and qualitative (Feuer, Towne, & Shavelson, 2002; Maxwell, 2004; Wolter, Keiner, Palomba, & Lindblad, 2004). In many disciplines other than education, scholars are eagerly sought out for the potential commercial value of their ideas (Blumenthal, Causino, Campbell, & Louis, 1996). The value of a scholar’s “sticky knowledge” – Hippel’s (1994) term for the insights from research that is not published, but can be communicated – is also apparent in education, where some researchers are in high demand among the practitioner community. This knowledge is not always purveyed by social scientists and educational developers, but the fact that some of our knowledge is not viewed as useable does not obviate observations that research finds its way into educational practice.

If we see many examples of educators looking for or using externally generated knowledge as if it had real meaning, then postmodernism’s argument that all knowledge is local must be flawed. Similarly, if we see that most knowledge from the outside is viewed as suspect – or at least imperfect – until other additions have

been made to it, then modernist/positivist views are also problematic. Although the revisions to traditional theory suggested by Huberman attempt to address the problematic and contingent nature of knowledge, and to suggest ways in which dissemination activities may take account of this, his discussion does not address the other issues raised by postmodernists, namely that all knowledge is local, contested, and political. Organizational learning theory has not, to date, given us much evidence about how practitioners or policymakers grapple with the wide variety of “evidence-based” innovations that are promoted by hucksters as well as scholars. And none of the perspectives help us much as we try to understand the deepening politicization of knowledge in education, in which governments privilege some research while ignoring other “rigorous” approaches, and where parents and community members (at least in the United States) want to weigh in so that their opinions about what constitutes a high quality idea will also be heard.

New Perspectives

The new perspectives on dissemination and knowledge utilization that will be described briefly below can be viewed like layers on an onion of the problem of knowledge and practice. While it is clear that philosophers – and most Western individuals – accept Descartes’ dictum of “I think, therefore I am,” which encapsulates the individual and psychological perspective on knowledge use, there has been a long recognition that thinking and subsequent knowing is constrained by context. Scholars have recently begun to examine these layers at a number of different levels: political, social networks, organizational fields, and cognitive responses. Each of these will be briefly examined below, and the relationship of theoretical ideas to the problem of school improvement will be suggested.

Political Agenda-Setting

Characterizing applied educational research as an underutilized treasure trove or as a vast swamp of mediocre studies of limited utility is a matter of opinion rather than objective assessment. There is, however, little question that policymakers hope for quick answers that they rarely get, and researchers want to produce definitive studies that will change the direction of education. If this is the case, why don’t we see more use of rigorous research? The answer lies, in large measure, in the nature of the policy process, whether it occurs at a national, state/provincial, or local level.

The notion that knowledge use is constrained by political contexts is not new. In the late 1980s, when evaluation research was well established on the policy scene, observers began to notice that publicly funded research was often used primarily because it “fit” a set of partisan purposes that were formed prior to the availability of the results. Legislative or parliamentary staff members did not read research to find out how their elected bosses *should* vote; instead they often combed research to

find results that would fit the official's or party's preferred stance. Thus, for example, even the most rigorous multimillion-dollar educational evaluations relating to supplementary educational services for less advantaged children in the United States were ignored or embraced depending on personal perspectives.

Weiss and Bucuvalas (1980) were among the first to propose that knowledge produced through more-or-less rigorous inquiry needs to pass two types of tests before it is used: a *truth test*, which helps the individual or group looking at the information to decide whether it is a reasonable approximation of "reality," and a *utility test*, by which the same groups determine whether or not it can be applied given a set of constraints, which could range from financial to potential negative consequences not considered in the research. Thus, for example, educational researchers wonder why policymakers continue to advocate for large schools and large districts when cumulative research evidence suggests strongly that size is negatively related to students' achievement (Lee & Smith, 1997; Fowler & Walberg, 1991). Yet, local school boards and their administrators can present compelling evidence to support bigger institutions that range from obvious (cost savings) to symbolic (large schools are more likely to have comprehensive programs, which increases public support for education). The research may be true, but does not yet pass the utility test.

In addition to Weiss's cogent observations, the robust line of research on the policy-making process has been driven by the observation that much of the action in policymaking occurs before any votes are taken, during the period when new ideas are introduced and become policy issues for the legislature body and the public. The most frequently cited models of policy development emphasize, like Weiss's, the chaotic and pluralistic aspects of the process in most Western countries.

Until the 1970s, research on agenda-setting tended to look for (and find) elite influence (Putnam, 1976). An alternative, while acknowledging elite bias and resistance to change in the formal system of influence, makes a key additional assumption: that "pre-political, or at least pre-decisional, processes are often of the most critical importance in determining which issues and alternatives are to be considered. . .and which choices will be made" (Cobb & Elder, 1971). This may include "nondecisions," one process by which ideas are eliminated from formal consideration. While elites may determine which issues come up, it is at this juncture that nonelite groups joust to get their knowledge and ideas into the discussion. The pre-decision process is often biased and politicized (Wolter et al., 2004, p. 521), but in other cases there are multiple points of entry, and "outsiders" who have ideas can market them freely (Edmondson, 2005; van Velzen & Louis, 2009).

The Role of Knowledge in Agenda-Setting

Explaining the complexity of the social problems to be addressed by policy is usually left to social scientists and practitioners. However, in education, researchers are ill equipped to participate in the policy-making process because they don't understand it. While educational researchers occasionally become active policy analysts, they are more likely to play an entrepreneurial role, "selling" their own findings or acting as a behind-the-scenes advisor. Researchers complain that their firm results

are often ignored, while policymakers argue that the research is not useful. At the same time, professional associations representing educators are regarded as weak sources of knowledge for policy (Louis, Febey, Gordon, & Thomas, 2008). Whoever is complaining, the outcomes are the same: limited attention paid to the value of rigorous research or practice-based knowledge (Rosenbaum, 1996; Ryan, 1999).

The point is not that policy deliberately ignores research and rigorous examination of effective practice (although it sometimes does), but that the policy-making process always takes into account that “what we know,” at least in the social sectors, is swamped by what we don’t know. Focusing on these uncertainties often stimulates debates that further undermine the credibility of knowledge, sometimes resulting in policy statements that research was not important in determining policy when it is apparent that there is a strong research base (Brown et al., 2003).

Alternative Modes of Agenda-Setting

A recent example in the United States illustrates the problem of incorporating research and practice perspectives into agenda-setting. The federal Reading Excellence Act was based on the goal of ensuring that every child in the United States would read by the 3rd grade *and* on the assumption that we know how to teach reading. However, competing views among various actors – individuals, professional associations, and well-placed policy advisors – undermined these reasonable assumptions (Edmondson, 2005). Schisms concerned the best way to teach reading, whether reading should be taught in pre-school or earlier, and other issues. Rather than rallying the expected coalition of stakeholders, the legislation precipitated lingering divisions between agencies and researchers committed to understanding and promoting reading. If promoting reading in the early grades can be politically volatile and create vituperative debate, we cannot expect that managing change in more complex parts of the system will be less so.

Policy initiatives can also become resistant to empirical or rational analysis. For example, Technical and Further Education (TAFE) policies in Australia were influenced primarily by corporate opinions and a neoliberal rhetoric linking further education to economic expansion and work, in spite of limited empirical evidence supporting the payoff of such a shift (Ryan, 1999; Symes, Boud, McIntyre, Solomon, & Tennant, 2000). This policy process apparently lacked the pluralistic and chaotic discourse that characterized the development of the Reading Excellence Act in the United States, but did so at the cost of discouraging the inclusion of alternative ideas that might have led to a more comprehensive education policy. There is little evidence that the policy change made much of a difference in the routines and practices of universities, except on the margins (Symes et al., 2000).

What can we conclude? First, the use of knowledge in the agenda-setting process is contested and poorly understood. Second, using rigorous practice or research-based knowledge to sway opinions once the agenda is set has little impact (sad news to all of the social scientists who prepare for legislative or parliamentary testimony). Finally, in education, research on agenda-setting is very limited; we know more about how legislative agendas are set in the small, progressive state of Minnesota

(Mazzoni, 1993) than we do about larger and perhaps more typical states and much less about other countries.

The contrasting agenda-setting histories of the US reading initiative and Australia's TAFE policies reflect the problems of school improvement today. On the one hand, we observe devolution or decentralization policies that place the responsibility for knowledge utilization and change more clearly in the hands of schools. The assumption that localized processes of knowledge utilization can contribute to educational improvement is a distinct paradigm shift that has occurred on an international basis, propounded by an increasing consensus among teacher associations, politicians, and parents in countries as diverse in educational tradition as Sweden, New Zealand, the Netherlands, England, and the United States. On the other hand, political actors continue to make decisions that involve centralized, hegemonic decisions that are intended to shock the system into change – for example, efforts to introduce new standards-based reforms in previously decentralized systems.

Social Networks

Many scholars focus on the characteristics of knowledge *and* context as a predictor of use. According to many writers, educational research is likely to influence policy development when it (1) is compatible with existing belief structures, (2) diffuses rapidly throughout the organizational field so that it becomes legitimized, (3) *has prima facie* utility in local sites, and (4) is “processed” or discussed within the potential user group in ways that make it fit with local preferences (Wejnart, 2002).

Weak Ties and Diffusion

The “strength of weak ties” is a concept that explains the unexpected finding that new ideas transfer most rapidly between groups that share only a few members (Granovetter, 1973). The underlying explanation is that *very strong ties* foster “groupthink”: little disagreement about preferred policy solutions occurs among groups that share common ideologies, and therefore genuinely challenging information is unlikely to be exchanged. The *absence of ties* between groups means that innovative policy ideas will not be shared at all because of limited opportunity to meet. *Weak ties*, in contrast, permit both the development of diverse ideas in independent groups and also the occasional ad hoc communication that is associated with more the rapid spread of new ideas. Weaker ties between units within the same social system can be important in generating a broader range of solutions to identified problems, or help in identifying new problems (Hansen, 1999). The implicit understanding of the importance of weak ties underlies much of the enthusiasm in several countries for developing networks among administrators and teachers in different settings (Stoll & Louis, 2007).

Recent research on policy formation and agenda-setting incorporates network studies of networks that examine weak and strong ties. In particular, research on policy networks has turned from an emphasis on bargaining to one that also includes

information transfer (John, 2001) and the diffusion of innovations in the public sector (Louis, Rosenblum, Bingham-Catri, & Jones, 2003; Wejnart, 2002). This shift expands the framework to account for the emergence of competitive “issue networks” and also moves beyond examining privileged or “elite” communication relationships to more inclusive and loosely regulated forms of information exchange. A network approach argues that most connections are fluid and bound together by the trading of valuable ideas and joint work and not just the exchange of favors. The fact that these are international trends, often involving the borrowing of language and ideas between countries, suggests a strong currency for a flow of political perspective about educational reform among elites. Ideas about effective schools and effective teaching have also been widely diffused through international research networks, and later, within countries, have been influential in affecting policy discourse.

The implications for conceptualizing complex educational changes are stunning. If policymakers at all levels in the educational system are held in a large but diffuse network in which crudely defined ideas circulate, but in which some ideas come up against unpredictable exclusionary boundaries, the problem of managing change becomes enormously complex. In large systems, managing complex change requires managing the flow of knowledge – something that has become increasingly difficult in the information age. Rather than managing change, we are driven to a worldview in which embracing the apparent chaos and disorder of an evolutionary process provides the only logic for making the world better (Wheatley, 1999; Wheatley & Crinean, 2004). It is the nature of the idea and whether it “sticks” that creates structures – not the command and control apparatus.

Strong Ties: The Influence of Elite Networks on Knowledge Use and Change

The weak ties concept is compelling, but may be less applicable when complex knowledge needs to be transferred. The weak ties approach suggests that countries or states will look for solutions to educational problems quasi-independently. One government’s choices will not dictate an approach to the other. “Successes” are, however, communicated in a variety of venues ranging from invitational expert conferences to OECD meetings, and governments compete to be the first to adopt solutions that look good (Berry & Berry, 1999). The problem with this pattern is that the information communicated can be weak and poorly researched, and that spread may be based more on the immediate needs of officials to “look good” than on careful analysis. Furthermore, the more complex the information, the more likely it is to be distorted during transfer.

To compensate, officials develop stronger ties with information providers, turning to trusted groups for information on complex issues. In general, when faced with complex problems, most policymakers look for acknowledged expertise that has proven helpful in the past (Salisbury, Johnson, Heinz, Laumann, & Nelson, 1989). Experts may become members of the policy elite as part of their role in regularly providing information, a trend that accelerates when legislators are faced with ever

more complex research results and policy options. In countries with a professionalized civil service, inner circle policy advisors, often with ties to academia or think tanks, may come to be seen as displacing more neutral and experienced advisors.

Sustained interactions are a key to the effective transfer of complex knowledge. This is the strong ties–weak ties dilemma: Trust creates networks that not only facilitate the flow of complex knowledge, but may also serve to crowd out divergent voices and ideas. Sustained interaction facilitates consistency in “mental models” or the worldviews of parties (Huberman, 1999), and emerging research suggests that people simply do not remember factual information that challenges their mental model (Mishra & Brewer, 2003). Perhaps fortunately, networks connecting researchers and policymakers rarely generate stable or formalized strong ties. Reliance on experts does not make decision makers powerless recipients, because they pick and choose who to listen to (Lupia & McCubbins, 1994; Mishra & Brewer, 2003).

Organizational Frames: Institutional and Cognitive

In addition to the infusion of ideas related to organizational learning into educational lexicon, other recent developments in organizational studies seem to have profound implications for knowledge use and school reform. Each also contributes to the debate between the modernists and postmodernists. The first builds on the work of institutional sociologists of the 1950s and early 1960s, but takes a more radical stance in terms of the degree to which external influences condition internal stabilities in organizations, and thus affect the knowledge that will or will not be used. This school of thought, which emerged in the early 1980s, is referred to as the “new institutionalism” (Powell & DiMaggio, 1991). A second line of work, which is more recent, examines sensemaking in organizations. This perspective is consistent with the organizational learning ideas discussed above, but pays more attention to the “how” of organizational learning.

The New Institutionalism

The new institutionalism in organizational theory begins with the assumption that the patterned regularity of organizational behavior, which is particularly noticeable within sectors or industries, is a major social phenomenon that requires explanation. The assumption that repetitive social relations are facts that cannot be reduced to individual explanations is as old as the field of sociology itself. What is new about the current perspectives, however, is the emphasis placed on explaining lack of variation in organizational patterns – for example, why do all modernized countries have a higher education system that is increasingly similar in terms of types of institutions, length of study, and the names of courses of study? Why are school

classrooms remarkably similar whether one is in San Francisco, Rockford, Illinois, or London?

Organizational Fields

The answer, according to institutional theory, is that the emergence of an organizational field, or a collection of organizations in the same line of business, creates both collective opportunities to influence the environment and group norms that may generate resistance to change.

... in the long run, organization's actors making rational decisions construct around themselves an environment that constrains their ability to change in later years. *Early adopters of organizational innovations are commonly driven by a desire to improve performance. But ... as an innovation spreads (within the field) a threshold is reached beyond which adoption provides legitimacy rather than improves performance ...* Thus organizations may try to change constantly; but after a certain point in the structuration of an organizational field, the aggregate effective of individual change is to lessen the extent of diversity within the field. (DiMaggio & Powell, 1991, p. 65) (italics added)

The spread of the community college system throughout the United States after its initial “invention” in California is an example of this – a diffusion that has now been completed virtually worldwide in developed countries. Particularly striking is its institutionalization as a system that contains both “academic” and “vocational” programs and the similarity of programs between units that avowedly respond to local labor market needs (Brint & Karabel, 1989).

Norms and Epistemic Communities

The similar nature of individual organizations within an institutionalized field is maintained not by rational choices, but by the dominance of the norms and symbols that come to exemplify “the best of what we do.” Through their participation in symbolic rituals, organizational action reinforces the order of the institution and its relationship to society (Detert, Louis, & Schroeder, 2001; McLaren, 1999). To give just a small example, the use of bells in US high schools to signify the end of classes had little practical significance. Yet, in the 1960s, efforts to eliminate bells were resisted: Bells stood for the orderliness of schooling, as contrasted with the chaos of adolescence. Resistance was not a consequence of individual concerns, but of environmental pressures from the organizational field, and other constituencies who reinforce the norms and symbols. These may range from the general public (who expected bells) to the government and accrediting associations/inspectorates.

In spite of the large and small rigidities introduced into an institutionalized organizational field, change and knowledge utilization do, of course, occur. However, reforms often spread in a mimetic fashion among governments and become quickly institutionalized (DiMaggio & Powell, 1991). A clear example is the recurring waves of curriculum standards reforms in developed countries – a response to public concerns about the rigor and breadth of this highly institutionalized aspect of the education system. Because math is an area in which major comparative tests

have been conducted, the similarity in curricula between provinces/states (and countries) is increasing rapidly, while other curriculum areas (art, social studies, etc.) are highly variable between schools (e.g., are not institutionalized). Why should this be the case? In making these changes, policymakers and educators rely on information from others in their field: rates of knowledge dissemination and utilization are high, and research about math curricula and its effects are widely circulated. In the case of math reforms, the institutional interests of the organizational field in preserving public confidence in their programs often stimulated very modest changes in classroom behavior (Spillane, 2000).

The “middle school movement,” intended to reform schools for younger adolescents (usually 11–14-year-olds) in the United States, is another example of dissemination based on a mixture of scholarly research, information about practices in other schools, and “local knowledge.” The initial period of reform was more localized and chaotic, with many efforts to invent new solutions to the problem of creating more academic engagement among early adolescents. More recently, key structural elements, such as teacher teams, interdisciplinary curriculum, and cooperative pedagogical styles, have become widely shared and legitimated, *although research supporting their value is still rather slim*. What the institutional perspective points to is the increasing similarity in features of schools that are deemed necessary in order to qualify as “a real middle school.”

Institutionalism and Postmodernism

To summarize, the institutional perspective picks up the postmodernist themes of hegemony of particular ideas and forms of knowledge, but argues that these are largely created *within* the organizational field (often in response to external pressure) and are *self-sustaining*. Rather than emphasizing the “localness” of knowledge construction and use, they point to the mimetic nature of organizations within an institutionalized field as a determinant of what knowledge will be used. Educational reform within the broad organizational field is not dependent on the availability of specific externally developed models complete with training and support, although these may support change in individual schools: The intersection between pressures for change from outside, local development activities, and the rapid spread of workable ideas between adopting units determines knowledge use.

Making Sense and Giving Sense

The determinism of new institutionalism is challenged by an offshoot of the organizational learning perspective, which argues that the superficial resemblance of schools may be misleading. Effective schools research suggests that the organizational factors that matter for student achievement are not easily visible to an outsider. If the new institutionalism examines the environment for dissemination and knowledge utilization activities that affect whether information will spread within

an organizational field, new ideas about sensemaking move into the interior of the school, looking at features that affect the adaptability of individual units.

There are a variety of theoretical perspectives on sensemaking and change in the educational literature, but one finding is clear: When teachers or administrators are confronted with a new set of practices (such as those emerging from research), their interpretations of it will determine whether they engage in change, resistance, or simply ignore it (Gold, 2002; Louis & Dentler, 1988). Some studies focus on individual responses to disruptions or demands for change, which examine cognitive processes used by individual teachers to understand new information that is inconsistent with what they already know (Broadway, 1999; Zembylas, 2003), while others look at the role of context and culture as conditions mediating individual change (Angelides & Ainscow, 2000; Blase & Blase, 1997; Gioia & Thomas, 1996; Harris, 1994).

What Is Sensemaking?

Sensemaking is not an event, but is ongoing, focused on extracted cues, driven by plausibility, and tied to identity construction (Weick, 1993). *Individuals* pay attention when something in their surroundings does not fit with their usual routines, and use their experience to find patterns that help to explain new situations. Similarly, *collective* sensemaking occasionally occurs as part of a deliberate activity (like strategic planning), but more often emerges from informal communication that leads to common actions or agreed-upon activities (Coburn, 2001; Donnellon, Gray, & Bougon, 1986). In education, the nature of professional communities and dialogue has emerged as a powerful factor, determining collective understanding of new ideas introduced from outside (Coburn, 2001; Honig & Hatch, 2004), as well as organizational learning, or the creation of coherent and shared explanations for “how we do things around here.”

Sensemaking and Knowledge Use

Sensemaking occurs when teachers work together and learn from each other, which leads them to interpret changes in their setting and practice in a consistent and collective manner (Coburn, 2001; Craig, 1995; Louis, Febey, & Schroeder, 2005). The role of school leaders in helping to interpret new information or demands from the school’s environment and their implications for collective work is increasingly important (Coburn, 2005). Recent work has focused on the role of administrator’s story-telling as part of the collective interpretation (Dunford & Jones, 2000), while other research has emphasized the role of the school leader in helping to determine what information is considered worth talking about in the first place (Wahlstrom & Louis, 1993). The paradox of distributing knowledge more broadly is that it may require a significant “push” from the top of the organization (the principal or other local leader) in order for more initiative to be taken up as a more fundamental element of sensemaking. It is this paradox that has led some people to talk about

“sensegiving” as typically the job of a formal leader at the beginning of a change process (Fiss & Zajac, 2006).

Sensemaking requires not only cognitive engagement with the implications of a new research-based idea, but also opportunities to learn and practice (Coburn, 2001; Marks, Louis, & Printy, 2002). In peer groups with a high rate of interaction among members, values and attitudes are redefined through frequent contact. For example, time to meet and talk allows teachers and administrators to construct interpretations of new ideas and information, and to draw implications for their own work. Thus, organizational learning is a critical outcome of sensemaking because it prevents current beliefs and experiences from interfering with teachers’ and administrators’ ability to implement and interpret the new expectations that come along with expectations that the shape and practice of leadership in schools will change (Kezar & Eckel, 2002; Spillane, Diamond, & Burch, 2002). Making sense of any new initiative or idea, whether research-based requires alignment with existing conditions in the school, and the manner in which a new initiative or idea is framed also affects the role of policy actors outside the school (Firestone, Meyrowetz, & Fairman, 1998; Spillane, 1998). In particular, educational professionals need to see a connection to their main task, which is supporting student learning.

Sensemaking is a form of social processing but not necessarily deep processing. Studies of sensemaking often explore micro-interactions and cultural narratives. However, casual conversations and narratives can reflect superficial behavior expectations rather than addressing core assumptions about how the school should function (Craig, 1995). In order to create a more fundamental change, both time and deeper challenges to embedded assumptions are needed (Huy, 1999; Kezar & Eckel, 2002). This focus on “sustained interactivity” meshes well with Huberman’s analysis, reviewed earlier, as well as with most descriptions of the conditions that foster organizational learning.

Paradigm Shift or Paradigm Revolution?

The purpose of the above review of recent research in a number of disciplines is to point to two issues: First, there is a proliferation of research and theory bearing on the intersection of knowledge dissemination and utilization and school improvement (although many authors quoted in this chapter do not explicitly consider this issue), and second, much of this research already incorporates elements of a post-modernist position, although none of the empirical studies discussed is consciously postmodernist. The convergence taking place around the key elements of emerging views of knowledge will be considered first, and then the implications for school improvement practice:

- *All knowledge is local.* The above discussions assume that local knowledge is a key feature of the landscape of change, but most would agree that there is important knowledge that is not local. Knowledge created elsewhere must, according to

all theories, be compatible with existing belief structures, diffuse rapidly throughout the organization field so that it becomes legitimized, have utility in local sites, and be “processed” in ways that make it fit with local preferences. The “new institutionalism” adds another wrinkle to this: knowledge that is widely diffused is itself institutionalized so that it can be easily legitimated and shared within the “field” of organizations, sites, or other members of the culture. Although a great deal of important knowledge may come from outside the organization, the above theories also suggest that this information is always combined with local knowledge.

- *All knowledge is contested and partial.* This is supported by most of the new theoretical advances. Sensemaking, for example, assumes that the contesting of knowledge is central to the learning process. The “new institutionalism” (at a very different level) argues that it is the incontestability of many features of an organizational field that makes it difficult to change: only where there are chaotic events that cause either insiders or outsiders to question the existing knowledge base will change/knowledge utilization occur. The contested nature of knowledge is a key element of political theory and the primary element that leads most contemporary writers to conclude that there are many ways of using knowledge, depending on the degree to which it is “solid” – for example, meets truth and utility tests – and enters the agenda-setting arena at the right time and from the right source. In the organizational learning model, it is the debate and discussion around contested or partial knowledge that leads to a new *modus operandi*, a perspective that is consistent with the sensemaking perspective.
- *All knowledge is political.* Insofar as the newer theories address power, there is a tendency to follow Macaulay’s assumption that “knowledge is power” and that the creation of knowledge creates powerful settings (including constraints). None of the perspectives reviewed here adopt, however, the critical postmodernist view that power-plus-knowledge inevitably becomes an instrument of oppression. Nevertheless, political contexts are critical to understanding knowledge use, as is demonstrated by the analysis of knowledge utilization among policymakers, the “new institutionalists” observations that knowledge use is constrained as the organizational field becomes defined by both internal norms/patterns and external expectations/regulation, and the sensemaking focus on the role of designated leaders as “sensegivers.”

While all of the perspectives reviewed are consistent with some of the basic tenets of postmodernist views of knowledge, they also assume that knowledge has some realist qualities, and that it can be used by individuals who have not created it. The use process is complex and difficult to predict: there will be no production function D&U models emerging from this set of scholars. But messy cannot be equated with impossible. In fact, we may draw some lessons from Bordieu and Wacquant (1992) in this regard:

Awareness of the limits of objectivist objectivation made me discover that there exists, within the social world, and particularly within the academic world, a whole nexus of institutions whose effect is to render acceptable the gap between the objective truth of the world

and the lived truth of what we are and what we do in it. . . . It is this *double truth*, objective and subjective, which constitutes the whole truth of the social world. (Bordieu & Wacquant, 1992, pp. 254–255)

Some Implications for Practice

There are many implications of the layered approach to D&U theory proposed in this chapter. In particular, I argue that there is a self-conscious need to reintegrate our understanding of the nature of three arenas of knowledge: research results related to educational goal achievement (school effectiveness, broadly conceived), educational change processes (school improvement, broadly conceived), and the knowledge use strategies that can be pursued both inside and outside schools to improve student learning and development. None of these are inconsistent with Huberman's reformulation of traditional dissemination theory, but suggest an expanded context for thinking about D&U. In particular, we need to draw upon the research about political, historical, and organizational contexts affecting knowledge use to enrich the micro-level perspectives that are emphasized by Huberman and the sensemaking research. While it is beyond the scope of this chapter to suggest a model for D&U and school development that fully incorporates these theories, a few examples can demonstrate the practical connections:

- *Research knowledge is only one source of knowing, and its use must be negotiated during a dissemination process.* This fluid relationship – and even co-dependence – between research and practice must be acknowledged, and researchers must be prepared to be open to involvement in the development process at the user level. Much of the best practice in education is not generated by scholars in laboratories, but by teachers and school leaders in actual settings. Research enters the field at a later point, synthesizing, developing, and assessing practice-generated ideas. In case you think that this is evidence of the weakness of the field of education, the same is also true in science and engineering, where connections between universities and firms are increasingly close (Owen-Smith, 2003). On the other hand, the spread of new ideas in education, as in science and engineering, is frequently aided by research, which may codify and extend practice-based knowledge as well as making independent contributions to it. In many cases, researchers may not be as well equipped to engage in field-based development over long periods of time (they have students and new research projects to carry out), but the others may fulfill this function if they have a deep understanding of the emerging nature of the negotiated knowledge.
- *Involving potential users in research will not necessarily make research more useable – except at a particular site or among those who have been directly involved.* There has been a trend in many countries to involve practitioners in setting some research agendas (e.g., serving on peer review panels), and even as co-participants in carrying out research. This is thought to make research more grounded and, hence, useable. While it may be good for researchers to become

more connected to practice settings and vice versa, the power of site or place when it comes to change is infinite. Thus, extensive involvement of practitioners as researchers should occur for its own direct benefits, and not because it improves the possibility of dissemination and utilization.

- *The main barriers to knowledge use in the public sector accrue as a result of rigidities induced in institutionalized organizational fields, organizational designs that do not foster learning, and political agendas that are not consistent with the information.* Changing these interorganizational rigidities in the short run may be extremely difficult. The motto under these circumstances is not to engage in Sisyphean efforts, but to “try again another day” because contextual circumstances change for reasons that have nothing to do with research or educational policy.
- *The barriers to knowledge utilization are often to be found in organizational design. This suggests that redesigning the organization should be part of any effort to engage in “sustained interactivity” around research utilization.* The emphasis on developing school self-management that is emerging in many countries should be shaped around those capacities that augment not only the ability to manage budgets and personnel policies, but also attends to the creating of schools that can learn from knowledge that is generated inside and outside the school. This objective will require policies, as well as direct training and support to schools that have previously not engaged in these efforts.
- *Some forms of useful knowledge will spread with little dissemination effort – due to organizational field compatibility or because the field develops an infrastructure to assess and legitimate the type of knowledge.* We do not always need elaborate infrastructures or sustained interactivity to ensure the incorporation of new ideas in practice – nor can we ensure that the knowledge that spreads most rapidly is “good knowledge.”
- *Utilization and impact can only be assessed over the long haul.* Short-run efforts to foster major utilization are likely to appear shallow and hegemonic to practitioners, and fail to disrupt the interorganizational rigidities of the field. Policymakers and disappointed researchers are likely to view these efforts as failures and to pronounce schools as impossible to change. Thus, research-based efforts to create school reform must be based on an extended time line.
- *Creating sustained interactivity is not a solution to the D&U problem, but if it becomes a norm, it may well increase the scholarly impact because it enlarges the organizational field.* We should not limit the idea of sustained interactivity to the relationship between a “knowledge producer/researcher” and “knowledge consumers/practitioners” but focus also on formal and informal networks for transmitting knowledge between units. These networks, to be successful, must involve practice templates that combine research knowledge and practice knowledge.

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Innovation and Diffusion as a Theory of Change

Tom Bentley

In 1991, a Finnish computer science student named Linus Torvalds announced, in an email to an Internet news group:

I'm doing a (free) operating system (just a hobby, won't be big and professional) . . . this has been brewing since April, and is starting to get ready (Steinberg, Mulgan, & Salem, 2005).

By 2002, the system that Torvalds had developed, Linux, had claimed 25% of the world market for server operating systems, drawing on an estimated 8,000 person hours of developer time. It now supports a burgeoning range of software applications and services, shaped and spread by enthusiastic user communities and used by some of the world's largest public and private organisations.

The key to its rapid evolution and spread was its open, free nature. Torvalds deliberately shared the program, encouraged its replication and use and invited modifications and improvements which he vetted and adopted and as such the core operating system continued to evolve.

Open-source programmes are perhaps best known for the challenge they present to the dominant incumbent in the world of proprietary computer software, Microsoft. The challenge is not just to the quality and cost of products, but the operating philosophy behind them: Open source appeals to many who somehow feel that the tools to create and manipulate knowledge and information are best shaped by an ethic of openness, creativity and collaboration (Leadbeater, 2008).

Open-source methods have led to many other powerful ways of creating, refining and sharing knowledge. One of the best known is Wikipedia, the online encyclopaedia that now holds more than 1 million articles in over 100 languages. Wikipedia is created by its users and edited by volunteers according to open editorial standards.

The Internet is making possible mass-scale applications of knowledge and knowledge-sharing, which could be powerful, if not revolutionary, when applied the task of improving the quality and of reach public education.

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There is no shortage of visionaries who can see the potential. For example, Jimmy Wales, Wikipedia's founder, recently coauthored an article with Richard Baraniuk calling for an "open education revolution":

We want to infect you with the dream that anyone can become part of a new movement with the potential to change the world of education. (Wales & Baraniuk, 2008)

Baraniuk, a professor of engineering at Rice University in Texas, is the founder of Connexions, an "open-source media platform" designed to encourage the sharing and adaptation of educational materials. Connexions provides an online environment in which learners and educators can freely access, share and adapt learning materials on any subject.

In November 2008, Connexions announced a collaboration with the South Africa-based Shuttleworth Foundation to "jointly develop one of the world's largest, most comprehensive sets of free online teaching materials for primary and secondary school children."

For Wales and Baraniuk, changing the nature of educational textbooks and teaching resources is just the start. They see these methods as part of a mission to transform the nature of education itself, just as new collaborative technologies and methods are having radical, disruptive effects on the organisation of science, commerce, and cultural production.

In the same year, Paul Miller, a young researcher and entrepreneur in London, launched the School of Everything with a group of friends (School of Everything, 2008). The School of Everything describes its mission as "Everyone has something to teach, everyone has something to learn." It offers a simple, Web-based system, through which members can find people offering to teach in any area of knowledge and register to offer their own expertise.

School of Everything is setting out to reinvent adult education. Early signs are promising: Following 2 years of development, its public launch in September 2008 was followed by thousands of members signing up every month. Though its founders do not see themselves as business entrepreneurs, it has been deliberately established as a for-profit entity, in part to bypass the difficulties of operating in the world of public education, with its bureaucratic management structures, closed accreditation systems and incremental timescales.

A Shifting Landscape

These examples point to a profound shift in the organisation of work and learning that has been gathering force for a generation. Information has become pervasive through the networking of information and communications technologies (ICTs). Value is increasingly added through the creation and embedding of knowledge into products, services and organisations, and the most successful ways to innovate and undertake large-scale adaptation have become significantly more interactive and open.

The shift applies to every sector – in the corporate world, investment in research and development is increasingly undertaken through open, collaborative processes which seek to attract and motivate contributors from far-flung networks spanning countries, sectors, and firms rather than seeking to direct innovation through dedicated research labs, proprietary pipelines, or closed policy silos (Chesbrough, 2003).

In the public realm, civil society is using the same methods to mobilise campaigns, activism, and journalism through open, user-driven networks. Ohmynews.com, the Korean-based citizen journalism project, produces news and commentary generated by its network of more than fifty thousand user-contributors in more than one hundred countries. Avaaz.org – motto: “the world in action” – has built a global Web-based community to campaign on issues from human rights to climate change and poverty. It has attracted more than three million members and regularly mobilises hundreds of thousands to lobby meetings like the 2008 EU leaders’ summit on climate change.

These examples share common features:

- They are *open*, making transparent their own structures, operating processes and content to an unprecedented degree, and allowing access to users and participants with few restrictions.
- They are highly *networked*, operating through structures which enable rapid lateral transfer of new material across networks of users who cut across institutional, sectoral or geographical boundaries.
- They are *user driven*, affording a new level of empowerment and contribution to participants who might previously have been thought of as passive consumers or inexperienced students.

The combination of these three features means that the activities they create can be highly *self-organising*, relying on emergent structures and distributed decision making to allocate resources and coordinate projects, and highly *differentiated*, responding to the varying needs of their users instantly through the terms on which they choose to participate and in the process generating personalised services and experiences.

These features have led some to declare a new era of participatory democratic innovation which shakes the foundations of our professionally dominated and proprietary systems of institutional and economic life (Benkler, 2006).

Such changes have obvious importance for the way we understand and approach change in education. They point to the potential of emergent, networked innovation as a means to achieving rapid and widespread change.

But dynamic new movements and transformative ideas have been with us for much longer than the last generation. Some wither on the margins, while many turn out not to fulfil their radical promise. Others are absorbed into the wider pattern of economic and social life without revolution.

New educational eras have been boldly predicted many times before, premised on “scientific” measurements of intelligence, the professionalization of teachers, the

role of the state in making schooling universal, the introduction of computers into classrooms, and more recent advances in neuroscience.

This chapter examines the importance of the new innovation movement for the organisation of K-12 education and the potential for its methods and tools to extend the repertoire of educational change.

Beyond its potential, we should ask whether the growing emphasis on innovation and diffusion amounts to a model of systemic change relevant to the governance, leadership, and reform of mass schooling systems. There are many barriers to such change, including sunk investment in old models, producer capture and the cost of making disruptive transitions.

But there is also no question regarding the fact that education is already part of the global shift: Linus Torvalds was a student when he posted his program (as was Mark Zuckerberg, the founder of Facebook, the social networking tool). Many of the most influential innovations, such as the World Wide Web itself, have emerged from public education and research institutions.

This is not surprising: Any approach to enquiry and innovation which treats knowledge as a common good, pursues collaboration as a means to deeper understanding, and encourages open exchange and dialogue owes much to long-standing educational traditions.

But in the last century the dominant methods for governing and improving public education systems have taken quite different forms. While there have been many innovations, successful reform strategies and fiercely competing intellectual and ideological currents in education policy, deep systemic change has remained elusive, despite the central political status that education policy now enjoys in most countries and the intense focus on improving outcomes that accompanies this status.

This chapter examines whether the growing emphasis on innovation and diffusion amounts to a model of systemic change relevant to the governance, leadership, and reform of mass schooling systems.

It argues that the conditions for systemic adoption of this approach to learning and adaptation are not in place in most school systems despite the welter of innovative activity and the growing emphasis on spreading it. Accurate understanding of the real causes of rigidity and “adaptive flexibility” in school systems is a precondition of understanding how innovation can lead to deep, beneficial, educational change.

The Need for Systemic Change

The current pressure on schooling arises from twin drivers. The first is to ensure and demonstrate better attainment across *all* students and schools, and narrow the gap between the highest- and lowest-achieving students. The second pressure is to respond to the ever-growing range of need and demand, expressed as social and cultural diversity; greater student mobility; changing student, family and employer expectations; growing economic inequality; and geographical polarisation.

Public recognition of education as a central determinant of social and economic success – both for individuals and for whole societies – continues to grow. But educational performance is both cause and consequence – mirror and mould – of a society's success. So the practice of education is entangled, inevitably, in wider processes of change including urbanisation and industrialisation, family formation and the renegotiation of gender roles, mass migration and the emergence of new knowledge economies from India and Brazil to Finland and Malaysia.

As a result, of course, education systems are under constant pressure to improve fast enough to meet this heightened demand, while simultaneously adapting to the effects of wider social, economic and technological change, in real time, on the systems themselves. Any strategy for adaptation and improvement through innovation must therefore address these complex, ongoing interactions – between the impact of schools' performance on the capabilities of the communities they serve and on schools of changes to the economic, social, demographic and technological context in which they operate.

The challenge under those circumstances is to build systems which can improve their own core performance by focusing on priority outcomes like literacy and numeracy and essential standards of equity or fairness, while also actively reflecting the heterogeneity and diversity of the societies they serve.

Under these conditions – where education is expected to deliver often dramatic improvements in performance with often only modest injections of extra funding and simultaneously expected to respond and adapt to an increasingly diverse and vociferous range of demands – it is no surprise that innovation is also in demand.

Nor is it in short supply. New tools and practices are continuously being generated from both within and beyond formal education. They range from breakthrough pedagogies to concentration-enhancing drugs, digital learning assistants and communities of practice to corporate engagement strategies and models of system reform.

But despite the success of some strategies, few would claim that education systems are improving or adapting at the rate or depth that is really needed, or of the examples with which we began this chapter. The questions which are continuously raised in educational debate are how to find more powerful ways to select and run with the right innovations and how to spread them effectively across whole systems of organisation (Dede, Honan, & Peters, 2005). In the case of public education, those systems are often very geographically dispersed and organisationally fragmented.

The Dominance of the Bureaucratic Paradigm

In the second half of the twentieth century, education policies focused on achieving universal coverage for the core years of schooling. In its last 2 decades, the focus shifted towards pushing up quality through standards-based reform. Most countries have national education policies clustered around the following themes:

- standards-based measures to improve attainment in essential outcomes, especially numeracy and literacy;
- reporting, assessment and accountability based on key performance indicators;
- new infrastructure, including the overhaul and modernisation of school buildings and the introduction of ICT hardware and networks;
- reduction of class sizes and training of new teachers;
- finding, training and rewarding high-performing educational leaders;
- funding and growing childcare and early years centres;
- increasing post-compulsory participation by expanding higher education and creating new schoolwork pathways and higher vocational qualifications;
- reshaping the educational workforce to emphasise flexibility, professional development, specialisation of professional and paraprofessional roles and performance management;
- civic engagement and citizenship among young people;
- targeted strategies to tackle underperformance among specific, deprived social groups and in marginalised urban or rural areas.

This list masks many important variations in the ways that each reform can be approached. Among others these variations reflect policy choices about the measurement of attainment, funding, curriculum prescription, the role of government and non-government schooling providers and the structure of the teaching workforce. But with few exceptions, the reform agenda across OECD nations revolves around the same governance paradigm and the ongoing dominance of public bureaucracies in managing schooling and school reform.

In this model, responsibility for educational management and improvement is coordinated through a *tri-level* structure of central agencies, local authorities or school districts and individual schools. The centre makes policy, sets rules of accountability and allocates funding; a layer of local or regional authorities conducts planning and coordination and individual schools operate according to their own mix of leadership, community expectation and organisational capability within the prevailing environment.

This model is almost universal, though the relative power of each layer varies. Its ubiquity means that no reform strategy will be successful without explicitly addressing and aligning actions at each of the three levels (e.g., see Michael Fullan's theory of tri-level reform) (Fullan, 2005).

But while active alignment of the three levels is clearly essential, it is equally striking that the tri-level schema applies equally to the internal organisation of the typical school as well as to the wider system, indeed, to many different kinds of organisation.

In fact, other educational innovations tend to be channelled through and absorbed into this institutional paradigm as part of the enduring operating framework for schooling. As such, the tri-level framework provides the setting for the standards-based reform strategies of the last generation and helps to explain both their successes and shortcomings.

Standards-based reform uses a simple, powerful set of tools to pursue better outcomes. They are as follows:

- Creating formal performance objectives and standardising measures of performance;
- Targeting resources and prioritising key outcome measures;
- Strengthening and simplifying accountability structures;
- Building professional development and continuous improvement strategies;
- Centralising control over investment budgets, performance measures, curriculum specification, accountability structures and inspection systems;
- (Often) decentralising and deregulating other aspects of school resourcing and organisation, including school budgets, support services and professional development, creating new managerial flexibilities for school leaders.

The major policy trend, over a generation, has been the creation of a single framework through which to pursue continuous improvement in school performance by identifying standards, resourcing schools to meet them and making schools, students and professionals accountable for their attainment. This trend has occurred, of course, at the same time as the shift in public administration towards decentralisation and devolution in the organisation of public services through reforms broadly associated with the “new public management”. These reforms, which have applied to education as much as to anything else, have encouraged contracting out of key services, entry of new service providers into areas of state monopoly and devolution of management control towards the local level, for example, through school-level autonomy over budgets, teacher recruitment and procurement of support services. If differentiation and responsiveness have been achieved through administrative devolution and operational flexibility, they have been accompanied by the standardisation and hardening of measurement and accountability structures.

The aim of the reform strategies using this approach has been to ensure that each school has appropriately focused capacity and incentives to improve its own performance through participation in a common system of governance and accountability. Schools are then supported or rewarded to the extent that they are deemed to have under- or over-performed.

Some of these strategies have been highly effective (Levin, 2008). But this strategic focus has never, as far as I know, led to the replacement of the traditional model of bureaucratic governance.

Why is the Bureaucratic Model So Resilient?

One explanation, I believe, for the persistence of this model is that it fits hand in glove with a model of schooling itself which is deeply rooted in public imagination and in our wider systems of social and economic organisation. Centuries-old habits are hard to break and lead to the formation of powerful vested interests. Traditional forms of schooling are especially susceptible to producer capture given the relatively weak voices of users (students and parents). The costs sunk over generations into

schooling infrastructure and industrial organisational models mean that moving to alternative patterns of organisation and delivery can be expensive, although some more networked and open models could eventually reduce overheads and encourage more innovation.

But even where vested interests are weak or have been swept away by reform or market competition, the model does not seem to have changed radically. Successful private schools rarely stray from the organisational form or the regulatory methods found in state sectors and often generate their own intermediate bureaucracies to coordinate, regulate and manage support services in the absence of public school boards or local government. Across countries and cultures, the received definition of an “effective school” has also become remarkably similar, influenced by both the international research movement on school improvement and the internationalisation of performance indicators and measurement. The effective school is characterised by strong, purposeful leadership; an ordered, stable setting that sustains a consistent focus on learning, held in place by a clearly defined hierarchy of professional roles and organisational systems and cultures which support continuous review and improvement within the organisational framework.

Of course there are many variations and inflections, from specialist curricula to religious or community ethos. But the organisational core remains recognisable across sectors and cultures – and it aligns seamlessly with the wider governance framework.

This might prompt many discussions, but our focus is on what shapes the flow of innovation and adaptation. Traditional models of bureaucracy are usually characterised as rigid, rule based, and internally focused. Many reformers and reform strategies have worked to inject openness, contestability and explicit goal-setting into the workings of these systems. But perhaps the explanation for their resilience lies in their peculiar flexibility rather than their closed nature.

Much recent thinking about the shaping of social and economic behaviour has focused on the evolution, through open and self-organising processes, of *complex adaptive systems*. Rather than the formal, rational goals and accountabilities of the institutional framework, which is the focus of so much school reform, this thinking focuses on the patterns and dynamics of behaviour in systems which hold together without explicit systems of command.

Human behaviour is adaptive in the sense that it continuously adjusts to changing environments and new experience, even without conscious decision making. A burgeoning literature on game theory and behavioural and institutional economics provides a rich new source of insight into these patterns and the fact that social and organisational behaviour forms complex, durable patterns which often subvert or contradict both chains of command and the “common sense” of market incentives (Homer-Dixon, 2006; North, 2005).

The evolution of these adaptive systems can lead to increasingly complex patterns of specialisation, interdependence and self-organisation which hold together different needs, functions and interests in a wider community (Wright, 2001).

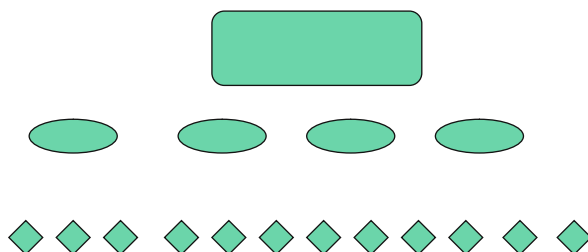
Such systems contain many diverse parts but still operate as coherent wholes which generate more than their sum (Chapman, 2003). Ecosystems function in

this way, with clear hierarchies, specialised division and sharing of labour between species and within groups, a constant, evolving mix of competition and collaboration and physical boundaries set and shaped by the interaction between landscape, population and capability. A school system could be characterised in the same way, except that its evolution is directed by human intentions and norms and not simply by competition and natural selection.

My argument here is that the bureaucratic model is adaptive, but that it is not necessarily designed to optimise learning outcomes for all of its participants. Instead, it enables its members – schools, administrators, teachers and so on – to coordinate the process of continuous adaptation to changing student identities, changing socio-economic conditions and changing policy requirements, through an ordered, incremental process of adjustment, refinement, and organisational learning. The bureaucratic model is not impervious to change: It offers a particular kind of flexibility which makes adaptation manageable, as long as the changes can be accommodated within its own organisational parameters. The system is implicitly geared towards maintaining the integrity of *its own* design.

This layering allows reliable organisation of teaching and learning and progression of cohorts of students, simultaneously with the day-to-day adjustment and improvisation needed to accommodate changing needs and behaviours – each box in the diagram in Fig. 1 simultaneously represents a unit of formal accountability and a domain of local knowledge and authority with its own leadership, power structure, informal social relationships, shared culture and so on.

Fig. 1 The tri-level adaptive structure of schools and school systems



The remarkable durability of these routines in the face of change may be explained partly by the mutual dependence of policy makers, administrators and practitioners on its orderly structure for the implementation of their own central objectives. They make ordered learning possible by creating the predictability and responsibilities needed to organise at large scale.

As Christensen, Horn and Johnson put it:

In every organisation there are forces that shape and morph every new innovative proposal so that it fits the existing organisation's own business model, rather than fitting the market it was intended to serve. (Christensen, Horn, & Johnson, 2008)

All durable systems set parameters on the scope of what they can accommodate. If an innovation has to pass through these processes and routines – what Christensen et al. describe as a “legislative process” – in order to win legitimacy and be taken up

across the operating system, it is inevitable that it will be shaped and implemented by the perspectives, interests and dominant methods in that existing system.

Stemming the Flow of Learning

But if the system as a whole increasingly requires rapid, powerful flows of innovation, these underlying sources of order also present a major constraint.

The same structures which make ordered learning possible also set boundaries which limit its possibilities by limiting the scope of inquiry, interaction and information flow in teaching and learning.

At the level of practice, many teachers seek ways around these limitations, but most remain within the boundaries of classrooms, year groups and a preset curriculum. Some of the most powerful educational innovations are disruptive: They require radically different patterns of organisation, using time, space, information and people differently in the learning process, in order to achieve their potential impact. But as Richard Elmore has persuasively argued, the multiple layering of organisational systems and authority, and the strong separation of the core technical and practical knowledge of teachers from the organisational knowledge and authority of educational administration, creates a potent “buffering” effect.

Thus policy makers and experts are insulated from the classroom, and individual teachers are insulated from the expertise and exposure to new practice that might make them directly accountable for generating the best possible outcomes (Elmore, 2000).

These properties have not escaped the notice of educational leaders. The need for “adaptive work” as part of any change strategy is increasingly accepted as part of the lexicon of educational reform. (Heifetz & Linsky, 2002) In this context, adaptive work means mobilising people to solve problems or meet challenges which go *beyond* the existing capabilities or technical solutions at their disposal (Bentley & Wilsdon, 2003).

Adaptive strategies therefore seek explicitly to *build a new capacity* which can be used to support higher student achievement and to build a culture of “high expectations” which seeks permanently to overcome an institutionalised status quo of student underachievement.

Two elements in particular stand out as features of these reform strategies: the focus on developing *leaders* who can successfully raise expectations and the focus on starting (or restarting) *new organisations* – academies, charter schools and so on – as a way to disrupt these patterns.

But while the introduction of fresh external stimulus may be recognised as essential to the prospects of systemic change, how best to combine them with the resources of the existing system remains a challenge unmet. In short, educational reform has become more adept at creating new directions and new models in the last generation, but still struggles to gain leverage for these innovations across whole systems.

In the context of the tri-level governance framework, this creates a deep *systemic tension*: Focusing on performance regimes in pursuit of higher standards from the centre requires strengthening of vertical chains of command and reinforcement of the structures which create functional standardisation and fragmentation.

At the same time, meeting the needs of an increasingly diverse student body by utilising a burgeoning range of expert knowledge and evidence about effective learning practices requires much greater levels of flexibility and direct collaboration with the wider world.

This combination of stability and incremental change allows the traditional model of schooling, and of bureaucratic school systems, to adapt continuously to all kinds of external change, and therefore to deflect the disruptive potential of almost any innovation, whether it comes from above, below or around the corner.

While reform strategies continue to rely on the ongoing consistency at the core of the system – such as those required by standardised reporting processes, outcome measures and benchmarked features of effective schools – they will inevitably help to reinforce and embed the core institutional design. Meanwhile, the adaptive resilience of the wider system is just as likely to be filtering and interpreting the signals being sent from the policy centre, and in the process reducing their impact.

Making Innovation Systemic

Yet if this were the whole story, it would be hard to account for the many different ways in which innovation is generated and spread across existing education systems.

Of course, much of the current wave of open, networked innovation has its roots in long-standing educational thinking and practice. The School of Everything is a self-conscious twenty-first century manifestation of Ivan Illich's "de-schooling" ideas, while the principles of systems thinking and reflective practice flow directly from thinkers like John Dewey and Donald Schön to contemporary scholars like Lawrence Lessig and Etienne Wenger.

Most school systems make significant investments in infrastructure for knowledge transfer, whether through professional development programs or technology networks, research laboratories or leadership institutes. Most schools participate in partnerships, exchange programs and self-generated improvement projects of some sort. The question is not whether resources for innovation exist, but whether the wider whole of the system manages to create more than the sum of its individual parts.

Some of the more breathless theories of networked innovation would suggest that its spread depends almost entirely on the kind of spontaneous, organic and self-organising growth shown by the viral spread of Web-based phenomena.

But a longer view would acknowledge that the most influential innovations are often the result of deliberately crafted strategies and that innovation has its greatest impact precisely when it is integrated with, or replaces, existing systems.

Christensen's analysis of the growth of disruptive innovation helps here: Genuinely disruptive innovations, in order to achieve their full impact, must initially be developed to "compete against non-consumption", that is, for use by those for whom the current industry standard is not accessible, affordable or sufficiently valuable. If new innovations are tested immediately against the industry standard, they will come up short because they are more expensive, lower in quality or do not benefit from an existing infrastructure.

But if innovations can grow in a space where previously a group of users was unserved – teenagers listening to transistor radios who could not have afforded the expensive table-top version, for example – then they may, over time, develop to the point where they can genuinely compete with and supplant existing industry standards.

Take a political example: the 2008 US Presidential election broke all records for campaign fund-raising and produced an unprecedented surge in voter turnout for the Obama campaign by successfully integrating long-established methods of political communication and campaign coordination with forms of Internet-based mobilisation pioneered *as an alternative* to the dominant approach since 2000. The Obama campaign produced a winning synthesis of traditional political organisation and open, networked activism which has helped to break the mould of US politics. It could not have done so without building on the growth of alternative spaces and user groups of pro-Democratic activists, but it could not have changed the national political landscape without integrating these methods into an adapted (and highly adaptive) national campaign infrastructure which built on long-standing party and fund-raising structures.

The lesson is that, rather than seeking only to subvert or bypass the adaptive capacity of existing systems, change strategies based on innovation and diffusion must harness them. Too often innovation is assumed to flow from one of three sources:

- from competition between schools, or from "quasi market" policy measures which replicate the effects of open competition, such as publishing performance league tables.
- from new knowledge, primarily created upstream from teaching and learning in the fields of basic research. For example, advances in neuroscience or ICT create insights about the nature of learning which can be fed scientifically into the design of curriculum, teaching and assessment programmes.
- from the interaction between teachers and learners; it is context specific and organic and cannot be generalised in ways that go beyond professional judgement and discretion; it therefore emerges from the bottom up, and should be recognised by policy makers through respect for professional autonomy and creativity.

While each of these has some truth, it fails to capture the systemic properties – we need a larger, more robust schema which shows how multiple sources of innovation can form part of a more robust *innovation system*.

According to the leading Australian researchers Jonathan West and Keith Smith, innovation systems embody five essential functions.

- Identifying opportunities;
- Creating and spreading knowledge and skills;
- Developing new organisations and production capacity;
- Managing risk and uncertainty;
- Building and maintaining essential infrastructure (West & Smith, 2005).

Different sectors, argue Smith and West, may adopt radically different ways of fulfilling these functions – but they are all present in systems which successfully adapt over time to changing conditions through the flow of innovation. Most importantly, innovation systems that succeed over time are grounded in the repeated, practical effort by participants to solve problems and challenges they encounter in the course of trying to improve what they currently do.

Crucially, Smith and West remind us that successful innovation systems are not driven exclusively by a single external factor, such as the rate of technical invention or the pressure of market competition. Instead, successful innovation systems are ones in which a plurality of competing approaches, collaborative problem-solving and a constant interchange between specialist expertise and practical experience become embedded in the organisation, culture and market structure of a given field.

Looking at the five together it is striking that some, like creating new knowledge and skills or developing new organisations, tend to receive disproportionate attention in education policy. For example, many school reform strategies now seek to create new organisations, such as the British Government's Academy program or Chicago's Renaissance 2010. Others, such as New York City or England's National College for School Leadership, have created academies and institutes to instil high impact practices among emerging leaders.

But while each of these elements may be highly desirable, depending on the specific need or opportunity it is addressing, it clearly will not bring systemic change unless it is combined in the right way with a wider set of activities.

Taking Diffusion Seriously

The flow, or diffusion, of innovation through these wider systems of activity is mediated by all the same influences which shape and characterise systems of human organisation. So strategies for diffusion must be based on our understanding of the ways in which people actually come to learn and adjust their own behaviour in social groups and organisations (Bentley, 2007).

They include the following:

- *Imitation*: people take up new practices when they observe them in situ, that is, see them being modelled successfully by others;

- *Iteration*: new practices are developed, accepted, improved and embedded through repetition and routine, not through one-off interventions;
- *Improvisation*: necessity is the mother of invention, as the old saying goes. When we are confronted by the need to act in changed or unfamiliar circumstances, we are more likely to try things we have not done before;
- *Inspiration*: stories narrated in compelling ways are far more likely to elicit positive responses than instructions, injunctions or more abstract descriptions of why change is needed;
- *Immigration*: moving people into new settings is often highly effective in bringing new practices to bear, rather than trying to move ideas separately from the people who enact them;
- *Interpretation*: the ability to recognise patterns and draw conclusions from complex sets of information about activities is crucial to whether or not innovations are successfully evaluated and adopted over time. As Lester and Piore argue, innovation requires the capacity to draw meaningful conclusions under conditions of sustained uncertainty, as well as to respond to unambiguous evidence of effectiveness. (Lester & Piore, 2004)

These forms of learning, of course, feature in the repertoires of great teachers. Ironically enough, they rarely appear explicitly in innovation strategies designed for the larger systems that teachers inhabit.

Can Open Innovation Work in Real Communities?

Hume, a local government area in the metropolitan area north of Melbourne, Australia, is characterised by ethnic and cultural diversity and economic struggle. It includes Broadmeadows, site of a Ford motor manufacturing plant, which is an important source of jobs and investment, but cannot sustain the whole local economy. Hume also includes Melbourne international airport, a crucial economic asset and source of thousands of jobs.

Hume exemplifies many features of the new global economy – diversity, inequality and dynamism – which do not neatly fit into an idealised, traditionally planned definition of place or community. Thirty-five different languages are spoken by its people. But their achievement is limited by Hume's location, which makes many job and learning opportunities difficult to access, and by the impact of economic disadvantage and social fragmentation. School reform to drive up standards is an obvious way to tackle this challenge and improved schooling outcomes is high on the agenda of the state, local and federal governments. But Hume has also chosen a different kind of response: the Hume Global Learning VillageTM.

Hume's Global Learning Centre, a sleek steel and glass building in the town centre, is designed as a hybrid: It houses the Council Chamber, a welcoming café and a public library. It provides conference and seminar facilities and Internet services for local learners: teenagers using them after school, mothers learning English,

or workers looking to improve their ICT skills. As Vanessa Little, the Learning Community's General Manager, explains, there are so many kinds of community resource in the building that there is very little space for her own team.

But there are good reasons for the close proximity of so many different functions. The centre is part of a much more ambitious strategy to link together the traditional elements of Hume's educational infrastructure – schools and colleges – with many other activities and sites of learning that can impact positively on learning outcomes. In *Learning Together*, the centre outlines a vision of “a learning community where people embrace learning as a way of life, for all their life, thereby creating a community that values learning as the key to strengthening individual and community wellbeing.” Hume's strategy is to transform and enhance what is achieved within its education institutions by linking them directly to its wider communities.

This means myriad projects, organised around themes like inspiring lifelong learning; learning in community settings; language, literacy and numeracy; ICT uptake and village networking. Threaded through them is a hard, practical focus on developing skills and learning with tangible benefits. But the activities reach into places where the traditional bureaucratic model rarely gets: recruiting women from new migrant communities to create digital records of songs, stories and oral history; attracting teenagers to download, create and exchange their own learning materials; holding an annual State of Learning research conference; mentoring and “inspiring learners” programmes that put high-profile individuals who grew up in the area in touch with Hume's current youngsters.

Many of these activities are familiar to educators. But there are few places where they are systematically connected to the development of formal education services. Hume's model for doing so is a wide-ranging partnership of institutions, a network capable of combining to raise money, offer shared services and jointly plan new infrastructure. As part of the same regeneration process, many of Hume's government schools are being rebuilt and reconfigured into a smaller number of learning centres designed to offer a new range of learning pathways to all their students.

The Global Learning Village does not act as a traditional corporate or bureaucratic centre; when it needs a legal entity to form a partnership or bid for funding, one of its network members steps forward. It is not a direct replacement for the existing governance institutions or service providers, but by designing itself to further the whole population's learning interests, it can bring these other institutions together to create entirely new options.

The Hume Global Learning Village is one illustration of how open systems of governance and learning can support more ambitious educational strategies. It uses practice-based innovation to generate collective action to change the *context* in which individual experience and service delivery occur. In doing so, it seeks to adjust the broad institutional parameters which frame the ongoing, incremental processes of educational participation. Crucially, it connects the workings of formal education providers with the many other dimensions of learning and sources of innovation that exist beyond their formal boundaries. It seeks to create community, as well as to serve it.

Innovation comes from multiple sources; but it may be best understood as the product of dissonance or incongruity, the clash between expectation and reality or the gap between the ideal standard and the particular form.

Hume's innovation is perhaps a response to the gap between the diversity and inequality of its community. In successful learning systems, dissonance is not screened out or neutralised, but used as the stimulus for a continuous pattern of experimentation, evaluation, collaboration and exchange; that is the theory of change which educational innovators should seek to enact.

Conclusion: An Architecture for Systemic Innovation

Whether or not Hume offers a powerful innovation that can be successfully adopted across whole systems of education is impossible to tell for now.

But there may be one overall conclusion to draw from its approach, from the "open-source learning" innovations featured at the beginning of this chapter and from the overall analysis of systemic change that I have presented.

The new theories of innovation and adaptive systems offer an opportunity for a new synthesis between schools of educational thought which have traditionally emphasised either the authority of expertise transmitted through vertical chains of authority or the necessity of understanding grounded in the experience of learners and the emergence of communities of practice.

As I argued, successful open systems are not governed by free-for-alls. An essential feature of open-source programming is that it maintains a clear editorial hierarchy and quality standards against which any adjustment can be judged. The crucial feature is that access to these standards, and the opportunity to test out new ways of meeting them, is openly shared.

Twenty-first century education cannot succeed without becoming more explicit or authoritative about the meaning of understanding and excellence. But the ways in which these definitions of excellence are applied: in school selection criteria, professional standards for educators, methodologies for student assessment and the expectations of the wider community could all be radically improved if they were subject to the rigours of open, user-driven testing and codevelopment of new methods.

Whether these methods become mainstays of our next education system depends on whether the institutional architecture underpinning mass education can be designed to make these standards and processes transparent to the people who use and depend on them rather than to the current closed communities of administrators and experts.

For example, such an architecture might include systems for the following:

- individual digital record keeping and portfolios;
- formative assessment and peer-to-peer exchange;
- open access curriculum standards and specifications, and open archives of curriculum content and learning resources;

- network-based user communities, both of educational practitioners and of students, clustered around specific shared interests;
- area-based information about social and economic outcomes, services and community structure, integrated across different public agencies and openly available for community use;
- funding and regulation of education providers which did not discriminate by sector or function, for example, between private schools or public technical colleges, but which explicitly sought accountability for public outcomes for any kind of organisation receiving public subsidy or protection;
- opening of educational infrastructure and facilities to wider, plural forms of community use, as many jurisdictions are now doing;
- harmonisation of regulatory regimes designed across different countries and jurisdictions to encourage diversity of practice and model, but make possible higher levels of mobility and “interoperability” between systems;
- development and research programmes based on open, collaborative platforms and specialised clusters of innovators;
- home-school-community services designed to support the educational “coproduction” of families and informal community networks.

There are certain to be many more applications. The crucial point is not that we should continue searching for the most powerful innovations, but that education needs an architecture which is capable of harnessing the flow of innovations far more effectively.

We are far more likely to be successful in building this “supporting infrastructure” for systemic, adaptive learning if it is built in ways which make the standards, content and terms of participation for public education radically more open than they have been over the last century. The tools with which to build such an open architecture are currently emerging around us.

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The Psychodynamics of Educational Change

Chris James

Educational change can take many forms. It may be equivalent to or an extension of something familiar, may restore expertise in an aspect of practice long forgotten, and may add skills and experience without a sense of loss. Radical educational change may be fundamental, requiring a substantial reorientation of practice or the way practice is organised. However, such a change may not be particularly disruptive to any sense of well-being because it is appropriate, required and timely. So, although the change may break important attachments to ways of working and expose relatively trivial habits and expectations, it may at the same time launch a new and exciting enterprise or endeavour. Moreover, whilst the change may generate great anxiety and apprehension, there is no powerful sense of loss; the change may even be experienced as revitalising and energising. Even if the hoped-for expectations do not materialise and the venture does not succeed, the accustomed sense of self-limitation has been broken. Not all educational change is experienced so positively. When the change is unwelcome, involves the loss of important attachments that cannot be restored and does not have an acceptable purpose, there may be considerable mental disturbance resulting from internal conflicts and the loss of meaning (Marris, 1974). The experience of educational change may therefore be complicated, and making sense of it can be extremely problematic. This chapter makes sense of some of these complexities in the sometimes disturbing experience of educational change.

The chapter draws upon a set of interlinked concepts known as system psychodynamics (see James & Connolly, 2000; James, Connolly, Dunning, & Elliott, 2006, 2008; Obholzer & Roberts, 1994), which use concepts from analytical psychology (Gabriel, 1999; Hirschhorn, 1988; Kets de Vries, 1991; Papadopoulos, 2006) and systems theory (Hanna, 1997; Miller & Rice, 1967; von Bertalanffy, 1968) to interpret individual and group behaviours in social settings. In system psychodynamics theory, a number of concepts are central:

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- *social defences*, which are the behaviours that individuals and groups adopt to protect themselves against unacceptable feelings that may imperil their senses of identity, legitimacy and value;
- *unconscious mental activity* and its influence on individual and group behaviours;
- *boundaries*, which are places of discontinuity in an individual's external social world, within an individual's inner psychic structure, and between an individual's internal and external worlds and which can be powerfully influenced by affective experience;
- *the primary task of work groups*, which is what work groups feel they should be doing, along with work group mentalities;
- *basic assumption tendencies* in group behaviour where groups in work settings put their efforts into meeting their unconscious needs instead of working on the primary task; and
- *affective containment* by individuals and in organisations.

The foundational axiom of system psychodynamics is that feelings powerfully influence individual and collective organisational practice and changes to those practices. So, regardless of any intentions to retain a cognitive rationale for practice and a cognitive perspective on educational change, feelings dominate. Systems psychodynamics enable that affective influence to be understood.

This chapter explores the reasons for the high level of affective intensity in educational institutions. It then sets out what may lie behind responses to educational change and, using concepts from systems psychodynamic theory, explores those responses in greater depth. In shedding light on change processes from this affective standpoint, the chapter also seeks to offer pointers for those leading and managing change in schools and colleges.

Feelings and Educational Institutions

For a variety of reasons, schools and colleges are places with high levels of affective intensity (James, 1999, 2008a; James & Connolly, 2000; James et al., 2006). For teachers, the work of teaching and organising in schools can call up a whole range of feelings (Beatty, 2000; Hargreaves, 1998a, 1998b). Learning requires motivation, which has an affective component. If the pupils are not motivated to learn, the teacher has to engender it and provoke the feelings that are part of it. Teaching is an uncertain and unpredictable practice, which can bring feelings of both excitement and anxiety. Teachers' and educational leaders' relationships with pupils, parents and close working colleagues can have a powerful affective aspect as typically do most social relationships that add to the affective intensity. Schools and colleges are institutions, which means they have important and significant social purposes. The responsibility carried by those who work in them arguably increases the affective intensity of their work. Importantly, many teachers have a very powerful attachment (Fonagy, 2001) to their work. It has meaning for them. For the pupils, learning is associated with risk and uncertainty, so they may well feel excited and energised

and apprehensive and fearful as they learn. In their lives in and out of school, pupils may experience a whole range of unfamiliar and unmanageable feelings, which may be brought into the classroom in ways that can be difficult to control.

The Affective Experience of Educational Change

While some educational change is easily accepted and can even be energising, invigorating and uplifting, unwelcome change can be profoundly disturbing and disorientating. There are two main reasons for the effect of unwelcome change: the disruption of defensive behaviours and the complex feelings that result from loss of meaning.

Much organisational practice in work settings involves defensive behaviours (social defences) that are intended to protect against the experience of unacceptable feelings or the prospect of that experience (Argyris, 1985; Menzies, 1960; Obholzer & Roberts, 1994). The same is true in schools and colleges – perhaps more so because of the affective intensity of educational work (Dunning, James, & Jones, 2005; James & Connolly, 2000). So, a good deal of educational practice, although it may have an explicit cognitive rationale, is actually intended to defend against the prospect of experiencing difficult feelings and to optimise the probability of experiencing positive ones. The requirement to change practice, especially if the change is not welcome, may cut across the “conservative impulse” to preserve and safeguard the predictability of life of those concerned (Marris, 1974). It may therefore be accompanied by feelings of loss, insecurity and inadequacy, which may all bring other distressing feelings such as anxiety. Thus, educational change may require a change in practice, which in itself can be associated with difficult feelings and anxieties, which are explicitly intended to protect against other difficult feelings and anxieties. So, change can bring an extra burden of difficult feelings and anxieties (James & Connolly, 2000; James et al., 2006). It is no surprise therefore that the conservative impulse in educational practice can be strong and can overwhelm adaptive capacity, which is the readiness and capability to learn and change. Unwelcome change that disrupts the familiar practice pattern can as a result generate high levels of anxiety. It can also call up powerful internal conflicts, which can influence responses to change that need to be resolved.

Educational change can also result in the loss of meaning. Throughout our lives we attach meaning to significant practices, physical objects and the people around us (Fonagy, 2001). In educational change, significant objects and aspects of educational work – teaching and organising – may be discarded, deemed redundant and lost and the attachment to them threatened or broken. Realisation that the meaningful object no longer exists requires that our mental energies “are withdrawn from its attachment to this meaningful object” (Freud, 1925, p. 15x). This requirement to withdraw from an attachment and to reattach to other objects demands a fundamental restructuring of meaning. This restructuring can provoke high levels of anxiety and generate conflicting feelings, which can influence behaviour. Those concerned may experience two powerful impulses: firstly, to return to the time before the loss,

and secondly, to reach a state of mind where the past is forgotten, both of which are practically impossible. The struggle to resolve this conflict and to begin to restore a sense of equilibrium can take time and energy and can drain people's vitality. Recovery from the feelings generated by loss depends on restoring a sense that the lost attachment can still give meaning to the present. However, when the sense of loss is extreme, it can impair the ability to attach meaning to subsequent events and lessen the ability to learn from them and to begin to understand how to resolve the conflicting feelings. Individuals may also seek to withdraw from the kinds of social experiences that may help them. So, a teacher whose work is profoundly affected and radically changed in an unwelcome way by an educational change may find it impossible to become motivated to work in the new way and in the new setting, may withdraw from contact with colleagues, and may feel unable to "move on" from the sense of loss (Marris, 1974).

Social Defences in Educational Institutions

Social defences are patterns of behaviour that are often routinised and taken for granted and that have the purpose of reducing the prospect of unacceptable feelings – typically anxiety – or eliminating influences that are experienced as potentially threatening a person's mental survival (Gabriel, 1999). They may be present in existing individual and organisational practice, and individuals and groups may resort to them in the face of unwelcome educational change. Typically, they are not deliberately or consciously engaged in unconscious processes but are largely the result of them. Understanding social defences can therefore give important insights into the experience of educational change and how to manage change appropriately.

Social defences can become so deeply embedded in organisational practices that their defensive purpose may not be immediately apparent or understood by those who engage in them. Indeed, for a variety of reasons individuals and groups are likely to cover over the affective rationale with an apparently valid and sensible cognitive explanation of their behaviour. Whilst social defences offer protection from affective pain and danger, they can also distance the individual and the group from their experience of the external world (Obholzer & Roberts, 1994). In that regard, they support and protect the ego.

From a Freudian perspective, the ego is the part of the psyche that links with the external reality of the environment. The ego also has the task of mediating between the id, which in Freudian terms is the location of unconscious excitations and desires and what he called "a cauldron full of seething excitations" (Freud, 1933, p. 106), and the superego, which is the part of the psyche that is responsible for self-criticism and self-monitoring. The ego ideal, though a contested concept, is generally considered to be an amalgam of the desired yet often conflicting features and representations that the ego attempts to emulate (Gabriel, 1999). The ego's tasks of arbitrating between these three "harsh masters" (Gabriel, 1999, p. 308) and mediating between the individual's internal world and their environment are substantial. They involve keeping the boundary between the individual's internal

and external worlds, self-preservation, and maintaining the mental integrity between the psyche's different components. It is no surprise that in the face of such challenging work as teaching or changing teaching or organisational practice in schools and colleges that individuals and groups resort to defensive behaviours to support the ego in its work.

Basically, social defences take five different forms, which are linked and can occur in combination: rituals and routines, projection and introjection, regressions, repressions and resistance and splitting.

Rituals and Routines

Organisational rituals and routines are the practices that one is repeatedly engaged in and that then become taken-for-granted ways of working. Such behaviours may have little apparent connection to any rational understanding of experience or may have a cognitive rationale that overlays and belies their deeper affective purpose. They can be engaged in individually or collectively (Menzies, 1960). Importantly, rituals and routines satisfy both the conservative impulse (they provide a consistent secure pattern) and the protective purpose (they afford a defence against difficult feelings). So, for example, having regular seating arrangements in the school staffroom avoids any conflicts that might ensue and associated difficult feelings that might be generated if there was a free-for-all for seats at lunchtime. The arrangement might also provide a secure place that contrasts with the relative chaos outside the staffroom. The long-established tradition in the UK of pupils addressing their teachers as "Sir" and "Miss" arguably has the purpose of reducing the affective content of pupil-teacher relationships. Perhaps school uniform is simply a way of protecting against the difficult feelings that may result from pupils being allowed to wear what they want to. Educational change may well alter defensive routines and the order they give and may also involve the loss of an attachment to a "much loved" way of working. Taken to extremes rituals and routines can develop into obsessions and compulsions. They can be very damaging to organisational effectiveness if the routine takes up resources that can be used on the organisation's primary task (see below). When engaged in collectively, rituals and routines and the set of shared assumptions and beliefs on which they are based provide a frame of reference for establishing meaning and significance. This frame of reference and the associated routinised and ritualised practices can become an important dimension of the organisational culture (Alvesson, 2002; Schein, 1992). The protective purpose of rituals and routines and attachments to them can help explain why culture change in schools and colleges can be so difficult.

Projection and Introjection

Although many writers from a range of fields use the terms "feeling" and "emotion" as synonyms (Goleman, 1995; Hochschild, 1983; Niedenthal, Krauth-Gruber, &

Ric, 2006; Oatley & Jenkins, 1996), others, such as Forgas (2000) and Fineman (2003), distinguish between the two on the basis that feelings are what is experienced, whilst emotions are feelings that are displayed. Such a distinction is helpful because it gives an additional analytical dimension, and on that basis emotions become particular kinds of actions, which have an affective rationale. However, feelings are also important rationales for actions that might not be described, as emotions and many actions can have a powerful affective component. There is thus a good case for arguing that all actions, including emotions, are feelings that are shown to others. When the feeling associated with an action is very apparent, for example, a teacher very heatedly arguing against a proposed educational change at a staff meeting, that feeling is very easily and consciously experienced by all those witnessing the event. The impression is that the feeling has “moved” from the teacher to those listening, who may then feel similarly angry. If feelings are expressed less overtly or less straightforwardly, the feelings may only be experienced unconsciously. Nonetheless, they are still experienced by others, and again, the feelings still seem to have moved, albeit unconsciously. The apparent movement of feelings in this way is known as projection (Diamond, 1993; James et al., 2006; Obholzer & Roberts, 1994).

Projected feelings may be “taken in” by others, which is a process known as introjection (Diamond, 1993; James et al., 2006; Obholzer & Roberts, 1994). The essence of the feelings and what the feeling represents become part of the recipient and turn into a so-called internal object (Diamond, 1993). During early development, children introject “parents” and “important others” who give security and reassurance. Later, the child may introject the parental ego ideal and superego to assemble a set of principles, a sense of conscience, an internal arbiter and censor. If the child introjects a parental superego that is punishing and harshly judgmental, he/she may as an adult become a severe judge of others and highly critical of what they do (Diamond, 1993). As a social defence, introjection can work in various ways. For example, in the process of implementing unwanted educational change, individuals may introject the feelings of security and assuredness projected by a wise and thoughtful head teacher so that the head teacher becomes internalised as a good object, in this instance a protector from the difficult feelings generated by the undesirable change. The introjection of the projections of a critical and judgemental manager can paradoxically be protective if the projections feel “right” and resonate with internal feelings of inadequacy and incompetence in the recipient. The introjection gives a sense of consistency between the recipient’s internal and external worlds. It is important for those managing educational change to learn to accept and respond to the projections of others without introjecting them. The introjection of others’ projections is likely to be unhelpful regardless of whether the projections are positive or negative (James & Vince, 2001).

When feelings have been introjected, the recipients may be unable to distinguish between their own feelings (those that have originated within them) and those that have been projected by others that they have introjected (James & Vince, 2001). In those circumstances, it is quite possible for the projected feelings to be used by the recipient as rationales for their own actions. This process forms the basis

of a social defence known as projective identification, which was first identified by Melanie Klein (Likierman, 2001; Segal, 1979). Projective identification is an attempt to control the other by means of projections. The subject (the person doing the projecting) imagines he/she is “inside” the other. The recipient of the projections may not be aware that their behaviour is being controlled in part at least by the other. An example would be a situation where the deputy principal does not want to implement a required curriculum change because of the unbearable anxiety it would provoke. The anxiety may be projected toward the principal (“I don’t think it would be a good idea to bring in the change until at least next year, I don’t think the staff would like it”). The principal may well introject the projection and delay the implementation. The deputy principal has created a proxy character to act on his behalf and he can then distance himself from the decision.

Regression

Regression is when people return to a childlike state of dependency, helplessness and immaturity when faced with difficult situations that generate threatening feelings. Put simply, “Adults take on childlike roles” (Diamond, 1993, p. 6). This defence is generally not particularly effective or successful. Even in the regressed state, the individual or group still experiences anxiety, and the more primitive level of ego functioning resulting from the regressed state means that the threat is less easily coped with. Despite its ineffectiveness, regression is a familiar response to the uncertainties and threats that can come with organisational change such as leadership transitions, changes in organisational objectives or radical changes in practice. As a consequence, groups may regress in their relationships with the leader, perhaps forming subcultures that may become more like that of a group of children with a parent, or the group members might fantasise about the possibility of remaining in a secure place (“We don’t have to change do we? Why can’t the school stay as it is?”) or returning to a former “safer” time, perhaps referring to it as “The good old days”. The recipient of the projections that result from regression may experience them consciously or unconsciously, a process that is known as transference. He/she may start behaving on the basis of the projections that he/she has introjected (see above), which is known as counter-transference in this context. So, in the example above, the leader of the group may begin to feel like a parent to the “regressed children” and start acting in that way.

Covert coalitions are social defences that are linked with regression and projection, which provide protection from painful feelings by establishing “a more durable set of relationships” (Hirschhorn, 1988, p. 63). These relationships typically reflect family relationships such as parent–child or sibling relationships. So, for example, a young newly qualified teacher may form a covert coalition with the more experienced head teacher, treating him as a father figure in order to gain protection from the anxieties associated with starting teaching. The head teacher’s response may be to become a kindly father-figure, thus colluding in the coalition. In educational change, problems may arise in this example when the young teacher’s expertise

develops and she seeks to break out of the relationship against the head teacher's perhaps unconscious wishes, or if the young teacher is unable to respond to a change that the head teacher is advocating and is keen to implement.

Repression

Repression is a social defence that consigns threatening or painful desires, thoughts and feelings to the unconscious, thus preventing them from being experienced consciously (Diamond, 1993; Gabriel, 1999). The repressing process begins in early life and continues throughout adulthood. It contributes to the formation of the personal unconscious (see below). If the repression is incomplete, the contents of the unconscious may emerge. A repressed thought or feeling may emerge relatively harmlessly, although perhaps embarrassingly as a parapraxis or Freudian slips, as such occurrences are more colloquially known. Serious repression failures may threaten an individual's deeply seated senses of lack of self-worth and vulnerability and may therefore provoke intense anxiety. Periods of stress, exceptional tiredness and the introjections of others' projections, all of which are probably more likely to happen during times of educational change, can undermine the repressing process and allow unconscious content to reach consciousness resulting in increased levels of anxiety. In organisations, individuals and groups may adopt rituals and routines and other defensive behaviours to support the repression process. Changes in these individual and organisational practices may therefore be highly threatening.

Denial is a defence that involves painful or unacceptable aspects of the internal or external world being denied but without their "being excluded from consciousness" (Gabriel, 1999, p. 293) in the way that occurs in repression. The presence of denial may be confirmed by the process of negation, which is when an idea is repeatedly and firmly ruled out when such an overt rejection is not really called for. So for example, a colleague who is anxious about the implications of a change to a teaching programme (but is in denial about it) may persistently say how happy he is about the change and how unconcerned he is about it (the process of negation).

Resistance

Resistance is a direct refusal to accept information or to defy or oppose a proposal, request or order of some kind (Fineman, 2003; Gabriel, 1999). It usually has an unconscious origin and may not appear reasonable or rational, and those resisting may not be able to articulate any rationale. Resistance results from a powerful and deeply seated sense of anxiety, which, in turn, may result from a perceived threat to an individual's sense of their identity, esteem and worth. Imposed educational change may be experienced as just that kind of threat, which is why opposition to it can be so strong. As with all social defences, but particularly so with resistance because of its direct oppositional nature, it may not be possible to overcome resistance by authority, regardless of its legitimacy. In the face of direct compulsion, the mode of resistance may simply take on a different form.

Splitting

In the social defence of splitting, contradictory feelings about objects and experiences that generate painful or threatening internal conflicts are separated and perceived as either ideal (all good) or persecutory (all bad) (Halton, 1994). It is a very common defence in organisations – especially those under stress – and the consequences may be very damaging. Splitting may result in reaction formation when the threatening impulse is repressed, leaving in its place the diametrically opposite feeling. For example, the quite natural anxiety about change in familiar practices may be so firmly repressed that the change is only seen as good with no negative anxiety-provoking aspect to it at all. In response to unwelcome educational change and the resulting organisational stress, individuals and groups such as school leaders, the local authority, the school board or the government may be viewed as either “on our side” or “the enemy”. Experiences during the change process such as meetings may be described as either “excellent” and or “rubbish”. The way a department in a school has responded to change may be seen by the principal as “absolutely marvellous”, whereas the response to another department may be viewed as “dreadful, as usual”. In both examples, the reality may be more complex.

The split and separated feelings may be projected to other individuals, groups or institutions by means of actions that are driven by the separated feelings (Diamond, 1993; Dunning et al., 2005; Obholzer & Roberts, 1994). So, in response to unwanted change, a head teacher may be heard blaming “the stupid politicians for interfering in education”. His unacceptable feelings about the imposed change are separated and projected towards the government. A group of disillusioned teachers discussing the implementation of a new teaching programme may be heard saying the “teaching in this new way would be fine if it wasn’t for that group of trouble makers in year 10”. The anxieties associated with the implementation are separated from other feelings and projected towards the group of pupils. If splitting and projection are persistent and widespread, they can result in a blame culture, where anything unacceptable or mistakes are always another’s fault. Taken to extremes, it can lead to bullying where an individual or group is *always* the recipient of blame. Ultimately, it can result in scapegoating where the recipient of the difficult projected feelings eventually leaves the group or organisation taking the difficult feelings with them, much to the pleasure – and relief – of those left behind (Dunning et al., 2005). In bullying and scapegoating, there is usually a fit between those projecting and those introjecting, so often organisational scapegoat will themselves feel a sense of release and liberation if they leave. It is as if their departure feels right to them. So, for example, a head teacher seeking to bring much-needed change in the face of continual conscious and unconscious hostile projections from the staff, governors and parents may come to the view that “it would be better for all concerned if I left and allowed someone else to take up the challenge” with a sense of relief all round.

The Unconscious at Work in Schools

It is now widely accepted that we are not fully conscious of all our mental functioning and that there are unconscious processes at work in our minds. However,

what the unconscious part of the mind is and what it does remain open for debate, as indeed does the whole notion of where it is. In the modern era, two main perspectives on the unconscious, those of Freud and Jung, have dominated.

From a Freudian perspective, the content of the unconscious is the outcome of repression (see above) and thus contains hidden and potentially threatening urges, ideas and feelings (Gabriel, 1999). Jung, who was for a time a student of Freud, generally agreed with this conception but argued that this personal unconscious also contained “semi-impressions, which had never sufficient intensity to reach consciousness but have somehow entered the psyche” (Jung, 1927, para. 321).

Jung argued that what Freud had described was the personal unconscious, which was unique to each individual. Compared to this, Jung contended that there was also a substantial collective unconscious (Hauke, 2006). It was on this idea (as well as Freud’s deterministic position and his narrow linking of libido with sexuality) that Freud and Jung disagreed, a disagreement that in effect ended their working relationship. The central feature of Jung’s conceptualisation of the collective unconscious was the notion of the archetype (Lawson, 2008).

From the Jungian standpoint, human consciousness grew out of the unconscious mental processes of the primitive ancestors of human beings who lived largely in a state of preconsciousness. In this primitive form, instinctual behaviour would have dominated and the individuals would be unable to distinguish between their internal mental world and the external world. Both would have been as one. The residues of those instincts have remained in the human psyche as archetypes, which are archaic structures within the psyche that have become embedded over generations. Archetypes predispose us to particular behaviours. Metaphorically, an archetype can be viewed as the bed of a river that has long since dried up, but should the rains come, the water may begin to flow and may then become a raging torrent. So, typically, we may not be consciously aware of archetypes much as we may not notice a dried up watercourse when we view a landscape or walk through it. However, in appropriate circumstances, the archetypes may become actualised – the rivers flow – and may condition our behaviour sometimes very powerfully. Importantly, archetypal structures are widely shared amongst all humans. This notion gives rise to the idea of the collective unconscious, from which it can be asserted that, despite substantial cultural differences, the dominant underpinnings of human functioning are in fact broadly similar. Jung used the term “archetype” in a very broad and perhaps even confusing way, referring to the following: archetypal events, such as birth, death, separation from parents, initiation and marriage; archetypal figures, for example, mother, hero, swindler and wise man; archetypal symbols such as the sun, water, the cross and the snake; and archetypal motifs, such as the Apocalypse, the Deluge, the Creation, and the Night Journey (Samuels, 2006). The notion of the collective unconscious and archetypal structures has important implications. For example, behaviour resulting from an actualised archetype can be very powerful, a notion that “gains its way against all reason and will, or else produces conflict of pathological dimensions, that is to say neurosis” (Jung, 1936, para. 99). The existence of archetypal structures may have a role in establishing the notion of a “vocation” such as teaching and the desire to respond to such a calling. Changing

behaviours that are strongly conditioned by the actualisation of an archetype may be difficult and may be resisted by those being asked to change. So when asked to fill in forms detailing the attainment of tightly defined competences by her pupils (as required by a new policy), the devoted, charismatic, passionate teacher may well respond with some feeling: “I didn’t come into teaching to do this!” or “Please tell me exactly how my precious pupils will benefit from this pointless exercise!” An interpretation of this event would be that the teacher’s commitment to her pupils, which is underpinned by the forceful activation of archetypal structures, is being blocked by a requirement to undertake work that she considers to be of little value in fulfilling her commitment, hence she seeks to resist and reject the requirement.

Henderson (1962) has proposed the notion of a cultural unconscious that “lies between” and mediates the influences of the personal unconscious and the more archaic and primordial collective unconscious with its archetypal structures. It “is built up through many exposures to cultural canons of taste, of moral principles, of social custom, and of religious symbolism” (p. 8). Such an idea is attractive and its potential mediating role immediately apparent. The cultural unconscious is linked to and influenced by the collective unconscious. Over time, the cultural unconscious has influenced the archetypal tendencies and predilections of the collective unconscious. At the same time, there would be a similar linkage and interplay between the cultural unconscious and conscious mental processes. The cultural unconscious could also have a role in influencing what is repressed into the individual unconscious. Thus, although teaching or being the head teacher of a school may have archetypal foundations, the actualisation of the archetypes may be conditioned culturally. So, for example, the work of the teachers in a science department in a school may be powerfully underpinned by the actuation of archetypal structures in the collective unconscious, which drives a desire to “educate the next generation.” That desire is conditioned by perhaps unwritten cultural assumptions on which the practice of teaching in the department, the school and the profession more generally is based. Those taken for granted assumptions may in part both influence and be influenced by repressed desires in connection with teacher–pupil relationships.

Boundaries and Educational Change

The work of schools shapes organisational and intrapersonal boundaries and at the same time is shaped by those boundaries. There are physical boundaries, for example, around classes, the school grounds and particular parts of the school, such as the staff room. There are boundaries between different groups – between pupils and staff, the leadership team and the teaching staff, the administrative staff and the teachers, and the cleaners and the ground staff. There are also task boundaries that distinguish what is legitimate work in the school and what is not. As with any work organisation, schools function because of boundaries of a whole range of different kinds. Intrapersonal boundaries of the kind discussed in the previous section between the collective unconscious, the cultural unconscious and the personal unconscious also configure what goes on in schools.

In system psychodynamics, the boundary represents structural inconsistency and discontinuity (Heracleous, 2004; Lamont & Molnar, 2002), and boundaries can be internal as well as external (Hirschhorn, 1988; Roberts, 1994; Schneider, 1991). Gabriel (1999) asserts that “The first boundary we discover is that which separates us from an external world” (p. 98). This boundary is the ego. From an organisational standpoint, Hernes (2004) argues that boundary formation in organisations is not incidental but is inherent to the process of organising and to the organisation itself. Boundaries are not therefore by-products of organising; rather, organisations evolve through the process of setting boundaries. As such, organisational boundaries are not fixed and static but may be variable, unclear and, to varying degrees, permeable (Paulsen & Hernes, 2003; Perrow, 1986; Scott, 1998; Weick, 1979, 1995).

Organisational boundaries can be experienced and analysed from a number of perspectives (Hernes, 2004). Various kinds of boundary have been identified: authority, political, task and identity boundaries (Hirschhorn & Gilmore, 1992); functional, hierarchical and inclusionary boundaries (van Maanen & Schein, 1979); and behavioural and normative boundaries (Scott, 1998). Leach (1976) defines boundaries as spatial, temporal and psychological, a view supported by others (Stapley, 1996) and Diamond, Allcorn and Stein (2004). Hanna (1997) considers that physical boundaries are also important.

Czander (1993) argues that all organisational conflicts are related to boundaries in some way. As points of where difference is distinguished and experienced (Heracleous, 2004; Lamont & Molnar, 2002), boundaries will be places of tension and affective intensity (Douglas, 1966; Hernes, 2004). Boundary violations are articulated and experienced as conflicts and may well escalate into major incidents in individual and organisational life. For this reason, people may be reluctant to protect boundaries, or may protect them more vigorously than might be expected (Czander, 1993).

The maintenance of boundaries is critical to organisational success (Czander, 1993; Diamond et al., 2004) despite the sense that in current ways of working in education and other settings boundaries may be disappearing (Hirschhorn & Gilmore, 1992). The management and maintenance of organisational boundaries is therefore an important organising practice. Similarly, securing and sustaining the boundary between individuals’ internal and external worlds and between the different parts of the psyche, for example, between the conscious and non-conscious elements, is crucial to survival in work settings.

It is difficult to think of an educational change that does not involve a reconfiguration of individual and organisational boundaries. A change to the teaching task means a reworking of the task boundaries. A change in practice demands a change in the role boundaries – which capabilities are now within the role boundary and which are not? A change in organisational responsibilities will require a similar redrawing of role boundaries. Altering the school timetable shifts time boundaries. Changing pastoral care responsibilities will almost certainly require a reworking of psychological boundaries. Varying a teacher’s regular teaching room requires a change in physical boundaries. Given that boundaries have a conservation function and given that existing boundaries are frequently points of conflict, it is no

surprise that unwelcome educational change (and therefore boundary change) can be so problematic.

The Primary Task in Educational Change and the Work Group Mentality

The primary task is what an individual, group or organisation feels it must do to survive and to continue and to carry on (Rice, 1963). If the task that the work group is engaged upon is widely sanctioned within the organisation and by key external stakeholders, organisational success can result (James et al., 2006). Clarifying the primary task of a work organisation may be difficult but is arguably crucial in improving organisational effectiveness, especially in schools (James & Connolly, 2000). An organisation that focuses its resources on the primary task is said to have a work group mentality (Bion, 1961). Typically however, work on the primary task carries a high level of anxiety, and this is especially the case in work in schools and is part of the reason why schools are places of high affective intensity. This task-related anxiety may be exacerbated in times of educational change, when the task may be redefined, when the definitions of successful task completion are altered or when a change is required in established ways of successfully completing or performing the task. In these circumstances, and indeed under normal circumstances, because of the primary task–anxiety link, work-group members may seek to avoid working on the primary task and turn instead to basic assumption tendencies.

Basic Assumption Tendencies and Change Processes in Groups

A basic assumption tendency is when the group avoids primary task-related work and concentrates instead on meeting its unconscious needs (Bion, 1961). There are different forms of basic assumption mentality, and they are not fixed. Moreover, a group may move between a work group mentality and a basic assumption mentality.

There are several kinds of basic assumption tendency (Bion, 1961).

- Fight and flight (baF) occurs when the group behaves as if it has met to flee from or fight something.
- Basic assumption dependency (baD) arises when the group acts as if it has met to be sustained by a leader on whom it depends.
- Basic assumption pairing (baP) is when the group functions as if the members have met together in order that two people can pair off and create a new and as yet unborn leader.
- Basic assumption oneness (baO) is where members join and surrender themselves to the group, thereby experiencing well-being and wholeness (Turquet, 1974).
- Basic assumption me-ness (baM) is when the members of a group behave as if they are not a group but are separate and distinct individuals for whom “groupness” is an anathema (Lawrence, Bain, & Gould, 1996).

Following a study of successful schools in disadvantaged settings, I have examined the associations between the different basic assumption tendencies and the different facets of joint working or collaborative practice in school staff work groups (James, 2008b). I found that fight or flight, dependency and pairing are associated with the group's relationship with the primary task. In the successful schools, while the work group tendency was evident, this was due in part at least to the highly meaningful nature of the given, normative primary task. Thus, the staff group's work on this task satisfied a deeply rooted and perhaps unconscious need.

By contrast, oneness and me-ness are associated with the deeply seated ambivalence that individuals feel about group membership. These simultaneous and conflicting feelings result from desire to join the work group along with anxieties that joining the group will result in some form of psychic annihilation. In collaborative practice, both collective and individual endeavours are valued. The "collective" pre-dispositions of oneness and me-ness and the behaviours they underpin must therefore be held together in dynamic tension in a staff work group for successful joint working.

Two new basic assumption tendencies concerning the learning and change that are inherent in reflective practice emerged from this work. In basic assumption change (baC), the group behaves as if current practice is not – and will never be – good enough. This basic assumption drives a powerful desire in the group to change its practice. By contrast, in basic assumption stasis (baS), the group behaves as if it must stay as it is in order to survive. Both baC and baS are driven by anxiety. In the change mode, the anxiety may be founded on a lack of self-worth and a desire to counter a sense of personal and organisational. With the stasis tendency, the anxiety may be that change will bring chaos and insecurity. Both change and stasis must be held together in a dynamic tension and their concomitant anxieties contained (see below) if collaborative practice is to be successful.

In educational change, alterations to the task may heighten the anxieties associated with it, and as a result, the staff may begin engaging in fight/flight, dependency and pairing ways of working. If there are disruptions to the composition of the working group, the group may move to either individual atomised functioning (me-ness) or may give up their individual autonomy, sacrificing it for the good of the group oneness – neither of which is ideal. In the face of educational change, the group may start working in a change mode and may rush wholeheartedly into the proposed change and indeed any other change that comes along. On the other hand, the group may adopt a stasis mode of working, refusing to adapt in any way and resisting the change.

The Importance of Affective Containment by Individuals and Organisations During Educational Change

When there are difficult feelings in an organisation, for example, during a time of educational change, people are more likely to seek to protect themselves from them

(Dunning et al., 2005). Schools are places where feelings are always concentrated and where there are often difficult feelings present. During times of change, affective intensity and the likelihood of difficult feelings being present will increase. One response might be exerting affective control to minimise or even eradicate the difficult feelings from teaching, organising and change in educational institutions. However, even though feelings are very difficult to deal with, they are essential in helping to motivate actions and are a prerequisite for practice. The same applies to changing educational practice; feelings support the will to change and are dominant in the experience of change.

An alternative to affective control is affective containment. Affective containment is the process of providing an environment that brings about effective and authentic receptiveness and reflection. The idea was first developed by Bion (1961) to describe the creation of the conditions during psychoanalysis under which the experience of feelings, especially anxiety, can be accommodated securely, articulated and reflected upon. A containing environment for emotions (feelings that are shown) contrasts with a controlling environment where feelings are restrained, hidden and not allowed to become apparent as emotions. In controlling environments, difficult feelings have to be managed in other ways. If those feelings are hard to bear, individuals and groups may attempt to protect themselves by adopting defensive behaviours. In addition, the sense of “being controlled” may itself be experienced as a threat, which may in turn generate unacceptable feelings. Environments that seek to bring about affective control may therefore create more problems than they solve.

During educational change, affective containment can be very important. It can allow feelings to come to the surface, to be talked about and reflected upon. The difficult feelings can be accepted by others (as opposed to being introjected) and, in an important leadership act, can be reconfigured and returned to the others in an acceptable form (James & Jones, 2007). The containment processes can prevent the development of defensive routines in the face of change, enable the meaningful objects that may be lost during the change to be appropriately valued, and can facilitate re-attachment to the new.

Concluding Comments

This chapter has addressed the sometimes destabilising experience of educational change. By drawing on system psychodynamic theory, it has sought to explain and interpret individual and group responses to educational change. A number of systems psychodynamics theory concepts have been employed in this endeavour. They are social defences, the influence of unconscious mental activity, organisational and individual boundaries, the primary task of work groups and work group mentalities; basic assumption tendencies in group behaviour particularly in relation to collaborative practice; and affective containment by individuals and in organisations. Although the reasons for initiating change may be varied and the responses to change may be very wide ranging and unpredictable, systems psychodynamic

theory can offer some very powerful insights into understanding the educational change process and how it might be better managed and led.

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Moving Change: Evolutionary Perspectives on Educational Change

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The recognition that the implementation of changes in the professional beliefs and knowledge, behaviors, organizational conditions, and outcomes of people working in schools and school systems takes place over time is a fundamental precept in educational change theory, research, and practice. The aim of this chapter is to provide a concise overview of significant conceptual tools developed by education change theorists for describing, studying, and explaining that process as it plays out over time at different levels – e.g., individual, program, school, and school system. Given the volume of published research on educational change over the past 50 years, it is perhaps surprising that our understanding of the process dimensions of educational change remains limited to a few core concepts that once articulated have assumed a taken-for-granted status. This chapter revisits these concepts, highlights key areas of debate or lack of conceptual clarity, and suggests areas for further research regarding the processual nature of education change, particularly in terms of stage or phase theories of change over time. For each level of change considered, reference is made to key sources in the literature for the prevailing conceptual models of the temporal dimensions of the change process. While other publications might have been selected, these have been chosen because they are widely cited and applied in the literature on educational change, and because they draw attention to many of the key ideas and issues in considering change as a process that evolves through identifiable personal and organizational stages or phases over time.

Change as a Developmental Personal Process

Credit the developers of the Concerns-Based Adoption Model (CBAM) for their seminal conceptualization of change as a developmental process in attitudes and behaviors for individuals attempting to put new ideas and practices into use (Hall & Loucks, 1977, 1978; Hall, Loucks, Rutherford, & Newlove, 1975; Loucks &

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Hall, 1977; see Hall & Hord, 2006, for a recent comprehensive overview of CBAM and supporting research). The basic ideas are straightforward. One dimension of change is represented as a developmental sequence of “Stages of Concern” that reflect a person’s (e.g., a teacher) disposition or attitudes toward a change that he or she is attempting to put into practice (voluntarily or as an organizational mandate). A second dimension focuses on a developmental progression in a person’s behaviors as he or she prepares for, begins, masters, and refines the use of new professional practices, referred to as “Levels of Use.”

Through studies of experienced teachers implementing changes in curriculum and teaching (referred to as innovations), the CBAM developers identified and defined seven Stages of Concern. At Stage 0, Awareness, a teacher has little knowledge about or interest in the change. At Stage 1, Informational, the teacher is interested in learning more about the change and the implications of its implementation. Teacher concerns at Stage 2, Personal, reflect anxieties about the teacher’s ability to implement the change, the need for change, and the personal costs of getting involved. Stage 3, Management, concerns intensify as the teacher first begins to cope with the logistics and new behaviors associated with putting the change into practice. At Stage 4, Consequence, teacher concerns focus on the impact of the change on students in their classrooms and on ways of modifying the innovation or its use to improve its effects. Teacher interest in working with other teachers to jointly improve the benefits of implementing the change for students is manifested in Stage 5, Collaboration, concerns. At some point in the change process, teachers may develop Stage 6, Refocusing, concerns. These teachers think about making major modifications in the use of the innovation, or perhaps replacing it with something else. The intent of the developers of the CBAM framework was not simply to create a research-based framework for understanding teacher change, but also to create ways to assess teachers’ feelings and experience with innovative practices, and to use this information to provide interventions that would address their concerns.

The image of affective “stages” that a teacher (or anyone implementing a change in practice) progresses through over time is somewhat misleading. It is grounded in the notion (supported by research) that as teachers (both novice and experienced) become aware of, learn about, try out, and master the use of new teaching methods and programs their feelings about the change often evolve from a predominant focus on self (high Personal concerns), to task (high Informational and Management concerns), to impact (high Consequence and Collaboration concerns). Where things can get confusing, however, is if education researchers or practitioners misinterpret the CBAM framework as a necessary and lockstep evolution in the concerns of innovation users, rather than a possible progression dependent upon the influence of other factors at play in the implementation context. CBAM theory posits that the nature and intensity of individual concerns about the implementation of new ideas and practices across and within each stage will be higher or lower, depending not only on the person’s progress in mastering the change, but also on the organizational conditions (e.g., administrative and collegial support, fit with prior beliefs and practices) associated with the change, and the perceived impact or results of the change

for those affected (teachers, students). Without effective professional development inputs during the time in which teachers are learning to use new teaching strategies and programs, for example, teachers may experience unresolved Personal and Management concerns that can lead to frustration, resistance, or even abandonment of the change. Furthermore, interventions that do effectively resolve early stage concerns do not necessarily stimulate more intense concerns at subsequent stages in the model. Researchers applying the CBAM have discovered, for example, that even with repeated use of a new practice and adequate professional assistance, teachers may incorporate new teaching methods and programs into routine patterns of use without necessarily shifting their concerns toward refinement of the innovation based on observed evidence of student impact. Research on teacher collegiality and professional community suggests that the shift into more intense Consequence or Collaboration stage concerns may be less a function of teachers' individual mastery in the use of new programs and practices than of whether the organizational culture of the school in which they work emphasizes improvement in student learning through shared goals, teacher collaboration, and ongoing teacher learning activities (e.g., Anderson, 1997; Dufour, Eaker, & Dufour, 2005; Little, 1982; Rosenholtz, 1989).

A second element of potential confusion in applying this stage theory of teacher feelings about implementing new practices is that teachers are likely to experience and express concerns that link simultaneously to multiple "stages" in the model. It is the relative intensity of their concerns related to one or more stages that distinguish teacher attitudes toward a particular change they are involved with, not the mere presence or absence of concerns. For example, a teacher who is preparing or just starting to use some new teaching method might be genuinely wondering about the potential benefits of the innovation for student learning compared to current practices (Consequence concerns), while being predominantly concerned with figuring out how to integrate the use of that method into his/her daily lesson plans, and with attaining a basic level of comfort and competence in how he or she applies it in the classroom with students (Management concerns). In other words, at this point in their mastery of the use of the new method teachers are more preoccupied with the logistics and skill of doing it than with assessing and judging its effects on students and modifying it accordingly. It is not the case, however, that they do not care about student impact. In a metaphorical if not a real sense, it may be more appropriate to think of the different categories of concerns less as distinct stages than as notes in a musical chord that can be played in ways that give emphasis to different feelings depending on the teachers' progress in context. The CBAM developers refer to change users' concerns profile across the stages. A profile may reflect multiple peak concerns, not a single dominant focus on one stage. The theoretical and practical meaning of "stage" in this well-known model of the evolution of teachers' dispositions toward the implementation of changes in practice would benefit from further research.

The second dimension of the CBAM framework for understanding, assessing, and facilitating teacher change refers to a behavioral progression in knowledge and skills associated with mastering the use of new programs and practices, described

as Levels of Use. Progression from one level to the next is marked by key decision points and corresponding behaviors in several domains associated with the change: acquiring information, assessing, sharing, planning, status reporting, performance, and knowledge. Levels 0 (Nonuse), I (Orientation), and II (Preparation) describe the behaviors of teachers vis-a-vis an innovation before they actually begin using it in the classroom. Teachers at Level I, Orientation, are seeking or receiving information about the change, but have not yet committed (or been committed) to implementation, whereas at Level II, Preparation, a teacher is actively planning to begin implementing the program or practice at a later date. Once teachers actually begin to operationalize their use of the innovation in the classroom, they enter Level III, Mechanical Use. Teachers at this level are struggling with the logistics of implementation (e.g., lesson and resource planning, classroom management, record keeping) and with attaining basic mastery of the new teaching skills. Any changes they make in their use of the innovation are likely to be teacher-centered, that is, aimed at making use of the innovation more manageable and easier to practice. A teacher who establishes a pattern of regular use and who makes few adaptations in his/her use of the new program and practices is said to have attained Level IVA, Routine Use. Many teachers will settle in at a Routine Level of Use once the new program or practice gets integrated into their ongoing repertoire of teaching strategies, materials, and so on. Some teachers, however, may begin making adjustments in their use of the program or practice based on evaluations of its impact on students. This is characterized as Level IVB, Refinement Use. If they actively seek out and interact with other teachers to collectively and collaboratively modify their use of the innovation to improve student results, they are engaged in Level V, Integration, behaviors. Eventually, some teachers may exhibit Level VI, Renewal, behaviors. Teachers at this level are actively exploring alternative programs and practices or major changes in the innovation.

Similar to the Stages of Concern, the CBAM Levels of Use concepts and framework describe a possible – not an inevitable – progression of individual innovation user behaviors associated with mastering the implementation of new programs and practices in teachers' work. As a developmental model of innovation user behaviors over time, however, the Levels of Use concepts and framework are more inclusive of alternative outcomes of use than the Stages of Concern. The behavioral model recognizes the practical reality that many educators engage in all sorts of professional learning experiences (Orientation) that lead to greater awareness and knowledge about programs, ideas, and practices that they may never end up implementing. It distinguishes people who are planning and otherwise getting ready to try out something new (Preparation) from those who are actually applying it in their work (Mechanical Users and beyond). Most importantly, the model accommodates the fact that some innovation users (perhaps most), after an initial period of mastering the logistics and basic skills required to implement the program or practice (Mechanical), will settle into a personally comfortable Routine Level of Use. The factors that lead some educators to engage individually or collectively in deliberate impact assessment and modification of their use of new programs and practices (Refinement, Integration) are not well understood. As noted for the arousal

of impact-focused concerns, this may be less generally a function of individual professional orientations and skills than of workplace-specific norms and arrangements that give more or less emphasis to results. The original CBAM research and theory were developed prior to the contemporary curriculum content and student performance standards and accountability policy era. The incidence of impact-focused levels of user behaviors (Refinement, Integration, Renewal) linked to the implementation of new programs and practices may be more prevalent nowadays given the changes in the policy context. Again, the theory that supports this developmental model of change would benefit from further research.

The common sense appeal of the Levels of Use (and Stages of Concern) concepts and frameworks relates to their generic applicability to any new policy, program, and professional practices that require expected implementers to alter current professional beliefs and behaviors. Just because it resonates well with people's practical experience, however, does not mean that it makes perfect sense as a developmental model of change. One source of persistent confusion has to do with the nature and definition of professional expertise as it relates to the implementation of new programs and practices. Implicitly we can infer that someone (e.g., a teacher) who has sufficiently mastered his/her use of a new program or practice to move from an assessment of Mechanical Use to Routine or Refined Use has attained a higher skill level. Some CBAM researchers, however, note that implementers may routinize the use of new programs and practices at sub-optimal levels of expertise (Anderson, 2006). In other words, they are implementing the practices on an ongoing basis, and are comfortable with the way they are doing it, but demonstrate low levels of understanding and skill in their use (and are probably not aware of that discrepancy).

Our understanding of teacher and principal growth from novice to expert generally and with regard to the use of specific teaching and leadership strategies remains poorly developed. When it comes to teachers, in particular, our notions of developing expertise are confounded with notions of fidelity and with compliance. Fidelity refers to the degree to which someone, such as a teacher, is implementing a program or practice in accordance with the way that program or practice is designed to be used (Fullan, 1982). Compliance adds the prescriptive expectation that particular forms or patterns of practice are not merely professionally desirable, but are formally required by some external authority (e.g., school system policy and/or administrators). Some change researchers and theorists have argued that it is appropriate to view and assess changes in teacher practices as a process of behavioral change that progresses incrementally toward conformance with ideal images of implementation, when supported by effective leadership, resources, and technical assistance (e.g., Leithwood & Montgomery, 1982). From this perspective, variability in the ways that teachers implement new programs and practices reflects variations in teacher understanding and skill in the use of those particular programs and practices. To the extent that these variations are conceived as a linear progression of behaviors that approximate a desired pattern of use, this represents a normative developmental model of teacher change over time. Others have similarly distinguished variations in teacher use of specific programs and practices as ideal, acceptable, or unacceptable relative to prescriptive definitions of what the

innovation would look like in practice if implemented well, but without arguing that the variations represent developmental steps in mastering its use (e.g., Hall & Hord, 2006).

Our conceptions and understanding of variability and growth in teacher implementation of educational innovations are further complicated by the recognition that innovations are typically multi-dimensional (Fullan, 1982; Hall & Loucks, 1981; Leithwood, 1981). In broad terms, educational innovations for teachers may involve changes in materials (curriculum content, textbooks), practices (e.g., teaching or assessment strategies, grouping practices, classroom management), and beliefs (ibid). The exact nature and extent of change within each of these dimensions, however, is innovation and context specific. The adoption of a new textbook, for example, is a change in materials that may or may not fit with teachers' prior beliefs and practices. Furthermore, for a group of teachers simultaneously learning to implement the same new teaching strategy (e.g., guided reading), the gap between their prior beliefs, understanding, and practices and those associated with use of the new strategy may vary in magnitude and complexity for different individuals. Leithwood (1981) proposed a generic framework of ten dimensions that might be implicated in the implementation of any change in teaching and learning (not all changes would necessarily affect all dimensions), and that could be used as a tool for comprehensively describing and assessing use of different components of a change. For our discussion here, the basic point to highlight is that for a given set of innovation users, implementation progress relative to expected and ideal patterns of implementation may vary for different dimensions. Considered from this perspective, the idea that teachers or anybody implementing changes in their professional practice may move through holistically defined but empirically identifiable stages or levels of concern and skill in their use of that change gets murky indeed. Intuitively, no one disputes that implementing changes in current practices is not a single event, but rather an evolution in attitudes, understanding, and behaviors for those involved over time. The theoretical concepts that we use to describe and explain this process, however, are not resolved.

Program and School Change as an Organizational Process over Time

The preceding section examines developmental theories of change in educational settings from the vantage point of the individuals attempting to implement changes in programs and practices. This section focuses on process theories concerning the implementation of new educational policies, programs, and practices over time more from an organizational perspective. Key sources for the original ideas date from the 1970s and 1980s in the research and writing of Berman and McLaughlin (1976; Berman, 1978, 1980, 1981), Fullan (1982, 2007), Fullan and Pomfret (1977), Miles and Huberman (Miles, 1983; Huberman & Miles, 1984), and a few others (e.g., Corbett, Dawson, & Firestone, 1984). There are four core ideas that have become

ingrained in the discourse on educational change – (1) that change is an organizational process over time; (2) that the process can be described and explained in terms of three broad phases; (3) that activities associated with different phases are interactive, not necessarily sequential in time; and (4) that change over time is less a process of direct replication than one of mutual adaptation. This conceptualization of change as an organizational process over time has been applied to the investigation of educational changes that take the form of new programs (e.g., a new curriculum, a new textbook, a set of packaged set of activities and materials for a specific curriculum area) and new instructional strategies (e.g., cooperative group learning, particular assessment techniques, specific classroom management strategies), as well as to the study of the adoption and implementation of models for whole school reform.

First is the idea that change is a process and not an event (Fullan, 1982; Hall & Loucks, 1977). This idea emerged as a rebuttal to the misguided expectation by policy makers and external program developers that putting new programs and policies into practice was equivalent to the simple replacement of one technology with another, an event commonly referred to as innovation adoption. This concept worked well when applied to the diffusion and adoption of technological innovations (e.g., new types of seeds by farmers) (Rogers, 2003). Education change researchers discovered early on that public announcements declaring the adoption of new policies or changes in educational products (e.g., curriculum content, textbooks, program kits) and practices (e.g., team teaching, teaching methods) at the classroom, school, school district, or school system levels did not guarantee that practitioners at the local level would change what they were doing (Charters & Jones, 1973). As characterized by Berman (Berman, 1981; cf. Fullan, 1982, 2007), change is an implementation-dominant process not a technology-dominant process, and the progress and outcomes of the implementation process are highly contingent upon interaction of the innovation with local context factors (e.g., perceived need and motives for change, innovation quality and complexity, fit with prior practices and beliefs, funding, resources and working conditions to enable change, quantity and quality of technical assistance, leadership stability and skill, participation in decision making by key stakeholder groups, competing priorities and expectations).

In their early research and writing, Berman and McLaughlin (1976) employed the concept of “stages of innovation” to characterize the overall organizational process through which school district and school personnel engage in efforts to replace, modify, or supplement current professional practices with new ones over time. They defined three stages: initiation, implementation, and incorporation. Each stage is associated with different activities and decisions concerning the selection, use, support, and progress in putting the change into practice on the part of local actors in their respective roles. Initiation encompasses decision-making activities about the reasons for change, selecting solutions (new programs and practices), implementation planning, and seeking resources. Implementation refers to the stage during which local educators are actually attempting to put the selected change into practice. Typically, this involves activities that lead to adaptations in the innovation as well as changes and modifications in the organizational setting and behaviors. Incorporation refers to activities associated with the continuation of what

was originally a change into ongoing organizational routines and work practices. Berman and McLaughlin noted that decisions and actions at earlier stages affect what happens at later stages. From their research on the implementation of some 280 federally funded educational change projects in the United States, they concluded that while the focus of change was generally predictable from the content of the change initiative, the actual progress and outcomes of change were highly dependent upon local decisions and actions vis-à-vis its adoption, use, and continuation and upon the degree of specificity or uncertainty about the image of what the change should look like once put into practice.

Fullan (1982) nudged the conceptualization of the change process in organizations away from the linear notion of stages. He referred instead to three broad “phases” of change: initiation (also referred to as adoption or mobilization), implementation (or initial use), and continuation (cognate terms include incorporation, routinization, institutionalization). While he did not explain his decision to employ the concept phase instead of stage, his explanation of this model of the change process clearly indicates that he was striving to develop a way of thinking and talking about change in organizational practices that could account for the fact that it is “not a linear process,” even though it occurs over time. Like Berman and McLaughlin, Fullan asserted that what happens at one phase strongly affects events and outcomes at later phases. But he added the nuance that events associated with a particular phase can feed back into and alter decisions and actions taken previously, and employed two-way arrows in a conceptual diagram to try to capture the interactive relationships between actions within each phase, as opposed to portraying change as a deterministic causal chain of events. Nonetheless, the metaphorically sequential image of a change progressing through the phases over time remained powerfully embedded in this conceptualization of change. In a later work, citing the research and thinking of Matthew Miles, Fullan further elaborated on what he then characterized as the “Triple I” model of change: initiation, implementation, and institutionalization (Video Journal of Education, 1992). Implementation success (defined as putting the change into practice and sustaining that practice) depended upon the quality of attention and action given to distinct conditions and activities associated with each phase: Initiation (high-profile need, clear model of change process, strong advocate, active initiation); Implementation (orchestration, shared control, pressure and support, technical assistance, rewards); and Institutionalization (embedding, links to instruction, widespread use, removal of competing priorities, continuing assistance).

Berman (1981) reconceptualized his original stage constructs of the change process as “sub-processes” related to specific functions and activities within an organizational system. According to this organizational systems view, a change can be said to occur when existing organizational routines are replaced or modified such that the system enters a different state of organizational behaviors and attendant relationships, materials, and so on, depending on the content and scope of the change. While this occurs over time, Berman deliberately avoided the language and images of linearity in the activities associated with the three sub-processes: mobilization, implementation, and institutionalization. The sub-processes co-exist

as change-related functions in the organization, and the activities linked to those sub-processes can overlap in time and interact in mutually influential ways. The activities associated with certain sub-processes, however, may be more prominent in the actions of local actors at different times in the history of a change initiative, and the roles that those actors play in the change process can vary for different sub-processes. Mobilization activities include developing an image of the desired change (e.g., needs assessment, goal setting, product adoption), planning for implementation, and lobbying internally and externally for support (commitment, political support, resources, etc.). Implementation encompasses two broad functions that local educators engage in as they attempt to put new programs and practices into action – clarification and adaptation. Clarification is linked to activities such as professional development that help implementers figure out exactly what and how to do the change and how it differs from what they were doing before. Adaptation refers to local activities that lead to modifications in the content or design of the change as originally presented, as well as to the changes in behaviors and knowledge that they experience as a result of the process. Institutionalization happens when a system stabilizes into a changed state of routine behaviors, and is manifested through activities that demonstrate the assimilation of new practices into the ongoing behaviors of organizational members affected by the change, and by incorporation of these new routines into associated organizational decision-making processes (e.g., budget, staffing, support services). For purposes of this discussion, the key idea advanced by Berman is that organizational change is more appropriately conceived of as a change of state in an organizational system of behaviors, arrangements, and processes that occurs as a result of actions taken within different sub-processes of the system, but not as a predictable progression through developmental stages or phases over time. Berman's ideas foreshadowed much of the contemporary thinking about schools and school systems as complex adaptive systems, but these ideas did not catch on at the time.

What did capture the attention of educational change scholars and practitioners was the idea that various implementation outcomes were possible (where outcomes refer to the use of new programs and practices, not to the effects of their use on students or organizational effectiveness and efficiency). Berman and McLaughlin (1977; cf. Berman, 1978) distinguished four possible outcomes, differentiated in terms of the changes that result through the implementation process in implementer behaviors and in the new program or practices, i.e., the innovation. Non-implementation (or symbolic implementation) describes a state in which no change occurs either in implementer behaviors or in the innovation. Co-optation describes a situation in which the implementers modify the new program or practice to conform to what they were already doing, resulting, as well, in no substantive change in organizational work practices (though sometimes the users adopt new ways of talking about what they do that promotes an illusion of change in beliefs and behaviors). Berman and McLaughlin (op cit) reported that *mutual adaptation* was the most common implementation outcome associated with successful change. Under these circumstances, the implementation process results in changes in implementer behaviors in the direction of those envisioned by the innovation

developers and promoters, as well as in adaptations in the innovative program or practice in response to local circumstances. The fourth implementation outcome, technical implementation, refers to the rational planning image that implementers of an innovation will alter their existing behaviors in compliance with the ideal forms of practice as specified in new policies, programs, or practices, with minimal changes in the design, content, and procedures of the innovation. Berman and McLaughlin reported that they did not actually find examples of this outcome in their investigation of the implementation of federally funded educational innovation projects in the United States (*ibid*). Other education change researchers, however, argued that the change projects that Berman and McLaughlin studied simply did not include procedurally specific programs and practices that were known to yield demonstrably positive effects if faithfully implemented as designed (Crandall, 1983) when conditions conducive to successful implementation were in place (e.g., leadership, good training, resources). While it is debatable whether any new program or practice is ever exactly replicated by users in different settings, the idea that the quality of education could be substantially improved if only teachers and principals would carefully replicate “best practices” that have worked well for desired educational goals in schools serving similar students with similar resources remains deeply ingrained in the discourse on educational change.

Fullan drew a distinction between two organizational approaches to implementation – a fidelity approach and an adaptive approach (Fullan, 1982, 2007; Fullan & Pomfret, 1977; cf. Berman, 1980). The fidelity approach is most appropriate when procedurally clear new programs and practices are introduced in settings where there is a good match between local needs and goals and the selected change, where local resources and conditions are adequate to support the implementation of that change as designed, and when the likely effects of innovation use have been previously demonstrated in similar settings. Under these circumstances, organizational expectations and support for change may aim for the ideal of technical implementation of the change, whether that outcome is achieved or not. The adaptive approach is more appropriate when the technology of innovation use is not well specified, the claimed benefits of implementation are not well supported by evidence, and the local needs and resources conditions are not well matched to the change. Under these circumstances, the expected outcome would be mutual adaptation.

Whether by design or by default, mutual adaptation remains the most realistic conceptualization of what happens when educators genuinely attempt to implement new ideas, programs, and practices, i.e., changes occur both in implementer behaviors and in the innovation as initially conceived and designed by those promoting the change. Has our understanding of the process of mutual adaptation evolved since the original formulation of these ideas in the 1970s? The simple answer is not much. Analysis and discussion of mutual adaptation as a phenomenon has tended to focus less on the “mutual” dimensions of adaptation, than on whether and how implementers alter the change as originally introduced. The most common strand of inquiry and discussion reaffirms the idea already noted that under certain conditions (e.g., an uncertain technology, poor fit between the innovation and the “problem” it is supposed to address, inadequate resources, ineffective leadership and assistance)

the degree of adaptation to the innovation will be greater than under the opposite conditions. From this perspective, mutual adaptation is commonly characterized in quantitative terms as a matter of degree. Berman and McLaughlin (1977) also used the term *mutation* to describe what happens when implementers modify the design and content of a change as they put it into practice. Hall and his colleagues introduced the idea that for innovations that are procedurally well specified, there can be a point of “drastic mutation” beyond which so much modification has occurred in the program or practice as initially presented that it is no longer appropriate to claim that the original innovation has been implemented (Hall & Hord, 1987, p. 137). No one, however, has presented empirical evidence to suggest any uniform or alternative stages or developmental patterns in the process of mutual adaptation over time.

Datnow, Hubbard, and Mehan (2002) present a more elaborated conception of mutual adaptation in which context constitutes the critical explanatory dimension, rather than characteristics of the innovation, the implementation support system, and time. Their research and analysis focused on the fate of changes (e.g., comprehensive school reforms) originating externally to schools and school districts attempting to put them into practice. While employing the familiar language of reform adoption, implementation, and sustainability (i.e., continuation or institutionalization) to organize their account and analysis of change over time, they reject technical rational linear conceptions of the change process. They define implementation simply as “doing the reform,” and building upon the earlier work of Berman and McLaughlin, Fullan, and others, they argue that implementer adaptation of new policies, programs, and practices in relation to varied components or dimensions of local context is the normal process of change, even in situations involving highly prescriptive innovations. Their theoretical and research-based conceptualization of context and the adaptation process, however, adds complexity and depth to our understanding of this phenomenon. First, they propose that mutual adaptation might be more appropriately conceived of as a process of “co-construction” between those who design, advocate, or facilitate the implementation of a change and those expected to participate in enacting the change. Second, they argue that this co-construction process is subject to the varied interests, actions, and influence of all stakeholders implicated in implementation decisions and actions acting from the situational position of their particular roles and social contexts. Third, they argue that context is often misconceived as a system of lower levels (e.g., classroom, school) embedded within higher or broader levels (e.g., district, community, state). This metaphor tends to promote hierarchical and unidirectional perspectives on implementation in which local actors are portrayed as simply reacting to changes and pressures originating from external sources. Datnow, Hubbard, and Mehan argue instead for what they call a relational sense of context. From this perspective, people implicated in different functions of the overall enterprise of public education – e.g., state policy making, state education agency activities, district office work, school administration, classroom teaching, parental and community involvement, being students – each enact their role in particular social contexts. These social contexts co-exist in interconnected sets of relationships. Actions taken in one context create outcomes and conditions which can permeate through these interlocking relationships

to influence subsequent actions in other contexts in unpredictable ways. The unpredictability arises in part from the unique histories, socio-cultural characteristics and relationships, and social structural conditions of the different interacting contexts. In order to understand mutual adaptation in the implementation of educational change, one has to examine the interconnections among these contexts and how people involved in implementation respond in terms of the specific characteristics of the contexts within which they play out their roles in the process. The overall process (inter-contextual connections, communication between contexts, and prevailing responses within contexts) is strongly influenced by those actors whose organizational, political, or social positions allow them to exert the most power over how reform efforts and responses to them are defined and the corresponding courses of action that are taken. This relational and dynamic view of actions taken within and between interlocking contexts does not privilege a priori the influence of actions taken in one context over another. Change is multi-directional, not uni-directional. Datnow, Hubbard, and Mehan provide examples of local adaptations of school reform initiatives to a variety of structural and cultural contextual conditions – school organizational constraints, overlapping reform initiatives, state and district policies, linguistic diversity, and educator beliefs about student abilities, teaching and learning.

Datnow, Hubbard, and Mehan's account of the mutual adaptation process is consistent with complexity theory perspectives on social organizations as complex adaptive systems in which change occurs as a non-linear dynamic process over time (Kauffman, 1995; Waldrop, 1992; cf. Fullan, 2003). Actions taken in any specific socio-organizational contexts that are interlinked and implicated in adopting, implementing, and sustaining the change have unpredictable effects (including no effects) on organizational conditions and actions in other contexts. To posit predictable stages and outcomes of implementation is meaningless in this view. The overall model of the implementation of school reforms and programmatic changes in educational settings, however, preserves the basic distinction in chronological time between deciding to change (adoption), doing the change (implementation), and sustaining (or abandoning) the changes over time.

All analysts of the process of planned changes in education talk in both a chronological time and an organizational sense about the continuation or sustainability of changes in programs and practices beyond early experiences with implementation. While there is no fixed timeline, the basic idea is that some innovations lead to enduring changes in the way educators go about doing their work; that is, they become routine features of ongoing practice. Others only lead to temporary modifications in behaviors that are abandoned after some recognizable period of initial use. Changes may be abandoned for any number of reasons – e.g., loss of funding or other resources required to sustain the program or practice, evidence or perceptions of ineffectiveness, low leadership pressure and support, the presence of other priorities competing for people's time and energy, and staff turnover. As previously reviewed, change researchers and theorists have identified a number of organizational conditions and management practices and innovation characteristics that affect the likelihood that a given change in a particular setting will be sustained

or not (Anderson & Stiegelbauer, 1994; Berman, 1981; Fullan, 1982; Miles, 1983). The key point is the idea that some efforts to change do result in what systems and complexity theorists refer to as a state change for the people and organizations involved. That is, the changes become more than passing perturbations in the way people conduct their work.

The idea of a change in state (as opposed to a stage or phase in change) makes sense, but is not without its own conceptual and empirical conundrums. One has to do with the multi-dimensionality of change. Thus, some components of a change may get institutionalized and sustained as a feature of ongoing practice while others do not. Second has to do with the loosely coupled nature of schools and school systems as organizations. Thus, a change that affects multiple settings (classrooms, schools, district offices), or multiple contexts as conceptualized by Datnow and her colleagues, might get sustained in some contexts but not in others. Even in those where it does carry on, it is likely to take different forms as a result of the contextually sensitive adaptation process.

Third has to do with the magnitude of the change in terms of the actual difference it makes in prior patterns of work for the educators involved. Numerous analysts of planned educational change draw a distinction between changes which may result in people refining existing practices, replacing existing practices, or adding new practices to existing patterns of work, but which do not alter the fundamental nature of that work. Elmore (1995) describes this as the difference between first-order and second-order change. The idea of changes and improvements that are more profound and far reaching in their consequences for how schools and school systems are organized, the professional work of educators, and the nature and outcomes of student learning, than simply changing materials, learning a new teaching strategy, enabling people to work together (rather than individually) to try to improve what they do, and so on, is intellectually and politically appealing, but challenging to define and identify empirically. Perhaps we will know it when we finally experience it? Suffice it to say that most educational change initiatives are more about modifying the existing state of school organization and educational practice than about fundamentally changing that state. Conceptually and instrumentally, the idea of a state change in education runs into difficulties when we try to define the parameters and boundaries of the phenomenon or system that is potentially undergoing a non-trivial change in "state." These concepts are hard to apply at the organizational levels of schools, districts, or state/national educational systems.

Regardless of the organizational level or magnitude of change at hand and in mind, the long-standing notion of institutionalization as a final stage or phase of planned change is challenged by the contemporary ideology of continuous improvement in the context of standards-based and results-oriented education accountability systems. The idea that even new programs and practices that are successfully put into practice may eventually be subject to major modifications or replacement was noted long ago by the developers of the Concerns-Based Adoption Model, in the form of the Refocusing Stage of Concerns and Renewal Level of Use behaviors (Hall & Hord, 2006; Hall & Loucks, 1977, 1978). Crandall, Eiseman, and Louis (1986) posed the question of whether institutionalization or renewal was the

more appropriate organizational goal for the introduction of school improvement-oriented policies, programs, and practices. Over the past 20 years, the entrenchment of national and state accountability systems linked to curriculum content standards, student performance standards, student performance targets, large-scale testing of student performance, and mandatory consequences (rewards, assistance, sanctions) at the school and district levels based on evidence of performance is fueling and sustaining the idea of continuous improvement in the quality of teaching and learning in schools.

Drawing upon studies of sustained (5–10 years) improvement efforts at the school and district levels, Anderson & Kumari (2008) distinguishes the organizational practice of continuous improvement from the evidence of impact over time on student learning and the quality of teaching. They report that schools and school districts that engage in sustained improvement efforts may evolve through successive phases of improvement marked not only by the introduction of new or revised instructional programs and practices, but also by changes in the organizational structures and processes to support ongoing change, when there is compelling evidence that further improvement requires rethinking the existing support system for improvement. The latter point is key. It arises from the recognition that sustained improvement in student learning can stall in two significant ways. First, the support system as currently organized may reach a limit in terms of its capacity to effectively reach and provide ongoing support for improvement to all teachers, principals, and schools that it is intended to serve. Second, after a period of change, student learning levels can reach a point where evidence of improvement plateaus (cf. Fullan, 2003; Hopkins, 2007). Further improvement will not be accomplished simply by doing more of the same. These findings are discussed further in the succeeding section on educational change at the system level (district, state, nation).

System-Wide Change and Improvement in Student Learning

The idea of continuous improvement as applied to educational change has brought student learning outcomes more explicitly into theories and models of change. But what does it mean for student learning to continuously improve in a school, a school district, a school system? Is it incremental growth on set indicators of academic achievement for all students? Is it mainly about bringing low-performing students up to the level of their higher performing peers? Does it involve changing the standards and expectations as student performance rises? Does it happen in ways that can be characterized as phases, stages, or changes in state? Empirical and conceptual accounts of student learning *over time* in the context of educational change are recent and associated mainly with studies of large-scale reform at the state/national and school district levels (Fullan, 2000). Some well-known and researched examples at the district level include the decentralization reform in the Chicago School Systems (Bryk, Sebring, Kerbow, Rollow, & Easton, 1998; Simmons, 2006) and the case of Community School District #2 New York City (Elmore & Burney, 1997). Longitudinal investigations of improvement at the state/national level are

more difficult to come by. Two prime examples are an evaluation of the National Literacy and Numeracy Strategies in the United Kingdom (Earl et al., 2003; cf. Fullan, 2003; Hopkins, 2007) and the controversial accounts of and debates about state-wide improvement and equity in student achievement across Texas in the 1990s (e.g., Scheurich & Skrla, 2001; Skrla, Scheurich, Johnson, & Koschoreck, 2001a; Valencia, Valenzuela, Sloan, & Foley, 2001).

The breadth and depth of longitudinal research on large-scale reform at this level is insufficient to generalize with much certainty about patterns of change over time. We can, however, highlight some key findings and ideas emerging from this research. One is the phenomenon of plateaus in the trajectory of aggregate improvement in student learning over time. While this has been noted in long-term studies of school-level improvement (e.g., Anderson & Kumari, 2008; Anderson & Stiegelbauer, 1997), it is more profoundly evident in evaluations of system-wide reforms involving large numbers of schools and districts. Analysts of the British government's Literacy and Numeracy Strategies reform, for example, chart significant improvements in the percentages of elementary school students performing at or above government-prescribed standards on standardized tests of reading and mathematics during the first 3 years (1997–2000), a reduction in the gap between higher and lower performing students, and a phenomenal scaling-up of the number of schools and local education authorities reporting these positive results (the story and data are reviewed in Hopkins, 2007; also Fullan, 2003). Student performance across the system, however, leveled off for about 3 years and only began to rise again around 2004 and 2005. Hopkins attributes the early gains to the government's success in designing and intensively supporting a rigorous standards-based national curriculum development and implementation reform. In short, a national infrastructure of policies, resources, training, technical assistance, and monitoring to support implementation of the literacy and numeracy initiatives was effectively put into place. Citing the reform's director, Michael Barber, Hopkins refers to this period of the reform as a time and strategy of informed prescription. Informed prescription worked to get the curriculum reform into place with significant gains in student learning, but did not result in the ideal of continuous improvement once the initial gains settled in. Hopkins attributes the revitalization of improvements in student performance after a 3- or 4-year plateau to a deliberate shift in the government's strategy for improvement to what Barber conceptualized as informed professionalism. The impetus and support for ongoing improvement was redirected from a dependency on external direction and expertise to developing local leadership for improvement, and to encouraging and supporting lateral networking among schools and school personnel about promising practices and solutions to locally contextualized needs and challenges for improvement. The government reorganized its support for improvement less around technical implementation of the literacy and numeracy reforms, and more around developing and sustaining the capacity of school personnel to lead and make improvements together. For purposes of this discussion of phases, stages, or state changes in the process of educational change, the exact details of this shift in government strategy are less relevant than the evidence of the plateau effect in improvement student learning over time, and the

British government's strategic decision that further improvement meant rethinking and reorganizing the support system for change within the parameters of national goals.

The student achievement plateau phenomenon, followed by a restructuring of the system support system and then by renewed evidence of student performance gains, is also reported for the Ontario government's literacy initiative (Campbell & Fullan, 2006) and in longitudinal analyses of decentralization reforms, district organization and support, and student outcomes in the Chicago school system (Bryk et al., 1998; Simmons, 2006). The Chicago case adds some additional complexity to this pattern. As recounted by Simmons (2006), the Chicago reform has moved through three phases of improvement relative to student performance and to the district role and relationships with schools. Each phase of reorganization was preceded by a period of system-wide improvement in standardized test scores leading to a 2- to 3-year plateau in student performance gains. The complexity in this picture arises from the fact that the improvement gains varied for different sets of schools. Focusing on the low-performing elementary schools in 1990 (82% of the city's 429 regular elementary schools), Simmons shows how test scores declined initially in all these schools, began to rise in 1992, and plateaued 1993 and 1995. Among these schools, however, Simmons identifies half as "high-gain" schools that showed evidence of significant improvements in student performance, while the other half were "low-gain" schools that showed minimal overall improvement in this phase. The scores leveled off for both sets of schools, but at different performance thresholds. Following a partial recentralization of the district authority and reorganization of district direction, support, and intervention for school improvement, student achievement scores improved significantly among all these schools from 1995 and 1999, but stalled again between 1999 and 2001, leading to another reorientation and reorganization of district-level involvement in supporting ongoing improvement efforts in the schools. This change was followed by renewed evidence of improvement in the high-gain schools, but did not have an effect on the stalled achievement test results in the low-gain schools. Again, our purpose here is not to explore the details of the district improvement strategies and their evolution over time, but rather to highlight some patterns of change associated with a long-term system-wide improvement effort. The Chicago case reinforces the expectation that a system-wide improvement strategy is likely to result in short-term improvement in student performance followed by a leveling off or plateau in student learning gains, and that further improvement may require strategic rethinking and reorganization of system-level leadership and support for change at the school level. The difference in the Chicago case is the recognition that the pattern of gains and plateaus may vary for schools in varying circumstances across the system. Thus, the support system for improvement has to become increasingly differentiated in response to the performance trends and circumstances of individual schools and sets of similar schools. Elmore and Burney (1997) also talk about the development of a district approach to improvement in NYC District #2 that became increasingly responsive to differential progress in achieving school improvement targets in the context of district-wide goals.

A different scenario of wide-scale improvements in student performance over a sustained period of time occurred in Texas during the 1990s and into the current century. The history of this process and controversies surrounding the social and educational implications of the results are widely documented, e.g., Haney, 2001; Klein, 2001; Scheurich & Skrla, 2001; Skrla et al., 2001a, 2001b; Valencia et al., 2001. Texas was one of the first states in the United States to introduce a standards-based curriculum aligned with a state accountability system that included annual criterion-based testing of student performance on the curriculum, state-mandated performance indicators and reports, and public ratings of schools and school districts on the basis of student performance (aggregated and disaggregated by student characteristics, such as race and family income). Over a 10-year period, schools and districts across the state charted remarkable gains in student achievement on the state tests, and a significant narrowing of gaps in performance between racially and socio-economically different sub-groups of students. Controversy surrounding the results centered on claims that the state curriculum standards and tests were set at a low level of expectations for student learning, that Texas students did not perform nearly as well on nationally normed tests, that the state education agency inflated performance ratings by manipulating minimum pass standards, that the accountability pressures led teachers to concentrate classroom instruction more on preparing students for the tests than on learning per se, and that the claimed improvements in student learning, particularly for minority and poor students, were more illusory than real. By 2001, as seen elsewhere, student results had plateaued, but had plateaued at relatively high levels, with many schools and districts reporting 80% or more of their students performing at or above the state's minimum standards for acceptable performance in reading, writing, and mathematics. The state's response at this point was not to rethink and reorganize its support system for ongoing improvement under the existing curriculum regime. Instead, the state introduced a more challenging curriculum and testing system. In essence, the state raised the bar of standards and acceptable performance. The immediate effect was a decline in student, school and district performance levels. This created a new context and stimulus for improvement (and an impression that some schools and districts that were high performing under the old system were not so effective after all). Here is not the place to engage in the debate on the educational and social significance of the Texas miracle from 1991 to 2001 (see the works cited). The Texas case is, however, important to this discussion of the conceptual, methodological, and political complexities of measuring and judging continuous improvement in student learning over time. It reminds us of the implications of stability and change in how we assess and judge the quality and change in student learning over time. It also illustrates that when confronted with what may be an inevitable leveling off of gains in student learning across a system, system authorities can respond in different ways. In England and in Chicago, they reoriented and reorganized the external support systems to achieve better quality implementation within the existing curriculum and accountability system. In Texas they changed the curriculum and performance standards, with no major shift in state support for implementation of altered expectations and accountability requirements. It remains to be seen whether Texas schools will,

on a wide scale, register renewed gains with a more challenging curriculum and performance standards, but low investment at the state level in whether and how this might require change in the infrastructure of system support for improvement at the school and district levels.

Concluding Remarks

The aim of this chapter was to review and discuss different ways in which education change researchers and analysts have conceptualized, studied, and explained the process of change over time, particularly in terms of successive stages, phases, or states. Popular concepts used to make sense of change over time were discussed as an individual phenomenon and as an organizational phenomenon at the level of schools and school systems (district, state, nation). These included the developmental schema of affective Stages of Concern and behavioral Levels of Use applied to individuals implementing innovations associated with the Concerns-Based Adoption Model (Hall & Hord, 2006); the three-stage/three-phase mobilization, implementation, and institutionalization model of planned changes in program and practices in organizations (Berman, 1981; Berman & McLaughlin, 1977; Fullan, 1981, 2007); continuing developments in understanding the phenomena of mutual adaptation (Datnow et al., 2002) and the sustainability of change; and recent attempts to conceptualize and describe what continuous improvement looks like at the school and school system levels in terms of both student outcomes and system-level organization (e.g., Anderson & Kumari, 2008; Fullan, 2003; Hopkins, 2007). While many of the concepts reviewed are well known and often applied, this review draws attention to some of the knotty conceptual problems associated with their application to empirical findings from research on educational change. On the basis of this review, I argue that the fit of these theoretical concepts to practice should not be taken for granted by education researchers and practitioners. More research effort is needed to deepen theoretical development along these lines in our ongoing efforts to construct a discourse that accurately describes and explains educational change. In sum, as knowledge workers in the field of educational change, we need to continually challenge and refine our conceptions and explanations of the change process over time.

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A Temporary, Intermediary Organization at the Helm of Regional Education Reform: Lessons from the Bay Area School Reform Collaborative

Ann Jaquith and Milbrey McLaughlin

The Bay Area School Reform Collaborative (BASRC) was invented in 1995 as an ad hoc intermediary organization. It was created in response to a national challenge from philanthropist Walter Annenberg and his half-billion-dollar gift to American public education. The William and Flora Hewlett Foundation responded with \$25 million to support the creation of a San Francisco Bay Area regional education reform initiative. BASRC was charged with the goal of stimulating and supporting education reform in the Bay Area and working to close the achievement gap among students of different race and language backgrounds. During its 10-year history, BASRC pursued its mission by making grants to support schools' reform work and establishing a regional collaborative of member schools, districts, support organizations, and funders. BASRC's reform efforts proceeded in two phases. During Phase I of its work (1996–2001), BASRC funded 86 “Leadership Schools” in 6 Bay Area counties. By the fall of 1999 the initial \$50 million had been matched by \$62 million more in public and private funds.¹ During Phase II (2001–2006), BASRC invested in reform efforts in four *focal* districts and featured coaching as a reform strategy. The Hewlett and Annenberg Foundations provided \$40 million in funds and other sources contributed a total of about the same amount. Throughout, the Collaborative's signature reform tool was the school-based Cycle of Inquiry, in which teachers used student data to assess and plan for instruction.²

BASRC's Organizational Form

BASRC was an organization of a particular stripe. As an *intermediary*, BASRC operated between districts and schools and funders. The Collaborative vetted

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¹BASRC's regional membership also included an additional 146 Membership Schools, 40 districts, and several regional school reform support organizations and foundations which participated without funding.

²See McLaughlin and Mitra (2004).

participation in the reform effort, carried out an oversight role, and enacted a vision of whole school/whole district reform. As a *temporary* organization, funding periods defined its lifespan. According to a founding board member, there was never any intent to make BASRC a permanent addition to the Bay Area's education landscape.

Intermediary organizations have evolved as a response to a number of policy problems – how to make effective use of scarce resources, how to foster the spread of ideas and technologies, and how to coordinate missions across organizational and political lines. Likewise, temporary structures spring up in both public and private sectors to carry out special missions. Though both organizational forms are valued as promising policy responses, empirical research about the function and contribution of temporary intermediaries is limited. This chapter draws on 10 years of site-based and survey research in BASRC schools and districts to consider BASRC as a temporary intermediary charged with regional education reform. As background for the analysis, we first discuss the general opportunities and challenges associated with intermediary organizations and temporary structures. To identify and illustrate lessons for policy and practice, we then turn to BASRC's experience as a temporary intermediary charged with bringing about education reform in the San Francisco Bay Area.

Intermediary Organizations

The appearance of intermediaries in both public and private sectors reflects the contemporary appeal of interactive, boundary-spanning organizations dispatched to connect organizations and individuals. Intermediaries of various descriptions generally are capacity-building organizations, operating to increase the capability of individuals, organizations, or systems.³ Several features of intermediary organizations make them uniquely suited to play the roles of connector and broker. Many intermediaries are non-system actors and so have flexibility not available to public agencies. They enjoy multiple connections and complex relationships that permit them to act across institutional domains. Intermediaries such as BASRC live “at the boundaries. . .neither ‘of’ the system nor wholly outside it” (McDonald, McLaughlin, & Corcoran, 2002, p. 6). A positional aspect that adds value is their “betweenness” (Botes & Mitchell, 1995; Scott, 2003). Intermediaries can move between public and private agencies, individual and organizational concerns, and institutions with a nimbleness typically unavailable to bureaucracies or public agencies. Intermediaries “add value to the world mostly through what they enable *other* players to do (or do better)” (Briggs, 2003, p. 3).

³Initial conceptions of intermediaries featured them as mediating structures linking “the individual in his private life and vast institutions of the public order” (Berger, 1976; Kerrine & Neuhaus, 1979, p. 10). Subsequently, intermediaries' roles extended to include inter-institutional and inter-organizational transactions of various sorts.

However, intermediaries wrestle with their own set of positional challenges. Intermediaries such as BASRC must determine the appropriate balance between delivering their own vision and building the capacity of the organization they are trying to help (Sherman, 2002). To what extent does an intermediary see itself as transforming the field by imposing knowledge and skills, versus supporting a change that is coming from within the organization with which it works (Wynn, 2000)? Similarly, staff experience and background influence relationships intermediaries can establish with focal organizations and the organization's credibility (Honig, 2004). Do actors associated with an intermediary have credibility in the array of institutions with which they interact?

A related challenge involves establishing channels to enable a two-way communication between the intermediary and its target – channels that provide ongoing information about what client organizations need and enable intermediaries to be responsive in a dynamic environment. Briggs (2003) describes the environment in which intermediaries exist as “fluid, where demand for what they do can shift or erode, where the functions of intermediaries and other players may overlap, where the rules are ambiguous” (p. 2). Responding strategically to clients' shifting and evolving needs requires that intermediaries know what is needed when and are able to scan the environment and adapt well (Briggs, 2003, pp. 9–15). Funder relationships also test many intermediaries when they seek to attend to funders' interests while remaining faithful to their own goals as an organization, a problem of serving “many masters” (Briggs, 2003).

Temporary Organizations

Temporary organizations such as BASRC are created with a specific purpose and duration in mind. They are “defined as a set of diversely skilled people working together on a complex task over a limited time period” (Goodman & Goodman, 1976, p. 494). Temporary organizations assume varied forms and missions – such as presidential commissions, task forces, negotiating teams, research and development projects, and structures charged with providing a particular service. Their charter confines their mission and the organization's termination is tied to a specified time or event – when the commission or task force completes its work, and when an experiment, pilot project, or reform initiative ends. “These new structures are *themselves* innovations in the larger system – innovations designed to further installation of other, more specific innovations in target systems” (Miles, 1964, p. 19n).

Temporary organizations are created to do something that existing, permanent organizations cannot do, or accomplish easily. Typically they are invented to bypass “anti-change” elements in permanent organizations, to focus on a problem outside the purview of existing systems, or take on a problem for which permanent organizations have no regularly specified procedures or capacity. “They are formed with a sense of making a difference” (Goodman & Goodman, 1976, p. 496). Temporary organizations are distinctive in their ability to focus on a discrete task, and operate on

a narrowed, finite time table. To accomplish their charge, they need to keep a steady pace and cannot put off decisions in the way permanent organizations often can.

Time presents perhaps the greatest problem to both the temporary system and the organizations or systems it seeks to influence. Many temporary organizations operate under unrealistic timelines – constraints imposed at their creation that often reflect insufficient initial understanding of the scope and complexity of the task assigned. Further, temporary organizations' schedules as developed by funders or commissioners often overlook or minimize the start-up requirements of getting a new structure staffed and up and running. Implicit in the plans for temporary organizations frequently is the assumption that they will be "good to go" once the doors are opened and the first check is cut. Yet, staffs responsible for carrying out the organization's work need clear specification of rules, expectations, and procedures. These organizational processes and procedures take time to establish, yet funding and activity schedules often neglect this important management task for the new, temporary organization (Miles, 1964). Temporary organizations also commonly experience difficulty establishing effective, credible channels of communication with clients in permanent systems. Building the relationships essential to an effective communication strategy takes staff-intensive effort – a resource in short supply in a temporary organization on a fast pace to meet ambitious goals.

The "extra-system" character of temporary organizations provides flexibility and protection from the daily pressures felt by actors in permanent systems. This feature permits single-mindedness but it also can isolate temporary organizations and their staff from real-world dynamics. Being cut off in this manner can generate "them/us" divisions and "boutique" products impractical in the everyday context of permanent organizations. The education reform arena is replete with examples of initiatives nurtured in a special project setting but unsustainable once special funding and attention end – pilot projects that led nowhere.

Miles (1964) and others who study temporary systems comment on a tendency toward "grandiose, unattainable goals" (p. 481). Unrealistic goals may reflect the relative freedom from the constraints of permanent organizations and the warrant to think broadly. But they can also be "excessively noble in sentiment and impossibly difficult" (op. cit.). Temporary organizations walk a fine line between imagining the innovative "out of the box" plan for action, and simultaneously considering the doable.

And, temporary organizations often confront resistance *because* they are temporary. Perhaps nowhere more than in the field of education are actors cynical about the "flavor of the month" or the next good idea brought into a district by a well-intentioned group or task force. Educators often dismiss projects associated with temporary organizations as efforts to be endured but ultimately dismissed as "here today, gone tomorrow" resources. Temporary organizations such as BASRC, then, face special obstacles when it comes to handing off their efforts to permanent systems. Have they fostered change in attention, systems, and resources that will be continued, or will the target organization return to the *status quo* once the temporary structure is dismantled?

BASRC in Action

BASRC's founding was big news; the size of its purse and its ambitious, innovative mission created significant buzz in the Bay Area public education community.⁴ BASRC brought a vision of regional educational reform, tools and strategies for achieving this vision, and resources in the form of dollars and technical supports. BASRC's theory of change featured elements of school and district culture it assumed essential to improved student outcomes – a professional learning community focused on inquiry and evidence-based decisions about practices. In many respects, BASRC functioned as planners and funders intended, moving between schools, districts, support providers,⁵ funders, and others to advance its mission of regional reform. In other respects, the Collaborative fell short of its goals; many schools and districts struggled to carry out BASRC's mission and among those that did, the end of the initiative saw serious questions of sustainability.

Many of these shortfalls can be understood in terms of BASRC's organizational form. Here we explore the strengths and weaknesses of BASRC as a temporary intermediary. First, we look at the roles BASRC assumed and the ways in which it added value and promoted reform. Then we turn to the challenges that frustrated BASRC's efforts. What factors in the sites and the Collaborative itself account for the significant variation seen in the implementation and outcomes of BASRC's efforts? Finally, we consider the lessons BASRC's experience teaches about the role and function of a temporary intermediary at the helm of regional education reform.

BASRC as Reform Agent

The Collaborative constructed three broad roles to implement its reform goals: *grant maker, broker, and educator*.

Grant maker. BASRC acted as a scout for funders, establishing application and vetting procedures for the schools or districts. Funders expected that BASRC would develop a reform with coherence at the initiative level, capable of generating regional reform capacity. Through its support of Leadership Schools and focal districts, BASRC re-granted over \$100 million to support locally proposed reform efforts. Not surprisingly, educators were positive about BASRC's funding for their reform efforts and appreciative of the Collaborative's flexibility compared to that of public agencies. They also were positive about BASRC's accountability strategy, the Review of Progress – a strategy designed to establish and enforce standards for self-regulation and mutual accountability among its members. The R.O.P. process asked schools to document their reform progress and state their plans for the following year. This document underwent a peer review process by colleagues and

⁴Wildermuth (1995).

⁵BASRC termed individuals and organizations providing technical assistance to BASRC schools "support providers."

BASRC coaches through the local collaborative network. Ultimately, the R.O.P. was intended as a way for BASRC to hold schools accountable for making reform progress and to provide guidance to schools as they refined their reform goals.

Broker. BASRC played different brokering roles at different times and for different constituencies. Sometimes the Collaborative connected individuals and groups both inside and outside the system. For instance, BASRC brokered relationships with other support providers such as content-focused professional development on reading. At other times, BASRC brokered knowledge, by helping to translate, coordinate, and align perspectives on reform practices within and across the regional participants.

BASRC defined its broker role in two complementary ways: as a builder of ties and as a convener of stakeholders. BASRC brought educators together from a wide variety of school contexts through its Summer Institutes, role-alike networks, and Best Practices Institutes. Participants generally viewed these activities positively. A number of district administrators and principals commented that they had few opportunities to engage with educators outside their district and that they found these cross-school and -district conversations stimulating and valuable.

Despite the value experienced by those who participated in these opportunities to connect with other educators and experts, these brokering efforts experienced limited success. Attendance was spotty; competing demands for time and attention figured prominently as obstacles. Though a temporary organization operates in time and space apart from the permanent organizations it seeks to inform or change, the individuals who are the focus of such efforts rarely have the luxury to suspend their daily responsibilities. And the sprawling geography of the Bay Area region meant that participation in BASRC events required significant commute time, extending time away from schools and offices. The BASRC-supported professional exchanges educators reported valuing most involved opportunities without demands of travel and daylong meetings. For instance, though almost half of the principals reported that they had not attended a BASRC regional convention, nearly half said that they found opportunities to work with other schools in their district's local collaborative very or extremely useful. Similarly, a district administrator said that BASRC's local collaborative strategy "opened up an opportunity for us to join in partnership within our own district that we might not have thought of." BASRC's most effective brokering supports ultimately may have existed in the relationships and structures it built on the ground, up-close rather than regional exchanges.

Educator. Central to BASRC's educator role were strategies, tools, and technical assistance for teachers and administrators to learn about the Cycle of Inquiry, its foundational process for using data to investigate practice and plan for change that promised to increase student achievement. During Phase I, that support featured workshops and Summer Institutes as well as on-site assistance from BASRC staff. During Phase II, BASRC supported coaches at both school and district levels to provide hands-on assistance with the Cycle of Inquiry and other elements of its reform vision. Many teachers and administrators said that they would not have made progress in the areas of evidence-based decision making and comfort with data without BASRC. A teacher commented:

BASRC's biggest contribution—they made you do these Cycles of Inquiry. Initially like “oh my God.” But in retrospect, in addition to all of the staff development and materials, were the concepts and structures and systems that would never have been established had it not been for their guidance and requirements.

Some administrators described BASRC's concentration on inquiry in terms of culture change. “This has been a major shift—really looking at what we do, what we need based on data, based on how well we know the district. [The BASRC coach] was really able to pull it together and drive it home.” In particular, they commented about how a major part of the “culture change” BASRC enabled was to get beyond the “culture of nice,” to analyze their own work critically and ask tough questions “. . .and say if that's not working well, then let's throw it out.”

To expose BASRC members to new ideas, the Collaborative offered various 1-day or multi-day sessions focused on promising practices. Presentations by experts provided teachers, administrators, and local collaborative coaches with concrete examples of practices. BASRC's various professional development offerings received generally high marks from participants and positive recognition of BASRC's educator role throughout the Collaborative's duration. A teacher stressed how important it was for a district team to be off-site, hearing about promising strategies, and “talk about some issues that are vital to the district.” Another district superintendent thought “BASRC provides the type of professional development that can grow capacity in a district.”

However, response to BASRC's education efforts was not uniformly positive, and varied in both reception and consequence depending on site or individual readiness to learn. Schools and districts primed to begin, or just embarking on, the use of evidence-based practices were quicker to credit BASRC with building their local capacity. In particular, districts *ready* to engage BASRC's vision reported that the Collaborative's tools, procedures, and coaching enabled them to go to the next stage and, by their report, change culture. BASRC staff's feedback in this context often was deemed “excellent” because “working from the outside, they look at us through a different lens.” Teachers and administrators talked about BASRC as “providing needed focus,” “a facilitator,” “a vehicle for change,” “a kick in the butt,” “an external force to keep you moving,” and “preventing [the district] from staying stuck in management-type things.”

Not all BASRC staff experienced a smooth course working with schools or districts, however. Some coaches described difficulties in using some BASRC tools to help teachers learn. These differences turned less on the nature of the feedback BASRC coaches and others provided than on administrator and teacher willingness to hear critical feedback about the progress of their reform efforts. Across all of the focal districts and schools, BASRC tools, supports, and coaches added greatest value in schools and districts already committed to reform and eager for support. Districts and schools with less concrete engagement with education reform often experienced BASRC's efforts as “all process and no product,” and “providing too little direction.” These different assessments of BASRC's work highlight the significance of “readiness” as an important aspect of BASRC's ability to achieve, given its status as a temporary organization.

Its status as an intermediary provided BASRC a high degree of independence and agency in pursuing regional reform. Participating Bay Area schools and districts valued the Collaborative's flexible organizational structure and resources. However, though BASRC can count some important accomplishments in its decade of regional reform work, it also struggled with many of the obstacles associated with temporary systems and intermediary organizations – challenges that ultimately limited the Collaborative's impact in the region. BASRC's experience provides instructive perspective on the limits of this organizational form as a reform agent.

Ambitious Scale and Scope: Struggles with Regional Diversity

In theory, an intermediary organization ought to be able to educate and build capacity at the same time. In practice, educating and building capacity within a complex, interdependent, and loosely coupled system such as the San Francisco Bay Area proved to be an overly ambitious undertaking. The bold scale and scope of BASRC's work meant that the organization faced the difficult task of providing services and resources across the broad and differentiated population of Bay Area schools and districts. BASRC's reform vision – culture change in schools and districts that supported evidence-based decision making and attention to equity – made the outsider's role an especially challenging one. BASRC was not attempting to “deliver” a well-specified reform package; rather, the Collaborative sought to introduce the tools and habits that would enable participating sites to make fundamental change in the business of schooling and conceptions of practice. BASRC's executive director described it “not as a program but a vision – a vision of what schools should look and feel like.”

The Collaborative's initial 86 Leadership Schools varied significantly in student demographics, faculty background, community contexts, and grade levels. And most important to the outcome of BASRC's work, Leadership Schools joined the Collaborative with substantively different reform histories. Some Leadership Schools had extensive experience with the evidence-based, whole-school reform efforts BASRC promoted. Others, especially schools with a poor track record of student achievement, had little to no experience with the strategies BASRC advanced.

Many schools felt BASRC's tools and strategies did not meet their needs. Schools advanced in evidence-based practices found various BASRC technical assistance and support efforts too elementary, while many schools new to inquiry found sessions too abstract to be useful to them (McLaughlin & Mitra, 2004). BASRC recognized these problems but had insufficient capacity to provide Leadership Schools with tailored supports. BASRC sought to meet requests for site-specific technical assistance by underwriting support providers for each Leadership School. In some instances, these matches were effective; in many others, however, successful matches were not made. Schools discovered that the “pool” of support providers in the region was thin and that available support providers either did not fit their needs

or were ineffective. Staffing constraints, an insufficient number of qualified support providers, and the Collaborative's own relative newness to the enterprise often constrained BASRC to a "transmission" role and, as a teacher put it, "produced lots of big fat binders."

In its Phase II work, to move away from standardized tools and strategies, BASRC hired school- and district-level coaches, as well as local collaborative coaches, to work with teachers and administrators. In practice, however, the work of transforming the culture of even a single district consisting of multiple schools, each with its own different context and needs, proved a complex and demanding task. One way BASRC responded to this challenge was to keep its tools and technical assistance relatively non-specific in terms of content. This strategy reflected a philosophical commitment on BASRC's part to site-based input and local development of specific reform plans and strategies. But this approach left many responsible for carrying out reform efforts in schools and districts frustrated and unclear about how to proceed. As a reform coordinator in a focal district put it, "BASRC staff contributed with implementing change without a recipe but with the ingredients." It soon became apparent that in schools and districts lacking substantial experience with inquiry, more concrete guidance was needed – especially in light of the relatively limited timeframe under which reformers were operating.

Many protocols ran into problems because of the significant variation among settings in which they were used. In some schools, protocols did not connect with teachers' day-to-day realities; in others, protocols were ineffective because, as a coach put it, "the protocol didn't teach them anything new." The Literacy Learning Communities or the Equity Learning Communities BASRC introduced as a way to support teachers' implementation of reform strategies never came together for similar reasons. The diversity of teachers' experiences, expertise, and commitments to various literacy programs meant that a single "curriculum" or focused discussion was difficult to stage.

Ambitious Goals: Too Much, Too Soon

BASRC's goals were broad and ambitious – in retrospect, too much so given the organization's capacity and timeline. The Collaborative was commissioned to "close the achievement gap," to build appetite and capacity for regional change – a breathtaking charge resonant with worries about temporary systems, that in the presence of high-flying, unattainable goals, "failure and disenchantment are practically guaranteed" (Miles, 1964, p. 481). BASRC's status as a regional intermediary stretched its capacity to respond effectively to the diverse needs and experience of participants. Its temporary status compounded the problem. Since the Collaborative was not in it for the long haul, many schools and districts poised to take advantage of BASRC's resources were unable to reach "take off" point during their participation in the Collaborative. This outcome might have been different had BASRC been able to target intensive, site-specific resources. The Collaborative had insufficient organizational capacity to scan the region for these resources. But even if its plan

of action had allowed such focusing, its temporary status made BASRC relatively inflexible in terms of pace of change, and so unable to make the adjustments in timelines and expectations a permanent intermediary could.

Staffing Issues and a Tight Timeline

BASRC introduced its two-tier coaching strategy – executive coaches to work with the superintendent and school coaches to work at the school level – as a way to honor the organization’s belief in the importance of ground-level development while also providing material, specific implementation assistance. Though BASRC expended much effort and many resources to do a better job of supporting the reform progress of its diverse membership, the Collaborative’s coaches struggled with their task.

BASRC’s coaching staff, though they were educators with substantial reform experience, generally did not bring the background needed on the ground. Coaches shared no common experience with each other and in some instances even with their “coachee.” For example, only one of the BASRC school-level coaches had been a principal. And though all executive coaches were former superintendents, only one of the executive coaches engaged to “teach” BASRC had previous district experience with BASRC. Further, one executive coach questioned “the assumption that if you hire people who have been successful superintendents, that was going to be good for coaching. . . .”

In addition, the Collaborative’s coaching staff was new to the challenges before them. Their own lack of clarity about their roles and the expectations hampered their ability to promote BASRC’s vision or bring coherence to the initiative. The coaches had little opportunity to develop a shared understanding about ways to respond to members’ different styles, needs, and expectations. As a consequence, both executive and school coaches were uncertain about how much latitude they had to create site-specific plans. The local collaborative coaches (LoCoCos), who were district employees hired to support BASRC’s work in the district, also wished for more role clarity. But perhaps more important, they wished for more time. LoCoCos often felt overwhelmed. They described their coaching role as “like a second full-time job.”

These staffing issues with BASRC coaches responsible for carrying out Phase II reform work in focal districts and schools meant that, in practice, BASRC’s coaching model was unevenly implemented and the pace of the reform left little opportunity for mid-course correction at any level.

Sustaining Reform: Managing the Handoff

Temporary organizations such as BASRC must, at some point, hand off their work to permanent organizations. Creators of temporary organizations expect that these provisional resources will engender change in systems, organizations, and individuals – new practices that are incorporated into permanent organizations’ routines and norms. On sustainability grounds, BASRC’s impact on Bay Area education has been

disappointing. The Collaborative did accomplish some changes in district systems, but they were few. In one focal district, the local collaborative structure is in place, which “would not have happened” without BASRC. In other districts and schools, some BASRC practices remain, such as “selecting and tracking target students” and convening school leadership teams.

Signs are that the reforms BASRC championed will fade in many schools and districts. For example, though several BASRC Phase I schools that were in Phase II focal districts continued and deepened their inquiry-based reform work, by 2005, schools new to BASRC had caught up, with teacher survey data showing the same inquiry levels. However, both groups showed decline during the final year when BASRC funding support had been reduced, suggesting that inquiry practices had not been embedded in school culture in ways that were sustainable in the longer term, even in schools with almost a decade of BASRC experience. One district administrator says that in order to sustain the district’s conversations about evidence-based learning it needs “to continue its relationship with BASRC” because the “personnel resources and . . . the opportunity to talk about education . . . at different levels” is even more helpful than the financial resources. The district has not created its own internal structures and knowledge resources to continue these sorts of cross-level educational conversations when this temporary system disappears. According to their BASRC executive coach, BASRC’s failure with this district is “sobering, given how many resources and how much time has gone into that district.”

The lack of adequate resources comprises a significant obstacle to sustainability. BASRC’s flagship reform, the Cycle of Inquiry, requires dedicated staff and attention. It is not a reform to be “learned” and then considered self-winding. Change of the sort BASRC promulgated and tools such as the Cycle of Inquiry require ongoing learning and support if they are to deepen, spread, and retain vitality. The Cycle of Inquiry requires time for individual practitioners to collect and analyze data as well as reflect on practice. These activities must in turn be supported by data collection and analysis capacity at both the school and district levels. When BASRC funding ended, so did dedicated attention to a Cycle of Inquiry in most all schools and focal districts. As a temporary intermediary, BASRC introduced reforms that generally could not be sustained by existing district budgets and staff – especially in a context of high stakes accountability and state mandated curriculum – even when administrators were supportive.

Significant turnover in district and school staff also compromised the sustainability of BASRC tools and vision. The reform BASRC brought to participating schools and districts was not one of simple activity structures, but one that assumed change in organizational culture, norms, and expectations. So as staff left, so did the vision. Further, BASRC’s executive coaches worked only with the superintendent – other central office administrators were not included in coaching or, in some instances, in feedback sessions. BASRC elected this strategy on the assumption that Superintendents would be most comfortable and candid in a one-on-one coaching format. However, this tactic meant that other central office administrators were not brought into the district reform effort in a meaningful way, and so were unable to

provide substantive support. Yet, experience teaches that middle management backing is key both to implementing and sustaining district-wide reforms (Spillane & Burch, 2004).

All of these factors contributed to a survey-based conclusion of little “BASRC district effect.” Responses from district administrators in districts participating in Phase I *and* Phase II show no significant differences over time (1998–2004) in their assessments of “district reform leadership” or “central office reform culture” – two scales measuring key aspects of BASRC’s focal district strategy such as support for schools’ focus on teaching and learning and use of data as a basis for decision making (reform leadership), and district’s active involvement in school reform and district administrators’ learning (reform culture).⁶ However, a modest “BASRC effect” is evident in the 4 Phase II focal districts. Compared to 11 non-focal districts, they started with lower district indicators of reform culture and caught up to or surpassed the non-focal districts on measures of distributed leadership; district central office reform culture at the end of Phase II. Survey and interview data suggest that some BASRC-related change in district office culture was beginning to occur as the initiative drew to an end.

As a temporary organization, BASRC could not continue supports for participating districts once its funding came to an end. Because the Collaborative did not achieve the degree of system and organizational change it sought, it was unable in most cases to hand off its reform strategies and programs. The overall demand on participating schools and districts made by BASRC strategies and vision was greater than could be sustained on a permanent basis, all things equal. Despite funders’ intent and the Collaborative’s innovative work, BASRC in the end functioned more as a “special project” than the transformative force for education reform its supporters imagined.

Lessons for the Field: Temporary Systems, Intermediaries, and Culture Change

Can a temporary intermediary organization stimulate and sustain learning and growth on the ground? The response, drawing on BASRC’s experience, is “it depends.” The success of an ad hoc reform intermediary hinges critically on the readiness and capability of target organizations to take advantage of the tools and resources it provides, connections to additional resources it facilitates, and the school and district subscription to the overall operating vision. In BASRC’s case, its status as a temporary intermediary compromised its ability to be an effective outside reform resource. In hindsight, this shortfall reflects to a significant extent the mismatch between BASRC’s timeline and the pace of reform progress in many participating districts. Many schools and districts simply were not ready or able to engage the reform process BASRC assumed, and BASRC had neither

⁶BASRC District Administrator Survey – 1998, 2002, 2004.

the time nor the resources to respond effectively to these different paces of reform. BASRC's own management strategies are equally important to understanding the Collaborative's relatively disappointing impact on education reform in the Bay Area. In this case we consider lessons for the field based on BASRC's experience.

Address Sustainability Issues at the Start

Temporary organizations assuming a change agent's role must continually attend to sustainability issues once the funding clock starts ticking. Given a limited timeline to meet goals and the challenges inherent in creating sustainable solutions, temporary organizations need to focus on the attitudes and structures necessary to support and sustain the new practices from the beginning of their relationship.

Commitment. One important aspect of sustainability resides in the initial commitment of participants. In retrospect, many BASRC staff wonder how committed Collaborative participants really were to making the fundamental changes BASRC advocated – or whether primary motivation for some participants lay in the possibility of new funds.

BASRC conceived of its reforms in terms of learning, and an implicit assumption was made that, once learned and value demonstrated, tools and routines such as the Cycle of Inquiry would be incorporated into school and district practices. Sustainability issues associated with allocation of needed resources – such as funds, personnel, and time – were not addressed directly at the outset. Furthermore, key players in focal districts often did not recognize the kinds of supports that were needed to sustain the work. Even districts inclined to sustain and even extend BASRC reforms found themselves scrambling to do so as funding drew to an end. We saw that while commitment may be an essential element of a successful handoff, more is needed to embed reform goals and practices.

Organizational “hooks”. A deficiency of organizational “hooks” to which individual participants could attach their new perspectives and learning diminished the spread and sustainability of BASRC tools and vision. A number of teachers commented on the lack of expectations for them to share what they learned at BASRC gatherings, such as the network meetings. Others felt unable to act on BASRC's tools and reform strategies once they returned to their “regular jobs” because they lacked the warrant or support to do so. Explicit understandings and expectations about how the information, tools, and resources BASRC provided would be brought back to districts and schools – and explicit hooks for them – might have broadened their impact on practice or system routines.

Likewise, by expressly defining an “emissary” role for BASRC participants, the Collaborative might have lessened the “them/us” feelings sometimes expressed by non-participants – feelings that BASRC activities and mission had nothing to do with them or that participants received special resources and treatment. In some instances, educators participating in the Collaborative were relatively isolated. In one district, for example, an effective local collaborative structure added sustained value and connections to participants, but created resentment feelings elsewhere in

the district “that some of the schools were the ‘special schools’ that went up and did BASRC stuff, and some of them weren’t.” The whole-school, whole-district message was not uniformly received or understood and BASRC strategies did not address effectively issues of “spread” beyond BASRC participants.

Temporary Organizations Require Strategic Site Selection

BASRC’s decade at the helm of regional education reform provides clear instruction about the importance of a “match” between the capacities and mission of a temporary intermediary and its reform target. BASRC was most successful in supporting sustainable reform in schools and districts that were ready to take up its vision of reform and experienced in the evidence-based strategies used to advance it. Schools and districts less far along this reform path generally found BASRC’s tools and resources less valuable (funding excepted), and struggled to apply the loosely defined BASRC protocol and strategies to their settings. These sites, just getting started, had scant experience with inquiry and were unfamiliar with a culture of evidence-based reflection and focused critique.

Culture change takes time. But as a temporary organization, BASRC lacked a timeline compatible with this goal. Schools and districts “ready” for BASRC had histories with similar reform strategies; their growth and change with BASRC support reflected much more than their years with the Collaborative. In hindsight, it seems that a temporary organization of BASRC’s tenure is ill-suited to promote a significant normative and skill-based reform in settings lacking foundational experience and readiness. Almost all of the sites were moving toward BASRC’s vision of reform, but more time was needed for them to get there than was available under BASRC’s grant-supported tenure. In these instances, a permanent organization able to partner over an extended period of time and provide “just in time” resources would seem a more effective reform agent. An important lesson from BASRC’s experience is that readiness to pursue a particular reform vision is essential when the reform time frame is delimited and goals are ambitious.

Measurable Goals

BASRC was “accountability lite.” The Leadership School application of Phase I as well as the needs assessments and related requirements associated with Phase II membership asked educators to set out clear goals and strategies for meeting them. However, little clarity existed throughout the Collaborative’s life about what participating schools and districts were accountable for and on what timeline. Looking back, several BASRC leaders regret the absence of a memorandum of understanding to anchor expectations for both the Collaborative and participants.

BASRC’s single-minded reform focus was not matched in participating districts, especially as state and federal high-stake accountability requirements turned up pressure for improved student achievement. Even without considerations such as

those brought by No Child Left Behind, participating schools and districts by and large did not share BASRC's sense of urgency about either a pace of change or expected outcomes. Thus, as grant periods neared their end, both local educators and BASRC staff were unclear about what was expected of participating schools and districts, and when and how it would be measured. Reflecting on the Phase II experience and its variable outcomes, BASRC's head school coach said "I think we would all agree that from the very beginning we formed partnerships with districts that were rather vague agreements and we didn't really investigate the district's capacity to do the work, certainly at the district level."

BASRC's experience highlights the need for measurable goals and agreed-upon indicators, especially when the relationship is a temporary one aiming at sustainable outcomes. BASRC's executive coach, who initially resisted setting targets because they conflicted with what he called his "constructivist approach to learning," reflected on this lesson: "I want to be clear that the next time we go out with something we want to accomplish, that we're clear about it. . .even if they [participating districts] don't approve the goals, at least we'll have clear, measurable goals [to hold them accountable]."

Balancing the Tension Between Prescribing and Co-constructing

BASRC's process-heavy approach proved difficult for a temporary organization to execute effectively, especially when its "clients" were a diverse lot. In theory, BASRC's coaching approach might have been a way to create a balance between prescribed practices and local adaptations. However, given the bumpy start of the coaching strategy and the relatively short time it was in place, the Collaborative's experience supplies a cautionary tale about implementation but little solid evidence of the value of coaching as a way to achieve this balance.

Another way to address the diversity in BASRC's clients might involve a differentiated portfolio of tools, resources, and approaches. BASRC had limited success dealing with member diversity across the region. To this point, the head executive coach advised: "Even though lots of money has been poured into these districts over the years, they were not all on the starting block. So their level of readiness to accomplish what we wanted to accomplish was very different. And so we need differential models. We need [models for] places where we start at ground zero, and we need [models] for places where we can enter and really accelerate their movement forward."

In addition to the intrinsic initial value of a diversified portfolio, this capacity in a permanent or semi-permanent intermediary would allow response to any falloff in effort that might occur due to factors such as turnover in leadership or teaching positions. Intermediaries can act as relatively stable actors in the unstable environment in which schools are located. The instability of the political context in which schools reside makes it extremely difficult for schools and districts to adopt a long-term vision for success and then sustain the organizational capacity to achieve this vision over time. An intermediary organization can become the keeper of the vision

and can respond flexibly to fill the different needs that emerge as districts move to implement their reform strategies. However, as a temporary organization BASRC could not assume that role.

Managing Temporary Organizations

BASRC was “building the plane while flying it.” Plans were developed as the initiative went along; tools and strategies were tweaked or modified along the way. Leadership Schools – especially those new to evidence-based reform – found the Collaborative’s ongoing adjustment of protocols and strategies somewhat problematic during Phase I. The significant sea changes of focus on the district during Phase II were even more unsettling to participants. Changes in priorities, direction, or routines that occurred during the first years of the focal district strategy further complicated basic issues such as a lack of clear role definition for coaches and the introduction of insufficiently specific reform tools.

Role Clarity

BASRC’s experience suggests that in order to interpret successfully the Collaborative’s vision – and stay true to that vision – coaches and other staff required a greater degree of clarity than they achieved about both the vision and the practices intended to support it. An executive coach remarked on the absence of a well-developed conception when work began with the superintendents. “When I took this job I knew some parts of it would be under construction, but I thought there would be a more well-thought out model, and there wasn’t. But it has been pretty much ‘stumble your way through’...”

School-level coaches worried from the start about expectations, what they were supposed to do, and how to assess their work. One said: “We’re still trying to figure it out, what our theory of action is...” And another pointed to the organization’s own structure as an issue: “We’re independent contractors. There is no loop for us to enter into. We’re sort of out of the loop.”

If time and resources had been dedicated at the outset to allow them to work together to define their roles and establish explicit expectations, the coaches might have achieved the clarity and common language they sought. Role ambiguity created stress within the organization as well. As a temporary organization, the amount of “start up time” that BASRC could afford to spend building its own foundation of resources was limited. The BASRC staff responsible for the school coaching strategy recognized the problems stemming from this initial lack of role clarity:

... real live bodies are out in the field every day and they’re doing something. And I have more questions about, (a) what are you doing? Are you clear about the outcomes that you’re hoping to achieve when you’re out there? (b) how does the school work and the district work inform itself?

School and district participants similarly were unclear about their roles and responsibilities to the Collaborative. For example, many Summer Institute attendees were surprised by the expressed expectation that they would take what they learned back to their respective schools and districts, to help others understand BASRC's vision and goals, and to gain support for BASRC-related activities. Additionally, Summer Institute participants repeatedly pointed out that it took them 3 entire days to grasp BASRC's vision and tools, but they would have very limited time in the context of their day-to-day activities to present their knowledge to others.

Conclusions

Where BASRC's vision of inquiry and evidence-based reform was realized, even if incompletely, the power of its conception of what was needed to bring about education reform (i.e., changes in organizational culture and the integration of evidence-based practices at both the school and district level), as well as the value of the resources it brought to the task were evident. This conclusion from BASRC's 10-year experience confirms funders' and founders' vision about the focus and character of significant education reform, especially reform addressing equity of educational outcomes.

However, other lessons offer a cautionary tale: BASRC's organizational form was ill-suited to its mission and charge. As a regional intermediary with limited capability to differentiate its tools and resources, the Collaborative was unable to provide an effective response to the significant diversity in experience, district contexts, and student demographics existing in its broad membership. Even though BASRC employed application procedures designed to reduce member variability in such important dimensions as reform appetite, buy-in, and capacity, local differences in these elements nonetheless thwarted BASRC in its role as educator. As a consequence, the scope of BASRC's change agent responsibilities overreached the organization's ability to respond in both phases of its work. Over time, BASRC might have been able to evolve a way of working with schools and districts that provided both consistency of vision and opportunities for local adaptation. The Phase II coaching strategy held promise to this effect. But the Collaborative's status as a temporary organization meant that, except for schools and districts experienced in inquiry and ready to take up the reform BASRC envisioned, reformers sought too much, too soon. The organization had insufficient time to work with participants to make adaptations or even to develop the internal community of practice BASRC staff needed to carry a confident, consistent message to schools and districts.

BASRC's experience counsels that a temporary organization generally is a poor choice to bring about change in norms and values, or to teach complex skills of the sort required by the Collaborative's evidence-based reform. For many of participating schools and districts, BASRC's strategies could not be fully mastered and its tools could not be deeply embedded in everyday work in the period of time available. BASRC's experience affirms and illustrates the vulnerabilities associated with both temporary and intermediary organizations (see Table 1). It advises that,

Table 1 Distinguishing features of temporary and intermediary organizations

	Temporary organization	Temporary intermediary	Intermediary organization
Strengths	• Created to solve a particular problem • Diversely skilled staff • Decisive actor • Aims for quick results	• Flexible actor • Broker • Designed to develop innovative solutions	• Capacity builder • Grant maker • Non-system actors • Connector of disconnected agencies and institutions
Challenges	• Limited timeline to: (1) Build shared understanding of task among diverse, “temporary” staff (2) Develop relationships w/“target” organization (3) Establish effective communication channels (4) Meet own ambitious goals • Isolated from “real world” • Create sustainable solutions	• Acquiring inside knowledge and legitimacy • Assembling necessary organizational capacity	• Manage own vision with specific needs of target organization • Have needed organizational capacity to: (1) Scan the environment for needs (2) Respond flexibly to shifting needs in a dynamic environment (3) Manage scale and scope of work • Manage relationships with funders; serve “two” masters

to be successful, a temporary, intermediary organization promoting regional education reform needs either to provide specific, discrete assistance, or to be extremely strategic in its choice of reform sites, assuring both readiness for and explicit commitment to reform. BASRC’s mission called for a stable presence in the region, one that was capable of working over time with schools and districts as they developed their reform goals and achieved the degree of readiness necessary to use the rich array of resources the Collaborative provided. Its organizational form frustrated that mission.

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Change from Without: Lessons from Other Countries, Systems, and Sectors

Andy Hargreaves

Change Alternatives

When Galileo first constructed a telescope and saw that Venus transited around the Sun and not vice versa, and it was concluded that this must also be true of the third planet from the Sun – the Earth – Europeans had to confront the idea that everything did not revolve around them.

Teachers can also only really learn once they get outside their own classrooms and connect with other teachers: when they can see beyond the immediate world that surrounds them. This is one of the essential principles behind professional learning communities. Likewise, schools can only really learn when they connect with other schools – including ones outside their own immediate districts. And the same is true of countries.

In the early twentieth century, educational ideas used to spread around the world freely and in many directions. This is when learning theory was inspired and influenced by European psychologists and philosophers like Piaget, Froebel, Montessori, Pestalozzi, and Vygotsky. Now, ideas circulate more among the globally dominant Anglo-American group of nations and then outwards to other countries through international lending and donor organizations such as the World Bank. Whereas the ideas that circulated almost a century ago were largely pedagogical and psychological ones that involved professional educators, today's globally circulating ideas in education are institutional and systemic and are more confined to politicians, bureaucrats, and their advisors – they are ideas about how to change education on a large scale across entire systems and countries in relation to particular visions of economic reform.

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The Anglo-Saxon Obsession

In one sense, these developments are a good thing. Especially in America, for too long, educational reform strategies had been circulated incestuously within districts, states, and the country at large. The source of inspiration might shift – from New York City to Cincinnati and Chicago and then to Boston or Denver – but ideas moved around mainly internally – recycling ideological obsessions with tested achievement targets, accountability requirements, greater independence for charters and pilots, and performance-related pay for teachers. All these have been locked within an economic ideology of market competition, measurement-driven performance, granular analysis of data on quality, and the exercise of accountability in relation to standards, targets and outcomes.

The ironic effect of contemporary international interest in large-scale reform, though, is that it has exposed how the countries and systems that have actually been most successful educationally and economically are the ones that provide greater flexibility and innovation in teaching and learning, that invest greater trust in their highly qualified teachers, that value curriculum breadth, and that do not try to orchestrate everything tightly from the top (Wei et al., 2009; McKinsey, 2007).

Most market-driven and individualistically oriented countries in the Anglo-American group of nations suffer from wide achievement gaps between children from poor and rich families respectively, rank poorly in early child-care provisions (except for New Zealand), score particularly badly in child well-being (the UK and U.S. ranking last or next to last out of 21 developed countries) (UNICEF, 2007), and register much higher rates of stress and mental illness, especially among the young, compared to more mainland European-style systems and economies (James, 2008).

By comparison, high-performing Singapore emphasizes “Teach Less, Learn More” and mandates 10% “white space” for teachers to bring individual initiative and creativity into their teaching. Finland – the world leader on results in the Program for International Student Assessment (PISA) tests of sophisticated, applied knowledge in mathematics, science, and literacy, as well as on international ratings of economic competitiveness – avoids national standardized tests altogether and reaches high levels of achievement by attracting highly qualified teachers with supportive working conditions, strong degrees of professional trust, and an inspiring mission of inclusion and creativity (Hargreaves, Halasz, & Pont, 2008). The Canadian province of Alberta, which tucks in just behind Finland in international PISA rankings, has secured its success, in part, by partnering with the teachers’ union to develop a 9-year initiative in school-developed innovation (the Alberta Initiative for School Improvement) that involves 90% of the province’s schools.

Among a number of emerging reviews of international practice (e.g. McKinsey, 2007), a state-of-the-art review for the U.S. National Staff Development Council of teacher education and professional development practices in the highest-performing countries reveals that high performance is associated with highly qualified teachers being accorded wide professional flexibility for curriculum and pedagogical decisions within broad boundaries (rather than prescribed and standardized

requirements) in countries and systems where teachers are well supported in their schools and accorded considerable public and political respect (Darling-Hammond et al., 2009).

What can be learned from international comparative examples such as these, and just as importantly, how can this learning be organized most effectively? What can we take from other effective systems, and how can we learn from the best of them?

Change Travel

Reform is like ripe fruit. It does not usually travel well. In a classic set of studies, Mary K. Stein and her colleagues (Stein, Hubbard, & Mehan, 2004) have examined the destinations and destinies of successful reforms originally designed for New York District 2 in the 1990s. With a tight and detailed design focused on specified literacy instruction, learner-centered leadership, intensive coaching, and a relentless preoccupation with results, a successful reform in New York District 2 was transposed, along with some of its architects and implementers, to the city of San Diego. After some initial increase in measured attainment, the attempt to impose an instant solution on San Diego that had been developed over many years in New York was then declared a failure. The researchers identified many reasons for this, including:

- Military-based and larger San Diego was more conservative yet had less local capacity than smaller District 2 within high-capacity, chutzpah-like New York.
- San Diego's reforms were imposed in 2 years, whereas New York's had been developed over a decade.
- Large and complex secondary schools were included in the San Diego reform, unlike District 2.
- As San Diego's reform mill became increasingly grueling, resentment grew against the interlopers responsible for its implementation.
- Understandings of literacy and instruction that had taken a decade to develop in District 2 were interpreted more superficially in the fast-track reform environment of San Diego.

Stein and colleagues go on to document that a little less was lost in translation with a further attempt at implementation in Philadelphia as implementers tried to be more sensitive to differences of context.

Attempts to transplant reform designs from one country to another in wholesale fashion suffer from the same historic fallacies as the efforts to copy or replicate innovative, lighthouse, or model schools. Attempts to transplant the innovative designs that are evident in many model schools often stumble because implementation timelines are shorter, leaders are less charismatic or exceptional, staff are "captives" of a preceding culture rather than drawn to the school by its mission or being handpicked by the principal, resources are scarcer, and – in consequence – understanding of and

capacity to enact the complex principles and practices that make up the model school are weak (Fink, 1999).

A second fallacy in trying to spread school-level reform is that if whole systems cannot be copied, at least particular elements can. This leads to a search for silver bullets of educational change – easily separated practices or elements that appear to work well in a group of pilot or outlier schools and that seem to be worth mandating for or spreading to the rest. Technology is a common temptation. Small schools are another – ignoring the fact that a badly led or dysfunctional small community, or one that perpetuates poor teaching and learning practices, can be more claustrophobic and stressful for staff and students alike than a larger, more anonymous institution that at least has some variety within it (McQuillan & Engleert, 2001).

This fallacy and failing also occurs at the international level of policy borrowing and policy transfer. For example, from the complexity of high-performing Finland, policy-makers might be and have been drawn to the fact that all Finnish teachers have masters' degrees and then embark on certifying all their own teachers to Masters level (McKinsey, 2007). But just as when college-educated teachers were upgraded in many countries in the 1970s to acquire bachelor of education degrees on often indifferent, part-time courses, the acquisition of an additional masters-level qualification in other countries can lose the rigor that first defined it and connected it to its already highly qualified applicants in the case of Finland. It can become a merely symbolic process of certification, rather a substantive process of quality improvement.

In educational reform, Sarason (1990) pointed out everything is connected to everything else. You cannot change one thing without changing the rest. Cherry-picking particular policies like small schools or masters' degrees fails to grasp how they are interconnected with a whole array of other elements. But as we have seen, trying to transpose an entire system can be culturally inflexible and ineffective too. Despite these documented difficulties, whole reform designs or isolated elements of them are often exported impulsively from one country to others. The reasons are usually ones of ideological compatibility with favored agendas of market competition and political control over the education agenda, and cultural affinity among the English-speaking nations, along with the physical travel of a very small number of international consultants or policy pollinators among and beyond them. One key instance concerns the transposition of national policy strategies from England to other English-speaking countries. These policy strategies center on setting imposed targets in tested literacy and numeracy at different age points along with curricular and training emphases in these core subjects. Strangely, England ranks relatively poorly on international tests in literacy. The record of its literacy strategy has been labeled as unsuccessful, contrived, or stuck even by its proponents (e.g. Barber, 2007); parents are increasingly opposed to the testing of younger children (Honore, 2008); and the scope of standardized testing is already being severely scaled back (Hargreaves & Shirley, 2009). Yet, the country's emphasis on standardized testing and governmentally imposed system-wide targets has been eagerly adopted by both Ontario and Australia, even though they already rank among the world's leaders in literacy attainment (Levin, 2008). These ready-made solutions seem to be going in

search of problems that do not exist or making up ones that aren't there, rather than local problems giving rise to their own solutions.

Change Lessons

This does not mean that we cannot or should not learn from other contexts. But we should do so intelligently in relation to clear principles and multiple examples, sensitively in relation to differences in context, and interactively through dialogue among educators at all levels within and across the respective systems rather than confining discussions and decisions to only the most senior leaders in the system. Let's look at three examples by way of illustration.

Finland

Finland receives a lot of international policy attention. It ranks number one on most PISA assessments, has the narrowest achievement gaps in the developed world, and is a world leader in corporate transparency and economic competitiveness. In 2007, I took a team there for the Organization for Economic Cooperation and Development (OECD) to examine the relationship between leadership and school improvement (Hargreaves et al., 2008). Drawing on our evidence and on the growing body of other literature on the Finnish experience (Aho et al., 2006; Castells & Himanen, 2004; Grubb, 2007; Sahlberg, 2006), this is what we concluded.

After being one of the most backward economies in Europe in the 1950s and after an international banking crisis, the loss of its Russian market, and the escalation of unemployment rates to almost 19% in the early 1990s, Finland consciously connected economic transformation toward being a creative and flexible knowledge economy to the development of a significantly more decentralized education system. This effort has been coordinated at the highest political level where chief executive officers (CEOs) from leading companies like Nokia meet regularly with university presidents in a science and technological development committee chaired by the prime minister.

The coherence is not merely bureaucratic and governmental, but visionary and inspirational. Finns have a common vision that connects their creative high-tech future to their past as creative craftspeople. There are more composers and orchestral conductors per capita in Finland than in any other developed country, and all young people engage in creative and performing arts until the end of their secondary education.

This vision is shared at every level among Finns since teachers create their country's future as a creative and inclusive nation. Though teachers are paid only at the OECD average, teaching in Finland is highly competitive with only a one-in-ten chance of acceptance to teacher education programs in primary education. Retention is high among Finnish teachers because conditions are good and trust is high. All

Finnish teachers are awarded masters' degrees. Finns control quality at the most important point – the point of entry.

Within broad guidelines and with minimal steering by the state, highly qualified teachers create curricula together in each municipality for the children they know best. Curricula and pedagogy are not separate – they are in a common tradition of what continental Europeans call “didactics”. The sense of delivering a curriculum devised by others from afar is utterly alien to Finnish educators. Finnish educators are grateful that they are not constantly bombarded by government initiatives, like the Anglo-Saxon nations.

In small classes rarely larger than 24 students, and with generous definitions of special educational needs, the push for quality is driven largely by quietly lifting all children up from the bottom, one at time, through knowing them well in small classes, having specialist support as needed, and not having to deal with excessive paperwork and endless external initiatives.

Principals work across schools, sharing resources where they are needed, and feeling responsible together for all the children and young people in their town and city, not acting competitively only for the children in their own school.

Assessment strategies are largely diagnostic forms of assessment-for-learning and internal to the school. External accountability is confidential and undertaken on a sample basis for monitoring purposes only, not as a census of everyone.

Principals are seen as being part of a “society of equals” in their schools, not as line-managers. They are often recruited from within their schools and they engage in considerable informally distributed leadership with their colleagues. Principals may not be recruited from outside education, and many principals teach for at least 2 h per week. Leaders teach and teachers lead. Teachers say that if the principal is indisposed or ineffective, they take over the school as it belongs to all of them.

Finland has a strong system of social support and investment funded by high taxes that characterizes much of continental Europe so that people have security of housing, of support for parental leave so families can care for young children, of early childhood education, and of care and livelihood in old age.

Some market-oriented advocates dismiss the high-performing Finnish example as simply too different (New Commission on the Skills of the American Workforce, 2007). Or they highlight weaknesses such as Finland's impending generational crisis of leadership succession, as a way of occluding the strengths. Or they choose single items such as awarding teachers masters' degrees, that are applied and imposed in isolation and disembodied from the democratic and inclusive context of the rest of the system and society (Barber & Mourshed, 2007). Or they overly celebrate how the system succeeds without Anglo-Saxon systems of standardized testing (Sahlberg, 2006).

And yet, the broad principles of developing an inspiring and inclusive mission that attracts into the profession high-caliber people capable of creating curriculum together for children they know well in smaller classes is much more readily transferable. So too is the importance of active trust among and for the teaching profession, and the synergy of educational and economic improvement with social and public investment more widely.

Without an inspiring and inclusive mission, high trust for professionals and strong social support throughout the society, other less successful measures such as market incentives have to be used to attract and retain highly qualified professionals. Without highly qualified professionals, teaching cannot be trusted so much, which increases the argument for external accountability, standardized curriculum, and government intervention. But these measures then destroy nations' capacities to be competitive and creative knowledge economies. Last, without small classes in which teachers know their children well, individual knowledge of children's needs has to be developed in other ways, through batteries of data on standardized tests.

Tower Hamlets

If Finland seems too culturally homogeneous for other countries to be able to copy, let's turn to an interesting and more diverse outlier in England instead. After the collapse of London's docking industry in the 1970s, when supertankers and container ships could no longer navigate the tight bends of the River Thames, new waves of immigrants moved into the newly impoverished area of Tower Hamlets – many from rural areas of Bangladesh, one of the world's poorest countries. Despite the reconstruction of part of the Docklands into a fashionable global finance and media center of Canary Wharf, the white-collar workers who came and went on the new high-tech transit line were barely aware of the immigrant community in their midst whose people found little skilled employment in the office towers of glass and steel.

Tower Hamlets' Bengali community suffered from high unemployment rates and some of the greatest incidences of poverty in the country with more children on free school meals than almost anywhere else. Educators' aspirations for student achievement were startlingly low and in 1997, Tower Hamlets was proclaimed the country's worst-performing Local Education Authority, with the lowest-performing primary school in the nation.

Ten years later, the transformation of the schools in Tower Hamlets is dramatic. The schools perform around and above the national average. On standardized achievement tests, General Certificate of Secondary Education (GCSE) examination results, and rates of students going on to university, the borough ranks as the most improved local authority in Britain. It has significantly reduced achievement gaps in relation to children with special educational needs, those from cultural minorities, and those on free school meals. These gains have been achieved with largely the same population and are reflected in Figs. 1 and 2 in relationship to the more modest national gains posted in the same time period.

Figure 1 refers to the percentage of students gaining five or more passing scores at grade C and above in their crucial GCSE secondary school examinations. Grade C is typically the minimum required to move on to university-bound programs.

Figure 2 displays the percentage of students at key Stage 2 (age 11/the last year of primary school) who attain Level 4 proficiency in English literacy.

What explains this system-wide turnaround? In a large-scale research project co-directed with Alma Harris called *Performing Beyond Expectations*, I have studied

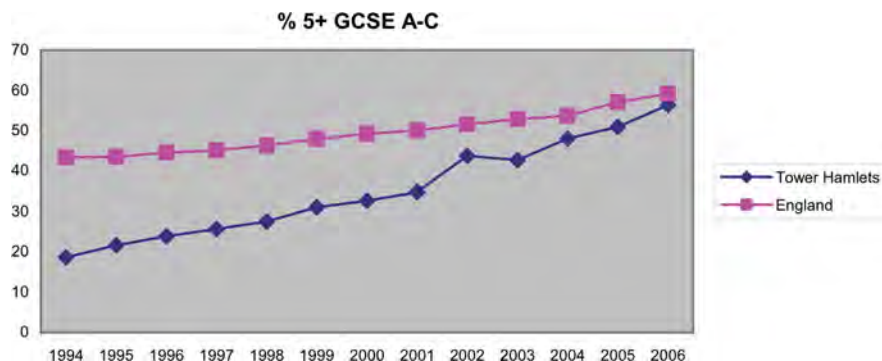


Fig. 1 Secondary school examination results in Tower Hamlets

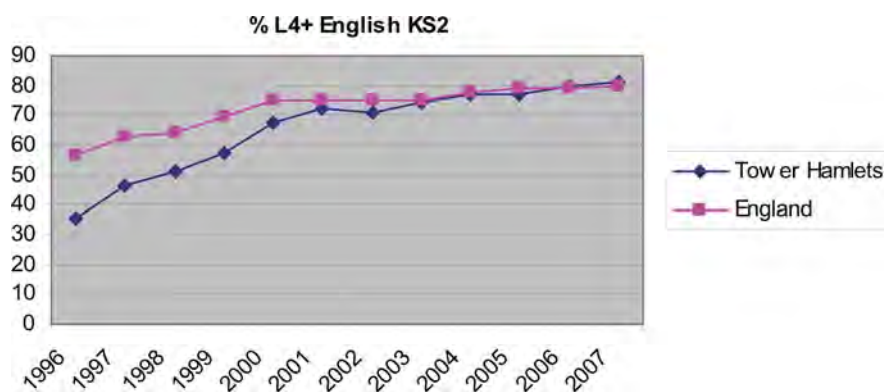


Fig. 2 Primary school literacy achievement in Tower Hamlets

the secrets of Tower Hamlet's success in association with my research colleague Alan Boyle (Hargreaves & Shirley, 2009). At the center of the story are the following components:

- The *visionary leadership* of a new director (superintendent) who was a self-confessed workaholic and who believed that "poverty is not an excuse for poor outcomes," that aspirations should be extremely high, that efforts to meet these aspirations should be relentless, and that everyone should work on this together;
- The *successful succession* of this first driving leader by a more developmentally inclined, yet equally persistent one, with just a short period of instability in between where the results took a slight dip;
- The ability to attract *high-quality teachers who stay* with the borough, after a period of weeding out overseas teachers who were drawn more to enjoying a brief life excursion in London than a long-term professional commitment to the schools;

- A commitment developed with the schools' leaders to set and reach ambitious *shared targets* for improvement in "a culture of target setting" so that "everybody owns them";
- A shared philosophy that *it is better to have ambitious targets and just miss them than have more modest targets and meet them*;
- *Mutual trust and strong respect* where "lots of our schools work very closely together and with the local authority" and where inspectors' reports refer to the "enthusiasm and high level of morale among the workforce";
- *Knowledge of and presence in the schools* which provides support, builds trust, and grounds intervention in consistent and direct personal knowledge and communication more than in the numerical data that eventually appear on spreadsheets;
- A commitment to *cross-school collaboration*, so that when one secondary school went into "Special Measures" (similar to "corrective action" in the United States) after taking in Somali students from refugee families in a neighboring authority, all the other secondary schools rallied round to help;
- A *resilient but not reckless* approach to external government pressure and policy – accepting the importance of testing and targets, but deciding to set their own targets and resisting the politically motivated pressure to build new (and partly privately funded) high-school academies since the authority already had high-trust relationships with its schools that now performed very well;
- *Positive business partnerships* with corporations in Canary Wharf that model a new form of "corporate educational responsibility" with schools; and
- *Strengthening of community relations and engagement*. Tower Hamlets schools affect the communities that affect them. They have done this by working with faith-based organizations and forming agreements with imams from this largely Muslim community to counter the effects of children taking extended absence from schools to attend and then stay on after family events such as funerals in Bangladesh. This includes announcements at school and at prayer in the mosque that extended absences will be treated as truancy because the educational achievement of the young people and the development of the community's future capacity matter that much. Tower Hamlets has also developed some of its schools into community centers that keep a school open from 8:00 am until 10:00 pm – providing resources and recreation for both students and the community's adults. Last, the employment of large numbers of classroom assistants and other staff from the community to support teachers builds strong relationships and trust between professionals and community members and enables and encourages some of these community members to go on to become professionally trained teachers themselves.

Educators in Tower Hamlets possess a robust and resilient sense of purpose; enjoy successful and sustainable system leadership that stays close to and is undertaken with schools; commit to professionally shared targets rather than politically arbitrary ones; establish an ethic of schools helping schools and the strong

supporting the weak; and commit to a kind of community development that penetrates all aspects of a cohesive and coherent change process, while still respecting and even enhancing the special expertise of educators in boosting achievement. One of Tower Hamlet's visionary leaders sums it up well: It's "not just about the data. It's actually knowing the school, knowing the community, knowing about history, knowing about the staff—all of that."

Performing Beyond Expectations

The study of Tower Hamlets is part of a larger investigation into unexpectedly high performance in other sectors and its implications for educational improvement. One of these sectors is sport.

Sport has started to undergo a revolution in evidence-based improvement. In *Moneyball*, Lewis (2004) describes how the Oakland Athletics baseball team of the 1990s managed to outperform most competitors, even after its financial backers had pulled out, by paying relentless attention to the statistic that best predicts season-long high performance: on-base percentage (the percentage of times a player can reach first base from the plate where he bats). "The most important, isolated offensive statistic is the on-base percentage," Lewis notes (p. 58). So the Oakland Athletics set about recruiting players who had a high on-base percentage and batters were urged to attend to it – to do anything it took to get on base, even drawing a "walk" or being hit by a pitch.

Systematically attending to this single statistic throughout the club's selection, organization, and playing strategies got it into the play-offs season after season, despite falling levels of investment. Before, coaches had recruited players who reminded them of themselves – big guys who could hit a ball hard. Now, the Oakland Athletics had some of the most peculiarly built players in baseball, but what they could all do was get on base consistently!

The parallel in football is Prozone: a computer program that can track players' performance throughout a game – monitoring and measuring energy levels, areas of the pitch covered, and number of successful and unsuccessful passes made – backwards, forwards, and sideways.

An English Premiership football club we have been studying employs a single Prozone analyst. Many Premiership clubs have entire Prozone analysis teams while at the other end of the scale, one low-ranking second division team's Prozone analyst fell off the floodlights in a rainstorm while recording the game with his camera! The Premiership Prozone analyst we interviewed, who made the program the subject of his master's degree, described how multiple cameras are typically positioned around the ground to track players during each game. Individual player patterns and profiles are subsequently compiled from the accumulated data. The key question, though, is how are the data used to improve performance?

In the extreme case, our interviewee described how some managers had tried installing electronic chips in their players' boots to measure the number of steps they took per game as an indicator of energy expenditure. Some managers then set

“step” targets to increase the energy that players used. However, players got around this by taking extra little steps off-field when they were retrieving the ball and the camera couldn’t follow them. The same kind of cheating occurs in education when targets for increased test scores are imposed on teachers who take their own extra little steps such as teaching to the test in order to produce the necessary numbers.

By comparison, the Premiership Club Prozone director invites players in to discuss their data. At first, only a trickle of players come to see him, but as players’ subsequent performance improves, their peers take notice and are very soon following their team-members’ footsteps to join this intelligent community of soccer learners who analyze data to improve performance together. Whether they concern individual student achievement, or comparative international performance, the most productive uses of data in education similarly occur not by imposing unwanted targets that lead to unnecessary expenditures of energy on superfluous extra steps, but by building intelligent communities of professionals and policy-makers who look at data together in shared commitments to improvement.

Conclusion

All policies start somewhere but most of them travel poorly. The past is a foreign country and too much nostalgia or amnesia about it impairs the intelligent immigration of its policy strategies into the present. This is the danger when presidents, prime ministers, and premiers try to replicate what worked for them as students in the past across entire policy systems in the present. Other countries and other sectors that seem to show exemplary success can equally be sources of disappointment if their strategies are adopted inflexibly and simplistically because of cultural familiarity or political plausibility.

Policy principles are much more transposable and transportable if they are interpreted intelligently within communities of practice among and between those who are their bearers and recipients. Indeed, it is these communities of practice and the ways they engage with past policies and comparative policies elsewhere in order to make committed and sincere efforts to improve together that will prove to be the ultimate test bed of effective as well as sustainable policy development and implementation. Seeds travel better than ripened fruit and so does the germination and cross-pollination of policy change.

In a high-performing country, a remarkably successful district, and a sports club that performs far beyond expectations, we have begun to discern what some of these common principles of high performance can be, including in contexts of low resources and even outright adversity.

What they point to is not what has characterized many Anglo-American reform strategies over the past 2 decades – bureaucratic standardization that stunts creativity, cutthroat competition that widens achievement gaps and pits the strong against the weak, obsessions with the independent authority of objective data and automatically imposed targets that make everyone expend fruitless energy on taking unnecessary extra steps to create the appearance of improvement, and the reduction

of leaders who develop their community's purposes to managers who merely implement the purposes of others and who are turned over with increasing frequency or ferocity if they fail to deliver.

Instead, what we have encountered is the importance of inspiring missions that connect the future to the past and draw the best people to the organization; leaders who know their people and how to get them to work well together in interchangeable roles and positions and who are able to stay long enough to see their work through; cultures of trust, cooperation, creativity, and responsibility; intelligent use of data that serves as a conscience that checks people and not as an all-powerful force that drives them; and commitment to the cause of community development, even among competitors who are galvanized by a common cause that transcends their differences and rivalries.

As we strive to extricate ourselves from the worst economic catastrophe for 70 years, it is time to move beyond the failed solutions of the last 2 decades, to abandon the ingrained ideologies of bureaucratic prescription and market competition, to resist the temptations to inflict our own educational biographies and the opportunities they gave us on a present population whose success may require different solutions, and to avoid transplanting simple solutions from plausible models of success elsewhere. Our task instead is to work together in relation to an inspiring purpose that can lift us all and commit us to helping each other, and to learn from the common principles that underpin inspirational success, far beyond expectations, in systems and sectors beyond and beside us.

In the Renaissance, it was the telescope that got us to see beyond ourselves. In the twenty-first century, it's more of a metaphorical Global Positioning System (GPS) that will help us locate and navigate inspiring sectors and systems, and that will help us learn how to extricate ourselves from the economic calamity that has befallen us. In the end, this will be achieved by no more slick solutions for achieving success in low-tax systems, but by truly investing in the quality, creativity, and community of the only sustainable resource we can ultimately rely on – the future generations of our people and those teachers who we call and depend on to educate them.

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Positive Pressure

Michael Fullan

Educational systems are known to be loosely coupled, fragmented, and overloaded with piecemeal initiatives. Under these conditions, there is a lot of room for inertia – things like to keep on doing what they are already doing. Yet, improvements in the performance of schools are badly needed. What forces could possibly and positively move whole systems toward substantial and continuous improvement?

When we first turned out the phrase “pressure and support” in the early 1990s, it became an instant hit. People could pick whichever concept they were predisposed to like and give lip service to the other. Politicians in particular loved the pressure part. What should have been an integrated set became two pillars.

Now that we have much more experience under our belts, it is time to take stock and clarify what forms of pressure and support in combination are effective. To do this, I (1) stipulate two advance criteria; (2) consider bad or negative forces of pressure; (3) identify a core list of integrated elements of positive pressure; and (4) furnish a case example to show that these ideas can and are being embedded in reality.

The two criteria to judge effectiveness are as follows:

1. Is a given pressure or support action *motivational*? That is, does it cause people to put in the effort to get good results?
2. Do the set of pressure and support policies and actions address improvement of the *whole system*?

By “motivational,” I do not mean that an action today will motivate people tomorrow, but rather if a particular action is taken with a degree of persistence it will incrementally and perhaps dramatically gain on the motivational problem.

Whole system is an entire state, province, or country. It is what we call “tri-level reform” – the school and community, the district, and the government. All schools. All children. Our question in this chapter is, why some forms of pressure

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work, while others don't? By "work," I mean that they motivate lots of people to change the whole system. One final foundational point: Inertia works because it is organic – nobody has to do anything for it to be effective. Negative pressure doesn't work because it is ad hoc or inorganic. Positive pressure will work when it becomes organically part and parcel of system functioning.

Negative Forms of Pressure

To recall, negative pressure is ad hoc and extraneous to the system culture. To the extent that some forms of negative pressure are built-in they actually serve the forces of inertia. I take up five forms of negative pressure:

1. blind sense of urgency
2. pressure without means
3. punitive pressure
4. groupthink
5. win-lose competition

The more the system fails, the greater the blind sense of urgency. Kotter (2008) talks about this as a false sense of urgency:

With a false sense of urgency an organization does have a great deal of energized action, but it's driven by anxiety, anger and frustration, and not a focused determination to win. . . . With false urgency, the action has a frantic feeling: running from meeting to meeting, producing volumes of paper, moving rapidly in circles, all with a dysfunctional orientation that often prevents people from exploiting key opportunities and addressing gnawing problems (p. x).

This is a recipe for burnout and cynicism. It saps people's energy while they never learn what to do. People get discouraged and lose hope.

Along with a blind sense of urgency is mounting "pressure without the means" to act on it. This is pressure without a theory of action. It shows the failures and the goals but no way of getting there. It omits or gives lip service to "capacity-building" – how to build the individual and collective knowledge, skills, competencies, and motivation necessary to work on the problem.

Pressure without means can afford to have ridiculous goals. No Child Left Behind (NCLB) Act in the United States is a prime example – well-intentioned with lofty goals (such as every child will have a qualified teacher by 2014 or every child will perform at a world-class level in literacy, math, and science, and so on) and without any strategy to get there, it becomes a fantasy. Fantasies left to rot become nightmares.

The more that blind sense of urgency and lofty goals without means prevail, the more the next bad step is likely to occur: tightening the screws with punitive pressure. Accountability with teeth, proponents say, is necessary to show people that we are serious. We will leave no child left behind because we say so, and we mean it.

Punitive pressure is what most authoritarian regimes and individuals reach for when all else fails. It doesn't take a psychology graduate to know that punitive pressure doesn't work. It can work in narrow situations such as standing over a person's shoulder with a gun or its equivalent. But even this doesn't work if the person doesn't have the capacity to do what needs to be done.

Pfeffer and Sutton (2000) identify the problem as "fear prevents acting on knowledge." They found that organizations that were weak on generating and using knowledge had an atmosphere of fear and distrust. They identify two specific consequences of fear mongering. The first problem is that it causes people to focus on short-term immediate results even if they have to cheat or fudge the books to show that they met targets. The second adverse consequence is that it fosters selfishness and individualism. Look after number one, blame others—survival of the sneakiest.

Fourth, *groupthink* is interesting because it can cut both ways – to prevent action and to encourage ill-considered action. "Groupthink" is a term coined by Janis (1982) that describes "a mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members' striving for unanimity overrides their motivation to realistically appraise alternative courses of action" (quoted in Wilson, 2007, p. 202). Many examples of negative pressure including our entire list can be attributed to the unexamined assumptions of the in-group going along with the policies and strategies promulgated by a central few.

Groupthink can serve inertia in another way. When teachers tacitly or otherwise fail to face up to poor performance of their peers by reinforcing the norms of the privatization of teaching, they are engaged in an act of groupthink. Groupthink is one of inertia's best friends.

Finally, certain forms of competition unleash negative pressure. When there is an unfair playing field, when certain groups do not have the capacity to be competitive, when some people are left out, competition actually *increases* the gap between high and low performers. Win-lose competition acts like Pfeffer and Sutton's fear mongering. Some individuals win, but at the expense of the system.

What makes the set of the five forms of negative pressure perverse is that they almost always appear together. The mind that thinks up any one of the forms is very likely to find and embrace all forms. One can almost see Douglas McGregor (1960) turn in his grave. Theory X assumptions are alive and well in the land of negative pressure:

- The average human being has an inherent dislike of work and will avoid it if he or she can.
- Because of their dislike for work, most people must be controlled and threatened before they will work hard enough.
- The average human being prefers to be directed, dislikes responsibility, and desires security above everything else. (Theory Y is the opposite where you expect people to rise to the occasion if you treat them well and enable their development.)

Positive Pressure

The opposite of negative pressure is not no pressure. No pressure is complacency. No pressure is inertia's other best friend. Fortunately, there are forms of pressure that palpably meet our two criteria: they are motivational, and they are such for hordes of people. They require a degree of sophistication and perseverance to master and to kick in, but they are practically powerful. They don't work overnight, but they are not long-term either – benefits (remember our large-scale criterion) can be obtained in 2 or 3 years, and then leveraged for greater gain thereafter.

We have identified and used five forms of positive pressure:

1. sense of focused urgency
2. partnerships and peers
3. transparency of data
4. nonpunitive accountability
5. irresistible synergy

I define these in turn and then provide a case example of them in action. Recall that Kotter did not like frenetic urgency. But he also knows about inertia. After examining about 100 large-scale change initiatives, he formed the following conclusion:

Incredibly, we found that in over 70 percent of the situations where substantial changes were clearly needed, either they were not fully launched, or the change efforts failed, or changes were achieved but over budget, late, and with great frustration. We also found that in about 10 percent of the cases, people achieved more than thought would have been possible (p. vii–viii).

Kotter (2008) states,

The winning strategy combines analytically sound, ambitious but logical goals with methods that help people experience new, often very ambitious goals, as exciting, meaningful, and uplifting – creating a deeply felt determination to move to make it happen, and win, now (p. 47).

This is moral purpose with a focus: a confident but humble sense of real hope that this can be done; ideas for acting on the goals; a wraparound sense that there is no time to waste; and a can-do attitude that this will be achieved by the whole team through engaged partnership.

Second, the partnership is crucial in two respects. One is vertical. Central leaders make it clear that they will provide direction and stay the course, but they also are committed to acting through two-way partnerships. Participation is made more meaningful and powerful through the use of horizontal peer learning strategies – within schools, across schools, and across districts. The idea is to learn about implementation from peers during implementation. Knowledge flows and a sense of identity grows with wider circles of peers. Yes there is lots of peer support, but one of the most powerful forms of pressure comes from engaged peers with a sense of urgency. The power of peers is that there are so many of them.

Third, transparency of data is essential and can and must be made into a powerhouse. Transparency is about two things: results and practice (i.e., the practices that caused the results). The good news is that both of these components are now recognized as crucial and are being developed in tandem. This is about assessment of learning (especially higher order skills), and the link to precise, high-yield instructional practices that produce such learning for all students.

There is still in the education field too much assessment (without adequate links to instructional practice) and too much stick wielding. Cisco, Intel, and Microsoft have just partnered with leading academics to produce new assessments linked to powerful instructional practices for the twenty-first century skills (Partners in Education Transformation, 2009). This initiative promises to develop and make available higher order assessments, and equally importantly to identify the effective instructional practices associated with the accomplishment of these new learning goals.

Transparency of data about results and practice is powerful positive pressure when used with the other four pressure elements in this section. It exposes not only results, but practices that produce the results. It generates specific, precise, visually clear images of what works. It is accessible for all as it takes all the excuses off the table.

Nonpunitive accountability must accompany transparency. Openness will do its work if people do not run away. The combination of positive pressures actually helps people to experience success, thereby motivating them to do even more. Nonpunitive accountability plays down “judgmentalism” in favor of high expectations in your face. Achievement data, effective practices, decisions about progress or not, are relentlessly pursued and portrayed. These practices act as (effective) accountability but accountability per se is not the main point. The value of relentless nonpunitive accountability is that it is a *powerful strategy for improvement* with external accountability as a natural by-product.

Finally, positive pressure is never piecemeal. The only chance to alter the course of inertia (because it is embedded culture) is to attack the cultural core itself in order to create a new replacement organic culture with positive pressure and support seamlessly built-in. Thus, coherence, alignment, and synergistic integrated forms of the first four positive pressures working in concert need to be established as “the new way we do things around here.”

A Case Example

The previous section could be written off as mere theory. It is not. There is now a powerful growing presence of many countries, provinces, and states committed to what Michael Barber, Fullan, and MacKay (in press) calls “the professionalization of system reform.” There is not total agreement, but a growing commitment on the part of politicians and professionals to put these ideas into practice, and yes, with a sense of urgency.

We can look for many manifestations of this in the coming year(s), and here I report on only one, namely, the case of Ontario where we have been using and studying the role of positive pressure since 2003 (see Fullan, 2010, and Levin, 2008). Here are some of the main elements expressed in reference to the five components of positive pressure presented in the previous section.

The Ontario public school system consists of 2 million students, 4,000 elementary schools, and 900 secondary schools within 72 districts. From 1995 to 2003, it was a stagnant system in terms of literacy and numeracy achievement – essentially flatlined and had actually lost ground with respect to high school graduation rates.

With a new government in 2003, and a commitment to educational improvement as measured by student learning, the province formulated a strategy based on purposeful, positive pressure. Based on the five elements of pressure outlined in the previous section, the strategy created a powerful base for improvement.

A Sense of Focused Urgency

Being elected in 2003, the new government immediately announced a small number of ambitious goals: improve literacy, numeracy, and high school graduation. The other elements of positive pressure created the essential means of getting there but let's stay with urgency for a moment. Urgency is not (although it could be) a crisis. In all cases, it is a sense of deep dissatisfaction with the status quo and a corresponding ambitious but manageable focus. The government set targets, roughly committing to going from 54% high proficiency in literacy and numeracy in grades 3–6 to 75%; and from 68% high school graduation to 85%.

These three priorities were stated and reiterated in all educational pronouncements. The priorities gained greater prominence by the establishment of an informed “guiding coalition” (GC), chaired by the premier and included the top officials (minister, deputy minister, advisers). The GC is a kind of “feet to the fire” mechanism that constantly puts pressure on the priorities, strategies, and progress. It was clear to all that literacy, numeracy, and high school graduation represented a small core set of urgent ambitious priorities.

It is interesting to observe that negative or frenetic sense of urgency always loses steam. It has no focus or momentum. Focused urgency maintains and even gains energy. When the government was re-elected in 2007, after four successful years, it was not complacency but greater urgency that characterized the mood. The premier commented just after the election in 2007 that he had changed in two ways since 2003, namely, (a) he was more confident about being on the right track and (b) more impatient. With positive pressure, urgency (partly because of initial success) actually intensifies as you go.

Partnership and Peers

A second form of powerful pressure consists of strategies that cause peers to interact and learn from each other in implementing improvements. Central leadership

provides direction, a sense of urgency, a concern with monitoring results and invests in strategies whereby peers can learn from each other. I mention a few here.

One is called “schools on the move” where over 100 schools (currently) have been identified as experiencing 3 years of gains in literacy and numeracy. These schools are profiled by name, demographics, strategies used, and results obtained. Funds are made available to other schools to learn from these schools – not in a hierarchical, superior sense of accomplishment, but rather, “this is hard work let’s learn from those who are making progress.”

Other similarly based strategies include “networked learning communities,” “districts learning from other districts” achieving success in district-wide reform, and schools facing difficult challenges being paired with other schools facing similar challenges but experiencing success.

In all these strategies, peers learn specifically from each other about what is working. Of course, there is plenty of support, but there is also a built-in form of pressure that happens organically. Nothing is more powerful than positively driven peer pressure.

Transparency of Data

Transparency or openness of data, as will be recalled, refers to two elements that must be connected. One is data on student achievement – performance data over time and disaggregated so that it is clear which groups are doing well or not. The other component is transparency of practice. We have to be able to access and learn from others who are employing more effective instructional practices in getting greater achievement results with given groups of students.

We have just seen in the previous strategy (peers learning from each other) how this works to get at effective instructional practice. Here we add the outcome data. It is crucial to note that there is a very close integration between instruction and assessment in these strategies. Schools examine and get better at identifying the *causal* relationships between particular instructional actions and specific student engagement and learning.

In Ontario, we pursue this from two perspectives, what I would call micro- and macro-viewpoints. Micro is the school; macro is the district or state. At the school level, in addition to promoting instructional practices in the classroom that closely link to diagnostic assessment (the daily two-way street between diagnosis and instruction), we foster three school assessment perspectives. First, schools begin to compare themselves with themselves – where were we last year on literacy achievement, the condition this year, and what do we aspire to for the next year. Second, schools are enabled to compare themselves with schools in similar circumstances (what we call “statistical neighbors”). This “apples to apples” comparison is valuable and stimulating especially when used in conjunction with peer learning strategies. Third, we help schools compare their performance to a larger external standard such as 95% success or the provincial target.

The macro use is from the district or province vantage point. Here, we have employed nonpunitive strategies. We have created a “statistical neighbors” database. All 4,000 elementary schools are on the database. They are organized into four bands – those schools facing the most challenging circumstances, two groups in the middle, and a fourth set situated in the least challenging contexts. Other demographic data are included: size of school, rural/urban, percent of ESL students, percent of special education students, and so on. Finally, each schools’ student achievement data are included – grade 3 and grade 6 percentages of students achieving proficiency on the state tests in reading, writing, and mathematics – six scores in all for each school, year after year.

The province monitors results, has a turnaround schools strategy (see below), and invests in helping school principals learn how to use statistical neighbors to monitor their own performance, to learn from others, and to work on strategies that will beget better results.

Transparency as can be seen is a pressure point. What makes it a positive pressure is that it is used largely nonpunitively, and the information is readily and easily accessible, not just for learning outcomes, but also as a route to learning about the practices that produced the results.

All of this is reinforced by negotiating annual targets (in the six results areas) based on existing and previous performance. Every school and every district is always cognizant of how well it has been doing or not in comparison with its own previous efforts, and in terms of what its peer schools are accomplishing.

Nonpunitive Accountability

One of the most perplexing problems in large-scale reform is how to turn around large numbers of poor performing or nonperforming (coasting) schools. We have already seen that punitive accountability backfires. Absence of pressure honors inertia. The previous three forms of positive pressure already stimulate action and improvement. A focused sense of urgency gets people’s attention; partnership and peer learning increase support, and also pressure from successful cases (it is being done in circumstances similar to ours); transparency of data makes it even more evident who is successful and who is not.

These three forces, however, are not powerful enough to improve the whole system. This is where nonpunitive accountability comes in because it puts the spotlight on all the schools and their performance. We have already seen that transparency of performance data and practice stimulates improvement for many schools. Nonpunitive accountability puts acceptable “teeth” in the change proposition. Here is how it works in practice.

First, in the face of poor or stagnant performance, leaders make it explicitly clear that the schools in question are not to blame. We call this nonjudgmentalism. Poor performance is recognized – transparent data tell us so – but the entire initial response focuses on capacity-building rather than criticism. Put another way, it is best to test the capacity-building hypothesis – if knowledge and skills were

developed would better performance ensue – rather than dwell on whose fault it is – the latter being a classic de-motivator.

Again, this is not just theory. We have done it with success through a strategy called the Ontario Focused Intervention Partnership (OFIP). As whole system (all schools) reform unfolds, it is necessary to elevate expectations for all schools in an explicit action-oriented manner. OFIP is a natural next step to focusing energy and capacity-building because it “picks up” schools that are, so to speak, not responding. We have three categories of OFIP schools:

1. OFIP1 ($N = 36$): these are schools whose students are achieving below 35%, as measured by the percentage of students achieving the high standard provincial average of 75%;
2. OFIP2 ($N = 200$): schools whose students are achieving 35–50%;
3. OFIP3 ($N = 755$): schools whose students are scoring 50–74%, but are coasting (i.e., their student achievement is between 50 and 74% but is flatlined or declining over a 3-year period).

Three points are crucial here. First, the focus is on *all* schools not just the so-called “low performing schools.” Over 1,000 (25% of all) elementary schools are involved, including those schools that seem to be doing okay but actually are “cruising” showing no improvement over a given 3-year period.

Second, OFIP schools are publicly labeled (any district could identify its nine or ten OFIP schools by name), but do not feel stigmatized. They are not treated as “failing schools,” but rather as schools in need of capacity-building. In some sense, it is all in the attitude – Theory Y not Theory X: treat people nonjudgmentally, invest in their capacity-building, and (in most cases) reap the reward. Third, these schools really do get specific capacity help – the kind of help that is being discovered and delivered from the three previous positive strategies.

All of this is increasingly specific. The name of the game is clarity, precision, and relentless implementation of effective practices. The key to success is consistent implementation of a few key strategies and time for staff to work together with a specific focus. All staff is engaged in the development of the school improvement plan and the monitoring of progress in achieving the goals in their school improvement plans. All OFIP schools are required to have in place:

- Uninterrupted blocks of time for literacy and numeracy
- A common assessment tool for primary and junior divisions
- A school improvement team that uses the school effectiveness framework as a guide to examine data, identify instructional intervention, and to plan for next steps in meeting ambitious targets for student learning
- A school improvement plan (SIP) revised based on the school’s self assessment and linked to the board improvement plan (BIP)
- Resources to implement a comprehensive literacy and numeracy program across the school

- A process to regularly monitor the growth and progress of specific students to ensure equity of outcome
- Interventions for struggling students

We could be much more specific if space permitted but basically OFIP helps lower performing or stagnant schools install practices of schools that are highly effective. And it does this without “attitude.” The result is that most OFIP schools improve – in 2007–2008, OFIP schools moved ahead 10 percentage points higher compared to the non-OFIP schools. No OFIP school, as I have said, feels negatively labeled. This is positive pressure at its best.

But, what if schools or certain districts (with high numbers of OFIP schools) do not improve? First, this is a much smaller number compared to systems that have a punitive accountability. Second, the pressure on nonresponsive schools and districts is mounting. The small number of schools and districts not moving forward become more and more noticeable. And yes, eventually direct intervention on the part of governments aimed at school districts, not improving despite all efforts, is necessary. But this (because of the strategy) is in a very small number of situations. When direct intervention is exercised under these (relatively last resort and small number of cases), it is applauded by the public and peer districts (as in “it is about time someone intervened”).

The lesson here is first use indirect means of pressure such as the three addressed earlier in this section, add more direct, but still positive measures as in the OFIP strategy, and then take more serious interventionist action in those (few cases) failing to move forward.

Irresistible Synergy

The previous four positive pressure points when pursued in an integrated fashion create relentless synergy. Strategies are focused, aligned, comprehensive, and based on partnership. They foster concentrated practice linked to results. Through purposeful action people become more skilled, as they become more skilled they become clearer (skill produces clarity), and as skill and clarity combine they generate *shared* ownership.

The corresponding positive results themselves are further energizers. Literacy and numeracy increased by 13% (using a very high standard of proficiency) across 4,000 schools in 4 years: high school graduation rates increased from 68 to 77% over the same period; morale of teachers and principals increased; and the percentage of new teachers leaving the profession by their 4th year plummeted from 32 to 9%.

Conclusion

Ontario is not a conclusive case. It still has not yet met its ambitious targets, let alone full success. It is difficult to maintain the sense of urgency. Perhaps the

pressure points are not strong enough. But the main line of argument holds. Specific, synergistic positive pressures are powerful in motivating very large numbers of system members to put in the individual and collective effort essential for getting continuous results.

I mentioned earlier the notion of culture as being organic – norms and values built-in that come to have their own momentum. Let's take accountability in terms of it being either a negative or positive culture. Strong accountability measures (our negative pressure points) occur when the system is not improving itself. This, as I have argued, produces even more negativism. By contrast, positive pressure results in a new culture in which the system is committed to and engaged in improving. I like Hargreaves and Shirley's (2009) statement that accountability is the gap that exists where responsibility stops. In other words, if (intrinsically motivated) responsibility is full bore, accountability is redundant. It is a natural and self-evident by-product of intrinsically driven individual and collective responsibility. You still need external accountability, but in synergistic positive pressure cultures internal and external accountability merge.

These advanced forms of integrated positive pressure for whole systems are fairly recent phenomenon – barely 5 years old. But they augur well for the future because they get results. This makes it politically attractive. It is still tough for politicians because the methods are indirect. They prefer “do this, get that” short-term strategies. But the strategies are still politically attractive because they do get results in relatively short time frames – 2 to 3 years, not 5–10.

Globally, attention is now beginning to shift to whole system reform because some countries are noticeably doing better through the explicit use of the strategies identified in this chapter. Barber and Mourshed's (2007) *How the world's best performing systems come out on top* is a case in point. People are now beginning to benchmark not just outcomes, but also policies and strategies.

My prediction is that this whole system reform work, undergirded by positive pressure components, will take off in the next 2–3 years. We will come to know a lot more about the nature, value, and indispensability of positive pressure in large-scale reform. It's about time, and desperately needed in the world of educational reform.

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Education for an Interdependent World: Developing Systems Citizens

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The work described here was only possible because of the many pioneers of the systems thinking movement in public education and the founders of the more recent SoL Education Partnership – Burlington, Vermont; Murphy School District in Pheonix, Arizona; the Hewlett-Woodmere District in Long Island, New York; the E3 Initiative and the Washington Sustainability Education Association; Sustainable St. Louis; Jaimie Cloud of the Cloud Institute for Sustainability Education; and Lees Stuntz of the Creative Learning Exchange, dedicated to fostering networks of collaboration among systems thinking educators. A special thanks also to Linda Booth Sweeney, who has served as coordinator of the Partnership in its formation and now supports capacity building and research in several of the sites. See the Creative Learning Exchange www.clexchange.org, The Cloud Institute for Sustainability Education

Education for Today's World, Not Yesterday's

I believe that the Industrial-Age education system that has spread around the world in the past 150 years will change dramatically in the coming decades.

This will not happen because such a change is easy. Indeed, as most educators know only too well, few institutions are more resistant to innovation and change than primary and secondary education. It will happen because fundamental change is necessary if human society is to survive and thrive in the world in which we now live. The Industrial Age is ending, and the changes coming will not be possible

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without recreating the two central institutions, business and education, which have been the primary propagators of the Industrial Age worldview and skillset.¹

Economic globalization has brought extraordinary material benefits and unimaginable dangers. For the first time in human history, billions of people share a material standard of living previously unimaginable, just as more share reasonable expectations of long life, democratic processes, and formal education than at any previous time. Just so, human beings are destroying other species and ecosystems at unprecedented rates and altering their ecological environment locally and globally as never before. The average American causes a ton of material waste to be generated *per day*, including the gaseous waste by-products of industrial life like greenhouse gas emissions.

According to Jason Clay of the World Wildlife Fund, to support today's global economy takes 1 1/4 Earths. Soon it will be more. But we have only one Earth, and the inevitable adjustment to living within the scope of her generosity grows more severe every year we continue down the "take-make-waste" industrial path.

The challenges ahead will be social and cultural as well as economic and ecological – indeed they are inseparable. According to the World Bank, the poorest quartile of the world's people saw their income share of global income fall from 2.5 to 1.4% from 1975 to 2000. Globalization has caused a collision of cultures as well as economic systems, with many around the world fighting to preserve traditional cultural identity against the spread of western style consumerism, while massive joblessness spreads as rural economies decline and tens of millions are forced to migrate to cities. In this sense, global terrorism, fueled by millions of disaffected youth with little hope for a positive future, is as inevitable a by-product of the spread of modern industrial development as is global climate change.

While most individuals and organizations are still largely in denial regarding the profound changes required to meet these challenges, more and more business-, civil-society, and governmental leaders (mostly in local government in the US) not only see the changes needed but are busy bringing them into reality (Senge et al., 2008). Fortunately, this revolution also includes a growing number of educators and communities, some of whose examples are mentioned in the following section.

These innovators are guided by imagining a different path into the future, one that leads toward *regenerative* economic system in place of the *extractive* system that has dominated the Industrial Age. They are guided by simple but profound questions. Why could we not emulate nature in creating "circular economies" with little or no waste? Why could we not interact across cultural differences with the

¹Many have argued that the industrial age ended decades ago, as the world of smokestacks and mass production was replaced by that of bits and bytes. But this confuses shifts in dominant technologies with shifts in the underlying values and processes that defined the industrial age. More steel is produced in the world today than ever before. So, too, are more automobiles produced and more coal burned. Indeed, shifts in dominant technologies are a defining feature of the industrial age, what Lewis Mumford and others called the "Age of the Machine." See "The Myth of the Machine, Vol. 1: Technics and Human Development," New York: Harcourt Brace, Jovanovich 1967.

aim of learning rather than domination, fostering a new renaissance as has happened before when established cultures were forced to face radical new ideas? Why could globalization not represent mindful stewardship of the Earth's treasures rather than mindless consumerism, awakening us to our sacred identity as *homo sapiens*, the "wise species"?

The key, to paraphrase Shakespeare, lies not in our stars but in ourselves. Below the multiple symptoms of social and ecological imbalances sits a growing gap in awareness between the nature of our reality and the nature of our thinking, symbolized in the following figure:

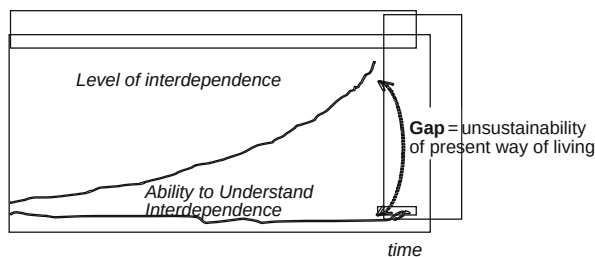


Fig. 2

Global industrial expansion has woven a web of interdependence, the likes of which has never before existed. The average pound of food travels 2,000 miles prior to its purchase by an American consumer. Many of our everyday goods travel much further.

Conversely, the by-products of our ways of living likewise travel around the world. For example, the greenhouse gasses emitted by Americans' cars and SUVs, along with our video games, flat panel TVs, and Web surfing (whose electricity is powered mostly by burning coal), 20% of worldwide emissions, contribute to shrinking glaciers, reduced spring runoffs, and hundreds of millions of chronically dehydrated people in northern India. Weather instability, flooding, and rising sea levels affect a great many more.² Soon, the same statement will be valid in reverse: as China's and India's surging economies eclipse that of the United States in greenhouse emissions (China's already has). Never before in human history have people's daily choices on opposite sides of the globe been so entangled.

But while this web of interdependence has been growing, our capacity to understand interdependence has not; indeed you could argue that it has steadily deteriorated over centuries. As humans have moved from tribal to agrarian societies and more recently to the modern industrial society, our sense of connection to the larger living world has progressively become more and more tenuous. For example, recent studies have shown that many American children believe that their food

²In 2007, Oxfam estimated that the costs to the world's poor of adapting to global climate change (including costs due to loss of crops, spread of tropical diseases, and migration) exceeded \$50 billion. (see www.oxfam.org) This figure is expected to rise sharply in the coming years.

comes from the grocery store, and most have no concept of seasonality in food, since all foods are available at all times.

Because this decline in capacity to understand interdependence has happened over many generations, it has largely gone unnoticed. Native peoples do not need to read books to understand their dependence on and responsibilities to “Mother Earth”; it constitutes the very roots of their culture. Farmers likewise must understand the dance of sun, wind, rain, soil nutrients, and water flows or they cannot survive as farmers. We need to understand neither, and consequently do not.

As this gap grows, our way of living becomes increasingly unsustainable. Very few adults today understand the global economy, let alone where the goods they buy come from, or the social and environmental by-products of the global supply chains through which they move. Few know, for example, that the worldwide expansion of industrial agriculture, mostly to serve middle-class consumers in the north, which displaces tens of millions of rural residents per year due to falling farmer incomes, is a major source of greenhouse gases (not only CO₂ from shipping food around the world but methane from the expansion of livestock to meet growing demands for meat), and has caused the loss of over a billion hectares of topsoil in the past 50 years, more than the size of India and China combined.

While there are many facets of the malaise of global industrial society, it is hard to imagine much real change without beginning to address this gap between our growing interdependence and our ability to understand that interdependence. No technological fixes are likely to solve climate change alone. No global government is likely to suddenly appear to deal with the growing stresses of food and water. No enlightened corporate responsibility movement will miraculously change the DNA of global business so that short-term profit comes into balance with long-term contribution to people and planet.

All of these changes, and more, *will only happen as our thinking changes*. The institutions of the modern world work as they do because of how we work. How we think and interact shape their policies and practices, neither of which is likely to change on their own.

Thinking Newly, Educating for New Thinking

Time does not go backward. Our task is not to re-create yesterday’s cultures of interrelatedness but tomorrow’s. This will require deep change in all the primary institutions that shape modern society – none of which is more important than education because none has a larger long-term impact.

“To be a teacher is to be a prophet,” said Gordon Brown, former Dean of the MIT School of Engineering and a founding inspiration to the systems thinking in education movement. “We are not preparing students for the world of today, or the world that teachers have grown up in; we are preparing students for a world that we can barely imagine.” Education is the one social institution with a 50-year-plus time horizon. Business does not have this. Government does not have this. The media

does not have this. But, school, by its nature, does. That is why education is always a key to the future direction of a society.

When education is driven by incessant pressures to perform on standardized tests, get good grades, and get into the right college, in order to get a good job and make lots of money, then education reinforces the consumerism and economic orthodoxy that drive the present global business system. When it is oriented around deeper questions of human and social development, it can contribute distinctly to the larger needs of a society needing desperately to reorient its priorities. In this sense, education is a natural leader in this time of “great turning,” when the Industrial Age is dying and, as Vaclav Havel put it, “something new, still indistinct, is struggling to be born.”

While this might sound romantic or grandiose, I believe the kids in school sense the significance of the moment. More than ever before in history, today’s young people grow up with an awareness of the world. They know about climate change. They know about our addiction to fossil fuels. They know about the persisting gap between rich and poor. They are often in direct communication with friends in other countries, and they know about the struggles of the world’s cultures to live respectfully with one another. As such they are disengaged when education that will shape their future does not address the imbalances, and when it does, they thrive.

Young people know that we are “living into” a new global society. What they don’t know is whether their teachers know about it. What they don’t know is do adults care enough and have enough courage to re-create education to match *their* world. Regardless of how they express it, they know that the only citizenship that matters today is global citizenship, how the people of the world work together to, in the words of Buckminster Fuller, “create a world that works for everyone.”

The overarching aim of education must become developing “systems citizens,” a generation of young people whose capacity to understand interdependence is commensurate with the interdependence that shapes our lives. This aim will take us all into new territory. No one knows how to do it. There is no set curriculum, anymore than there is agreement on the processes of learning that will be needed.

Moreover, educators won’t be able to do this by themselves. The modern school is an expression of public priorities and sits within a complex web of societal accountabilities. In the Industrial Age, school became the domain of specialists who taught fragmented subjects in a way that was fragmented from the lives of the learners and the larger community (Senge, 2000). Re-creating education will be a job for communities committed to a future that has a future, not just for professional educators.

Our efforts to explore this new landscape through the SoL Education Partnership focus on four foundational changes³:

³SoL (the Society for Organizational Learning – www.solonline.org) is a network of individuals and organizations who work together around the world for systemic change. The SoL Education Partnership focuses primarily on communities within the US where educators, local businesspeople and government, and youth organizations are working together to create a climate for continuing innovation toward educating systems citizens.

- systems thinking,
- authentic youth engagement,
- rethinking schools as learning communities, and
- education for sustainability.

The overarching aim is not educational reform but recontextualizing the whole process of education: starting with young children learning how to be more responsible for their own school environment and gradually moving to interconnecting diverse stakeholders in tackling complex real-life community issues. In this process, students stop being passive recipients of someone else's curriculum and become active agents in developing a sense of responsibility and efficacy for an interdependent world.

Systems Thinking

The first systems thinking classes at Orange Grove Middle School started in 1988, instigated by Frank Draper, a science teacher, and encouraged by Mary Scheetz, then Orange Grove's principal. When my wife, Diane, and I first visited Frank's 8th grade science class in 1991, it was hard not to notice that something was different. First, Frank was nowhere to be seen. In fact there was no teacher in the room. A couple of students had some questions about their library research, and Frank had gone to the library with them (remember, this was much before the Internet). But, to our amazement, the classroom had not descended into chaos. Instead, the thirty or so students were glued to their new MacIntosh computers, two to a machine, deeply engrossed in their conversations with one another.

We learned that Frank and his colleague Mark Swanson had designed their semester science curriculum around a real project, the design of a new state park to be developed on the north of Tucson. After studying the sorts of conflicts that inevitably arise in park and wilderness area management, they were working with a STELLA-based simulation model that showed the impacts of different decisions.⁴ They had an overall budget and prescribed mission based on environmental-quality, economic, and recreation and education targets they set for the park. At the time, they were working on designing the park's trail system. Once they would lay out a proposed trail, the simulation model calculated the environmental and economic consequences, prompting energetic debates over trade-offs among different options.

We had only been standing in the back of the room for a few minutes, and a couple of young boys came and grabbed us. "We need your opinion," Joe said. "Billy (the boy's partner) has a trail system that he thinks is great because it makes a lot of money (routing hikers past the best views), but it also does a lot of environmental

⁴STELLA and ITHINK are products of ISEE Systems, Hanover, New Hampshire: www.iseesystems.com

damage. Mine avoids the environmental impact areas, but he thinks it is too close to the Indian Burial Grounds and will stir up protests.”

We listened for a while as the two boys explained their different trails and showed us some of the simulated consequences. There were no black and white answers, and it was clear that they understood this. This was about design and making choices. The bell rang signaling the end of the period, and they said goodbye, agreeing as they left to come back after school to see if they could agree on a proposal to share with the rest of the class at the end of the week. (Eventually, the students’ proposals and analyses were presented to the actual park planning commission at the end of the term.)

Barry Richmond has identified eight constituent thinking skills that comprise a broad definition of systems thinking⁵:

- *Dynamic Thinking* – seeing patterns of change over time rather than focusing only on isolated events.
- *System as Cause Thinking* – recognizing that problems and their solutions are endogenous: They arise within a system, not from outside.
- *10 K Meters Thinking* – being able to step back and see the big picture.
- *Operational Thinking* – understanding how the structure of a system causes its behavior, and that the same basic structures apply to all systems. Understanding stocks and flows.
- *Closed-Loop Thinking* – recognizing feedback: Any action has consequences that can influence that action again.
- *Nonlinear Thinking* – knowing that feedback loops interact to produce changing responses over time.
- *Quantitative Thinking* – being able to consider and include all variables, even those that cannot be measured in standard units.
- *Scientific Thinking* – recognizing that all models are working hypotheses to be rigorously built, tested, and refined.

In that particular project at the Orange Grove, the students were learning to see change – the consequences of how the park’s trail system was laid out – as differing patterns of behavior over time (Richmond’s “dynamic thinking”). This was also illustrated earlier, when I argued that many of today’s most pressing problems could be understood as arising from a particular pattern of behavior over time: the growing gap over time between interdependence and our understanding of interdependence.

The students were also practicing stepping back to see how one change can have many different effects as the change plays out in a larger system, and how that system has its own distinctive characteristics and generates particular forces (10 K meter thinking and system as cause thinking).

⁵See “Tracing Connections: Voices of Systems Thinkers,” forthcoming (2010).

And, they were learning how to formulate a hypothesis: what sorts of consequences they expected from different changes and testing their expectation against a formal model of the system (scientific thinking).

The students also learned a variety of conceptual tools for mapping systems and for expressing and communicating with others about their understanding of interdependence. Again, these were applied to real-life situations the children could identify with, including ones drawn from their own lives. Today, tools like “behavior-over-time graphs,” “connection circles,” “causal loop diagrams,” and “system archetypes” are introduced as early as third and fourth grade, and young children are invited to look at daily experiences like how trust builds or deteriorates in a friendship, or what happens in breaking a bad habit (Quaden, Ticotsky, & Lyneis, 2009). As students get older, they can naturally extend these tools to more complex subjects, including developing their own simulation models.⁶ This develops not only deep content knowledge but thinking skills to see how common system dynamics can underlay very different situations.⁷

“Our approach was to invite kids to consider a worldview of complex interdependent systems. Instead of abstract learning, we use simulations to begin to confront and to penetrate this world of interdependence as it is embodied in particular real-life situations, and how these systems relate to other systems,” says Frank Draper.

This work is challenging and requires dedicated teachers like Draper and Swanson willing to wrestle with some timeless questions, as well as newer ones brought to light by the systems worldview – like, What if the education process throughout primary and secondary school continually build on children’s innate curiosity and capacity to construct their own understanding rather than digesting a teacher’s understanding? Learning through doing is ultimately essential for retention and meaningfulness, but how can this learning be extended to more complex subjects where the consequences of our actions are no longer immediate? What really are our innate capacities to understand complexity, and how far could this intelligence develop if it were really nurtured?

Authentic Youth Engagement

What was equally evident from the outset at Orange Grove was the engagement of the students. What made the state park exercise so engaging for them?

⁶See, for example, Diana Fisher, “Modeling Dynamic Systems: Lessons for a First Course,” available at www.iseesystems.com. In this book, Fisher shares examples of remarkable student work that includes college and post-graduate level work done by high school students versed in systems modeling tools.

⁷The idea of “generic structures” is a cornerstone of systems education and ranges from simple dynamic structures like delays that arise in virtually all social systems (and confound decision-makers expecting immediate results from their actions) to more involved structures like “aging chains” which arise in diverse settings from demographics to product life cycles.

First, they were wrestling with real-world problems rather than artificial school-room exercises. They could identify not only with the challenges of developing a new state park but also with the benefits of designing the park well.

Second, they were thinking for themselves. They knew there was no single right answer to the challenges they were facing. Ultimately, they had to understand better what would happen if different decisions were made, and they had to frame trade-offs. There was no single formula presented by the instructor to gain the right answer. Rather, they had to sort out their own thinking about a real issue and explore different proposals – ultimately coming to their own conclusions.

Third, the teachers operated as mentors, not instructors. The teacher's role was not to give a prescribed method or guide the students to a predetermined right answer. Indeed, the teachers did not know the best outcome and were colearners with the students. But the teachers' roles were no less crucial: They had to help the students make sense of the outcomes of different experiments. Having been involved in building the computer simulation gave them important knowledge for this task but no simple answers: A complex dynamic simulation model will often respond to changes in ways that its developers do not anticipate, as different feedback interactions play out over time.

So, the learning project was mutual for teacher and student. Though they had built the simulation model, it *was* a model and thus, by definition, incomplete. Indeed, one of the teachers' roles was to help the students appreciate the assumptions upon which the model was based, and to invite the students to critique those assumptions and consider the implications of alternative assumptions, a critical aspect of scientific reasoning.⁸

Lastly, working with partners drew the students into a joint inquiry. This not only enabled them to get to know one another but forced them to continually confront alternative views and assumptions. This drew students into a natural process of seeing how each of us reasons from past experiences and assumptions to draw conclusions that guide our actions, and to becoming more open to testing their reasoning.

Of course, human beings follow such processes of inferential reasoning all the time, but it is often easier to see how this works in another situation, since our own reasoning is often "transparent" or invisible to us. Educators understand the importance of reflection – learning how to examine our own assumptions and reasoning – but it remains an elusive educational goal, all but completely ignored by traditional schooling. Didactic instruction bypasses it entirely. Teachers' efforts to try to get students to reflect is easily undermined by teachers' authority and formal power, which intimidates students programmed to seek correct answers. As Scheetz said, reflection requires safety, which benefits from an environment of mutual inquiry. In this sense, students helping one another reflect is a powerful approach that goes well beyond teacher-centered strategies.

⁸For examples of students developing their own simulation models see D. Fisher, "Modeling Dynamic Systems: Lessons for a First Course", Second Edition, available from iseessystems.com

For example, consider the followed (slightly stylized) interaction between Joe and Billy working on their park trail system.

Billy: “Your trails are a bad idea because they are too close to the Indian burial grounds. You shouldn’t do that.”

Joe: “Who says? There are no rules that say we can’t do that. They do a lot less environmental damage than yours.”

Billy: “Yeh, mine *are* a problem. But what is worse?”

Joe: “I didn’t really think about the burial grounds. Maybe there is a way to avoid the burial grounds and also do less environmental damage also?”

Billy: “Yeh. Maybe, but I wonder how much less money we’ll make; the park has to generate enough money to stay open. Let’s try some other routes.”

In this simple interaction, the two boys are practicing Richmond’s “operational thinking,” understanding how specific features of the structure of a system cause its behavior (such as how trail location affects visitor hiking patterns, environmental effects, and park revenues) and how changes in that structure can change system behavior.

As important, the boys are engaging in a critical collaborative learning process: probing one another’s ways of thinking through the design problem they face and, in the process, making their own thinking more explicit. Plus, they are helping one another – neither is right or wrong, both are learning. Joe hadn’t really thought about the Indian burial grounds as a constraint; this was outside the assumptions upon which he was operating. Likewise, Billy had not paid a lot of attention to the environmental damage of his trails because he was focused on maximizing hiker traffic and park revenues. Both become more aware of taken-for-granted assumptions through the other’s inquiry. Both conclude that there may still be better overall designs if they expand their assumption sets. In short, the boys are mastering the basics of reflective learning based on collaborative inquiry, becoming more aware of their own taken-for-granted assumptions through thinking together.

Of course, such interactions only work if there is mutual respect. It is easy to imagine two young boys simply arguing about who is right, and never challenging their own reasoning.

This is why educators like Scheetz understand that realizing the benefit of systems thinking tools depends on the overall school environment. “An environment where learning is likely to occur,” said Principal Mary Scheetz, “is one that is safe and secure, and where taking risks is OK.”

What if we saw learning how to see systems as inseparable from learning how to see one another? What if we saw the foundation for systems citizenship as a seamless blend of cognitive and interpersonal skills in learning about complexity, anchored in learners’ ongoing discovery about what it means to grow as a human being in relationship with one another? What if teachers, as well as other adults working with kids, saw themselves as mutual learners along with the students?

Rethinking Schools as Learning Communities

Early on in Orange Grove's movement toward adopting systems thinking and "learner-centered learning," the staff realized that their success depended on the overall learning culture at the school, starting with how they interacted with one another.

For example, teachers often espouse an ideal of collaboration but lack practical experience at truly creating a collaborative work environment. Of all professions, teaching is among the most individualistic. Whereas most people in business or architecture or law have an acute sense that their accomplishments are the result of a team effort (even though some individuals may have more visibility to a customer or a client), teachers typically operate in a highly fragmented world of *their* courses and *their* students. Working as teams does not come easily to teachers who have spent most of their lives in an educational system that emphasizes individual performance and competition, reinforced by a professional work environment that forces them to practice their craft alone much of the time.

It takes time and commitment to go beyond platitudes about collaboration. "Of all the changes I tried to lead as principal, helping teachers learn how to team was probably the most difficult," says Scheetz. She personally led several-day retreats, where teachers began to reflect and listen to one another more deeply and to build different capacities for dealing with the inevitable conflicts that arise between different teachers' lesson plans or strategies with particular kids. "There is so much more potential for collaborative solutions than normally gets realized given the professional isolation common to most schools," says Scheetz.

Scheetz and assistant principal Tracy Benson (who later succeeded Scheetz) made sure collaboration became part of teachers' daily lives by redesigning the school schedule so that all teachers had 45–60 min free to clinic with one another, each day. "Collaboration only starts to make a difference when teachers have time to practice coordinating in real time," says Benson. "They need to know what Billy's teacher found out in his first period class or how a new systems idea that is suppose to integrate across civics and science is actually playing out for the kids. This is what actually helps them feel like a team."

Gradually, Orange Grove's teachers began to build a larger vision of the type of school culture they wanted to create. "We have to lead by example," said Martha Jones (check name), a history teacher. "If we show respect to the kids and to one another, the kids see that." Over time, the Orange Grove teachers found that their hard work in developing themselves as a learning community started to reshape how they interacted. "Any topic we talk about is a process of building a community," said Tom Keys, a math teacher. "Dealing with all our differences is the key to building our shared vision."

As the teachers developed as a team, so did their understanding of how specifically to move toward the overall school environment they envisioned. In the end, this came down to one idea: respect. "Teachers are always trying to improve discipline. We took a radical approach: we abandoned all the rules," said Jones. "We eventually

came up with one rule: show respect. We don't put one another down. We have to continually learn to listen to one another, not just superficially but actually."

Building learning communities does not stop at the four walls of the school. School cultures based on genuine respect and student engagement affect how people think and act and naturally start to bridge to encompass the larger community. Ironically, building this larger community is often more common in poorer settings, where resources are scarce and people must work together.

The Murphy School District in Pheonix, one of the founders of the SoL Education Partnership, is one of the poorest in America. Yet, the members of the community have succeeded in creating networks of mutual support that have led to delivery of food and clothing to those in need, a decrease in youth violence, domestic abuse and substance abuse, and an increase in student achievement over the past 3 years. A recent study by SoL researcher Dennis Sandow found that the "Students and their families, as well as the neighborhoods within Murphy School District, all benefit from a large, collaborative social system whose members include but are not limited to not-for-profit, government, faith-based and business organizations, teachers, councilors, parents, and Murphy School District graduates. There is a single (although unstated) purpose to this social system: to generate health and well being for Murphy School District students, families and neighbors" (Sandow, 2006).

Traditionally, the professional isolation of teachers is mirrored by the way schools see themselves as isolated institutional entities sitting apart from the larger communities in which they are embedded. This tragically often becomes a self-fulfilling prophesy: Isolated schools contribute little to their communities and in turn fail to tap the potential engagement and support from those communities. As this happens, the reciprocal benefits from acknowledging and cultivating the interdependence between school and community are lost.

"Maybe it is the harsh circumstances of Murphy, but it has always been obvious that if school here is to succeed it must become a hub for community building," says superintendent Paul Mohr, a founding member of the SoL Education Partnership. "When that happens, the benefits for students as well as adults can go well beyond what educators can do on their own." Over the past 5 years, student achievement at Murphy has increased significantly because of, according to Sandow, the larger "social system supporting the Murphy School District student's academic achievements."

What if "school" was defined not by institutional geography but by the geography of students' lives? What if the "teachers" were not just the professional educators but all the adults (and the older youth) with whom a student interacts? What if we assumed that sustaining innovation in education will only occur to the extent we develop collaborative networks linking local business, local social services and government organizations, and families who share a common vision of supporting kids in their development? What if we realized that whatever shortage we perceive in teachers is but an artifact of the fragmentation of school from the larger community – that, in fact, there are vast numbers of potential teachers waiting to be asked to help?

What would this mean for how education works in general and for nurturing systems citizens in particular – through reconnecting school and the larger communities

to create a rich laboratory for students learning how to build healthy interdependence here and now?

Education for Sustainability: Making Systems Citizenship Real

The Monte del Sol charter school in Santa Fe, New Mexico, came up with a simple way to start reconnecting school to the larger community, the school's innovative "community learning project" requirement. Here's how it works.

Every tenth grader at Monte del Sol can identify something she or he wants to learn that someone in the community can teach her or him. The resulting project then constitutes one of his or her five required courses for the year. I have met students at Monte del Sol who have learned carpentry, consulting, and community organizing. As important as what they learn is how they learn it. Freed from the classroom, they re-create the oldest form of education, apprenticeship. Not only does this lead toward learning that has real meaning to them, it connects many adults with students and gives them a sense of being meaningful contributors in the school, paving the way for both to work together for building healthier and more sustainable communities.

Jaimie Cloud of the Cloud Institute, a national leader in education for sustainability for over a decade, identifies seven primary "habits of mind" to be cultivated in education for sustainability (Federico, Cloud, Byrne, & Wheeler, 2009):

- *Understanding of Systems as the Context for Decision Making.* The extent to which one sees both the whole system and its parts as well as the extent to which an individual can place one's self within the system
- *Intergenerational Responsibility.* The extent to which one takes responsibility for the effect(s) of her/his actions on future generations
- *Mindful of and Skillful with Implications and Consequences.* The extent to which one consciously makes choices and plans actions to achieve positive systemic impact
- *Protecting and Enhancing the Commons.* The extent to which one works to reconcile the conflicts between individual rights and the responsibilities of citizenship to tend to the commons
- *Awareness of Driving Forces and their Impacts.* The extent to which one recognizes and can act strategically and responsibly in the context of the driving forces that influence our lives
- *Assumption of Strategic Responsibility.* The extent to which one assumes responsibility for one's self and others by designing, planning, and acting with whole systems in mind
- *Paradigm Shifting.* The extent to which one recognizes mental models and paradigms as guiding constructs that change over time with new knowledge and applied insight

Cloud sees education for sustainability as integrating ideas and approaches from many different content areas, like “ecological literacy” (science principles and natural laws that help understand the interconnectedness of humans and all of the Earth’s systems), system dynamics and systems thinking, “multiple perspectives” (truly valuing and learning from the life experiences and cultures of others), “sense of place” (connecting to and valuing the places in which we live), “sustainable economics” (study of the connections between economic, social, and natural systems), citizenship, participation and leadership (the rights, responsibilities, and actions associated with participatory democracy toward sustainable communities), and creativity and visioning (the ability to envision and invent a rich, hopeful future).

Obviously, education for sustainability is more than just new curriculum. It is about how the content and process of education can be interwoven with *real-life contexts* to create opportunities for young people to lead in building sustainable communities and societies. In short, real education for sustainability is only possible in concert with systems thinking, authentic youth engagement, and rethinking schools as learning communities to catalyze a radical shift. No longer is education something that adults do to kids. Education becomes a joint learning process for communities learning to become more sustainable.

For example, before I knew of the Monte del Sol charter school in Santa Fe, local businesspeople had given me an impressive local magazine, “Sustainable Santa Fe.” In addition to high-quality articles focused on community sustainability challenges and innovative responses by local organizations, I noticed the editorial byline: In order to advertise in the magazine, companies had to first meet certain criteria of waste management and energy efficiency. So, not only did the magazine feature sustainability-oriented stories, it fostered healthy competition among local businesses for positive brand image. It was only later that I discovered that the magazine was in fact a product of a group of Monte del SoL students teaming up with local community mentors in desktop publishing. Indeed, it was the students who had the idea of the advertising criteria.

In such projects, students become catalysts for engaging their communities, as they have at Brewster, New York High School, where science teacher Scott Beall created a novel way to teach 10th and 11th grade science, “Do Right Enterprises.” Beall told his largely conservative school board he was connecting meaningful science education with developing entrepreneurial skills. In fact, he had a bigger aim. For example, Brady teaches students how to conduct energy audits and then engages local businesspeople as clients. Not only do the students learn how to apply science to practical analysis, even local businesses start to reduce their energy (and carbon) footprint. Along the way, the students discover the difference they can make to their community.

“We thought we were doing the students a favor by letting them come in and gather some data from our restaurant,” said one local businessperson. “We had no idea how much waste they would find, and how much money we could save.”

The difference for student learning, even as defined more traditionally, is dramatic. “There is no doubt that the kids in the “Do Right” course learn as much science content as counterparts in more traditional science classes,” says Beall. In

fact, their New York Regents' science exam results tend to be as high or higher than counterparts in more traditional classrooms. "There are many ways you can design meaningful service learning sustainability projects with particular curricular content in mind," says Beall. "The big payoff is student motivation and a completely different understanding of what it means to *do science* rather than do schoolroom exercises."

When education for sustainability is connected to authentic youth engagement, learning naturally becomes intertwined with youth leadership development. "I think we tend to greatly underestimate young people's capacities as leaders," says Les Omotani, superintendent of the Hewlett-Woodmere district and another SoL Education Partnership founder. Starting several years ago, Omotani invited high school students to learn the disciplines of learning organizations and how to become systems thinkers and to serve as facilitators for community dialogues that the school hosts. "The young people learned that they could help adults have meaningful conversations about how to make the community, including the schools, more healthy," says Omotani. "The adults at Hewlett-Woodmere have learned to listen to and support the students' voice and come to see the students as important leaders, a view that many of the young people have accepted as well." The whole process is anchored in the yearlong Youth Leadership Forum, which invites students to focus on their own development as servant-leaders and systems thinkers, including change projects they shape themselves. Projects in recent years have included replacing disposable cups with reusable cups in the school and a "bag the bag" project that produced and promotes the use of reusable bags, rather than plastic bags, in the community.

"It's hard for me to imagine achieving the changes ahead without empowering the voice of young people to take responsibility for their own future," says Omotani, "rather than graduating disempowered and disengaged high school students angry at the irresponsibility they see all around them. We believe that a twenty-first century high school education must not only prepare our graduates for higher education and how to make a living but perhaps more importantly to prepare them to live (create) a sustainable and high quality of life!"

Stories like these also implicitly raise basic questions about how education for sustainability might address fundamental developmental needs for teenagers long neglected by traditional secondary education.

For most of human history, by the age of thirteen to fifteen, children had gone through some sort of rite of passage that signaled their joining the adult community. It was well understood that it was important that they discover how they could contribute to that larger community. Confining students in their mid-teens to classroom instruction and traditional academic exercises not only fails to tap their creativity, it also ignores fundamental developmental needs to deepen their sense of personal purpose and to learn how they can make a difference. It is impossible to know how much of the anomie and developmental anxiety young people encounter later in life, in their twenties and thirties, has its roots in neglecting these developmental requirements in their teens.

Noted anthropologist Edward Hall, who had spent his life studying child-rearing in diverse cultures, felt that confining young adults to schoolroom learning

“(ignores) the primate base we are built upon. . . Until a generation ago, males were warriors at the age of 18. . . with all that energy, those glands going like mad, they shouldn’t be in school. They’re tearing things apart! We should educate them before and after” (Hall, 1980, 1988).

What if we learned once more how to create meaningful rites of passage for entering young adulthood, and this were integrated into the educational process? How much of the frustration for students and teachers alike would be alleviated if we stopped seeing traditional classroom education as the anchor in secondary education and school became more a sort of base camp for young people exploring how to deepen their own sense of responsibility and efficacy – and the content of the curriculum were organized around this core developmental need? What if we stop seeing them as school children and, as Omotani says, saw them as important leaders in building more sustainable communities? How much would this contribute to the shifts desperately needed in awareness, understanding, and values needed to build a more sustainable world?

Learning that Lasts

These schools afford a rare opportunity to glimpse the longer-term consequences of education for systems citizenship. Orange Grove was one of the first public schools in the US to adopt systems thinking, authentic youth engagement (what they called “learner-centered learning”), and building schools as learning communities, starting in the late 1980s. (Education for sustainability was not a term used explicitly then, but many of the school’s projects focused on these priorities.) Now, thanks to a recently released video documentary, we can see some of the longer-term effects.

Filmmaker James Morrison and former Orange Grove teacher Joan Yates recently brought together seven former Orange Grove students, including several who had been part of an earlier PBS satellite video program when they were students, 14 years earlier. The former students’ reflections indicate powerful life lessons tracing to their experiences as middle schoolers.

“My overwhelming positive recollection was one of being involved in what I was doing; there not being a set outcome; of learning on the go, of presenting at the end of the day a result that was *totally mine*, that didn’t conform to a typical school-sheet form,” says James, now an attorney. “I remember that as a very powerful thing. I really felt like I was seeing real world results.”

The systems perspective was very real for the kids when they were students, as evident in these quotes from the original video: “I like the flexibility.” “You use it almost automatically: just like that, you analyze a problem as a system.” “We are so much more motivated than kids in other schools.” “You learn so much more than you would if it was just paperwork.”

And, it clearly had stuck with them 14 years later. Dave (a high school teacher today) talked of seeing a classroom as a system: “From the minute they walk in from home, managing thirty kids in a room five times a day is all about the systems.”

Nat (now a medical resident) commented: “(I notice) how often people use the word “system” and why the levers people try fail. In a recent documentary on New Orleans (after Hurricane Katrina), I was struck by how often people said that we need to use a systems approach so that this does not happen again: the failure in the levies happened because multiple parts of the system that should have been considered were not, whether it was wetlands or the height of the levies or whatever – people just didn’t consider how all of this would interact.”

“It (systems thinking) really made us think out of the box, rather than just follow the easiest answer or the first answer that comes to you,” according to Athena, a dentist today.

Interestingly, one of the lasting effects of their systems thinking work as teenagers was a sense of humility that had carried into their careers as adults: “Systems thinking teaches you to not take the straight line path between point A and point B,” said James. “That’s such an important lesson, not just for children, but for everyone. The ultimate lesson of systems thinking is that it’s always more complicated than you think. As a parent, I cannot think of anything more important I could teach my children, because it goes to addressing so much in our society – not just what we do as professionals, but for who we are as people and how we interact with our community and how we interact with the world at large. I think systems thinking is an imperative for how we educate our children, both now and in the future.”

In the original video, Scheetz talked about the importance of creating “simulations where students learn how to make decisions to improve a system.” Interestingly, when the adult students go together, several reflected on what they had learned from the systems simulations they had done years earlier.

“In an ideal world, patient care would work like a good simulation,” said Nat. “You come with your set of knowledge but you have access to people you consult with. A cohesive approach is especially important with complicated patient illnesses.”

Others talked about a city planning simulation they had done as students and the lessons it had left, like understanding trade-offs in making decisions. “I had located the school next to a shopping mall,” said Kelly, now a nurse, “because I thought getting kids to shop would be good for the economy. But, it also promoted truancy. I hadn’t thought about that.”

The adult former students also talked about the importance of collaboration and learning from one another as a defining feature of their Orange Grove experience. In the original video, many of the students’ comments had focused on the importance of working together: “Working together we get to know one another. . . You learn more trust.” Another commented: “You had a partner and you could converse a lot. . . there was so much freedom but you also had a goal.”

Fourteen years later, Andy (now a trade negotiator at the Department of Commerce) commented, “(In order to get things done) you are completely dependent on your ability to understand other people’s thinking. . . (for example in negotiations with the Chinese) to understand their positions, what sorts of pressures people feel domestically from their constituents. It’s really hard to shift from a

‘push’ type of argument, trying to convince someone, to ‘pulling’ them towards you. Making that sort of mental transition was really beneficial in my work.” Interestingly, in the original video, 13-year old Andy had commented, “You really have to start to learn to listen to other people... because you may actually be wrong.” Seeing this, Andy commented, “I had not realized how much of this insight came from the 8th grade.”

Appreciating collaboration is rooted in understanding the limits of each person’s mental models, starting with your own. “You have your perspective and you have to seek others’ views,” said Nat. “You learn pretty quickly that the docs are pretty knowledgeable but so too are the nurses and the support staff, and many have been in the trenches a lot longer than you have. You need to pay attention to one another and actively seek their advice.”

Clearly, for these young adults, systems thinking and learning collaboratively had shaped their worldviews in profound ways. In Andy’s words: “The real question is, are you, when you are the person in a position of power, willing to let it go? Are you willing to ask, ‘I don’t know – what do you think?’” For Athena, “Yes, we learned to look for more complexity, but also to look to our peers.” For Nat, “I think we learned how to actively seek out knowledge together.” For Dave, “When you look at other middle schools and you talk with other people, this really was a different place.”

Conclusions

“Education is the most powerful weapon, which you can use to change the world,” said Nelson Mandela. As concerns grow around the world around “sustainability” and the overall path of global industrial development, businesses, NGOs, and governments are stepping forward to confront increasingly critical issues around food, water, climate change, destruction of ecosystems, waste and toxicity, and growing gaps between rich and poor. But, if you believe that the shifts ahead will be cultural, not just technical, the potential role of education looms large.

Hoping to direct attention to this role, the United Nations declared the decade from 2005 to 2014 the decade of “Education for Sustainable Development.”⁹ This is encouraging, but the response in schools to date far less than what is needed. Today, what passes for sustainability education mostly is reworked environmental science curricula, even though the UNESCO emphasizes that it is about more than ecology but affects an “integrated approach to education, learning and life.” Still, few school systems have reprioritized their goals. Most teachers remain focused on “teaching to the test,” seeking to improve student achievement in traditional subjects. Few business and public-sector leaders have stepped forward to “connect the dots” between essential long-term societal changes and a fundamental rethinking

⁹See portal.unesco.org/education/en/ev.php-URL_ID=27234&URL_DO=DO_TOPIC&URL_SECTION=201.html

of the aims of primary and secondary education. Lofty sentiments do not make a revolution – yet that is exactly what we need.

In my view, two things are missing.

First, we must build a meaningful consensus as to the scope and substance of education for the twenty-first century and how it differs from education in the past. Perhaps, the vision of systems citizenship can help focus this budding consensus. Whether we are ready or not, young people will inherit a world in which they are first and foremost global citizens, not national citizens. Unlike any time in human history, young people today grow up with an awareness of the world, and with increasing connections to other young people around the world. It is irresponsible that they should leave secondary school without understanding how the global economy works, or understanding the basic interconnections between healthy economies, healthy societies, and healthy ecosystems. It is tragic that they should leave without genuine curiosity about and engagement with other cultures, for which, often, they need but to travel across their city.

I believe that *systems thinking provides the missing intellectual and cognitive underpinning for education for global citizenship*. This is starting to be understood among business and civil society leaders. “If I reflect on what many organizations have been going through, the whole awareness of sustainability has been growing because systems thinking, in different forms, is enabling us to see much more interdependencies than we have seen in the past,” says Andre van Heemstra of Unilever Management Board. He adds: “It is those interdependencies which make you conclude that it is more than stupid, it is reckless to think of commercial sustainability in isolation of either social or environmental sustainability” (Senge et al., 2008, p. 217).

Barry Richmond’s eight “systems thinking skills” offer a starting point in translating the need for systems thinking into the curricula and pedagogy needed to achieve it. By building upon the foundations of critical thinking and scientific reasoning, Richmond offers a bridge to mainstream ideas that are widely accepted. He extends these to incorporate thinking and learning skills almost completely missing in education today: namely, “the endogenous viewpoint” and learning how to identify feedback dynamics and understand the nonlinear ways complex systems can respond to simple changes. Long regarded as the stuff of graduate education, 20 years of evidence now exists to show that, done well, these skills can be nurtured in primary education and developed to remarkably advanced levels in secondary education, not just for an elite but for the majority of students.

Today many educators embrace goals like students “should know how to think systemically.” But little will change without rigorous programs of study, teacher training, and curriculum development. When combined with developments in education for sustainability and reflection and youth engagement, I believe there is much to build upon to create such programs.

Second, we must face the fact that it is unlikely that basic innovation in education will be accomplished by educators working alone. The failures of endless “educational reform” movements to produce large-scale lasting changes offer mute

testimony to forces that work to conserve the status quo in public education. The problem is not that educators do not have new ideas. The problem is that we, as a society, demand that education continue to operate in the main as it did when we were children. This immense cognitive anchor becomes the source of the political movements that inevitably rise up to squelch meaningful experimentation, the sine quo non of innovation. This inherent conservatism will continue to thwart innovation until communities of leaders from *education, business, civil society, and local government start working together* to support ongoing basic innovation, not remediation in public education.

We do not need to have all the answers worked out in advance in order to build these coalitions. We do need to have the capacity as communities to prioritize and persist in supporting new thinking and new practice. We don't just need teachers who are "prophets," as Gordon Brown called for. We need diverse leaders from all sectors willing to travel together into a future we can only begin to imagine. Education for life after the Industrial Age requires realizing that humans will actually be living together differently in the coming decades or they will not be living much at all – and that young people often have deeper intuitions than do adults regarding the changes coming.

Through the SoL Education Partnership, we are working together to embody and explore in several communities around the country what these new partnerships can look like. In particular, we are working to connect innovators from business and civil society with their counterparts in education. Many businesspeople live in a world where either you innovate or die. They understand how to manage the risks that come with experimentation, how to focus on testing new ideas in local ways before they are extended prematurely to broad application, how to finance and assess innovation. But to date, the businesspeople drawn into working on education have mostly been reacting to perceived shortcomings in schools, rather than focusing on the real needs of creating sustained innovation.

A natural alignment exists between innovators in the private sector and innovators in education, but this alignment has not yet developed sufficiently to have large-scale impact. Leaders in the private sector know that they need people who can think for themselves; solve complex problems in creative teams; work effectively with people from different cultures; and maintain a global, longer term perspective while dealing with immediate problems at hand. Yet, relatively few of our schools are focusing on these requirements in educating students, and most school systems and state departments of education are still sadly out of touch with these very real needs.

Lastly, pursuing both this new consensus and building these new cross-sector partnerships will, I believe, bring us as a society to confront a core unasked question: *In a world of growing interdependence, what is the purpose of education?*

There is a timeless aspect of the purpose of education, enabling young people to grow as healthy and contributing human beings. Most people drawn to teaching as a life work are drawn because of this calling, to be part of how children and young people grow and develop as human beings. This is the love of learning for its own sake.

But there is also a timely and contextual aspect of education, which starts with recognizing the specific challenges society faces and how education must be part of solving these problems. This is the aspect of education that Nelson Mandela reminds us of, and it is to this aspect that education for systems citizenship points.

No one works consciously to destroy ecosystems, or to widen the gap between rich and poor, or to use water and topsoil more rapidly than they are replenished, or to increase concentrations of greenhouse gases to the point of destabilizing global climate. All these changes occur as unintended by-products of business-as-usual. The problem is that, whether as businesspeople, consumers, or voters, we tend to operate with blinders. Individuals make decisions, like the products we buy, with virtually no awareness of the consequences of their choices for others. Companies maximize profits with little attention to the larger social costs, like the costs of climate change. Governments pursue national interests with little regard to the fact that all nations' interests are now increasingly bound together.

We have the sustainability issues that we have because, as individuals, organizations, and societies, we are unable to see the larger systems we have created that shape modern society, and we are unable to work together across institutional and national boundaries to create alternative systems.

Our core task is simple – to create a truly *regenerative economy and society*, one that operates based on the defining principle of all interdependent living systems: Life creates conditions for life. It is time to recognize that young people have the largest stake in the unsustainable future we are now shaping, and they are more than ready to share in creating an alternative. Are we?

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Social Movement Organizing and Equity-Focused Educational Change: Shifting the Zone of Mediation

Michelle Renée, Kevin Welner, and Jeannie Oakes

In the first edition of this handbook, we recommended significant shifts in the way education change is understood and pursued. Specifically, we argued that reforms seeking to disrupt historic connections among race, social class, educational opportunities, and schooling outcomes are likely distorted or abandoned altogether during the implementation process. To succeed, such “equity-focused” change must move beyond conventional change to address a series of unique political and normative challenges (Oakes, Welner, Yonezawa, & Allen, 1998). A related recommendation from that earlier chapter was that the processes of formulating, adopting, and implementing include the active participation of members of less powerful communities as well as the professionals and elites who typically lead reforms. Finally, we joined many others in recommending that education leaders be held accountable for providing all students with a high-quality education and, in particular, for ensuring that the least well-off students are provided with the learning resources they need. Here too, however, we argued that the form of accountability most likely to support the implementation of equity-focused change is the accountability of policy makers and school officials to the public and, most notably, to members of marginalized groups whose educational chances depend on such reforms.

An emerging body of research documents how social movement organizations around the nation have, over the past decade, furthered all three of these recommendations. This updated chapter use Welner’s “zone of mediation” (Oakes et al., 1998; Welner, 2001) to illuminate how social movement organizations are beginning to shift the boundaries, structure, and substance of local- and state-level education reform. The zone of mediation describes the potential of these organizations to bring greater balance to policy deliberations, increasing the probability of the initiation and sound implementation of equity-focused change.

The chapter begins with an explanation of the zone of mediation – describing the nature and use of the concept. We identify the types of forces that shape the zone and describe the potential role of social movement organizations as one of those

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forces. We then review recent studies that document how social movement organizations are building on the legacy of the civil rights movement to advocate for more equitable school policies and practices. Next, we apply the theoretical construct of the zone of mediation to two examples from our work in California – a statewide “opportunity-to-learn” campaign led by a coalition of community-based and legal-advocacy organizations and a grassroots movement in Los Angeles to make college preparatory courses the default curriculum for all students. We conclude with an analysis of three elements that we think are key to the future success of social movement organizations in shifting the zone of mediation to make schools more equitable: (a) the practice of participatory inquiry, (b) the need to address the political and normative aspects of education reform, and (c) the importance of efforts being grounded in the theory that schools are a key component of the larger political economy.

Reintroducing the Zone of Mediation

The equity-focused reform process is unique. These reforms tend to face daunting normative and political obstacles at both the initiation and implementation stages. Quite often, the environment for potential equity-focused reforms is simply not hospitable toward forward movement. In our studies of detracking reforms, for example, we repeatedly observed this inhospitability; teachers and school leaders have explained to us that the politics of schools and neighborhoods would never allow for meaningful changes to elite, high-track classes (Oakes, 1992, 2005; Welner, 2001).

A decade ago, when we wrote our chapter for the first edition of this handbook, we criticized the dominant educational change literature for failing to adequately account for the normative and political barriers standing in the way of such equity-focused reform. That literature, we contended, assumes well-meaning actors who, if given the technical tools and shown the way, will move forward with school improvement efforts. While this dynamic might exist for purely technical reforms, it is rarely recognizable for reforms that strongly implicate issues of race, class, and language-minority status.

To help illustrate the forces – particularly technical, normative, political, and inertial forces – that create the environment surrounding a potential reform, we described a zone of mediation:

[Schools are] situated within particular local enactments of larger cultural norms, rules, incentives, power relations and values. These forces promote either stability or change, and they accordingly set the parameters of beliefs, behavior, and policy in schools. The intersection of forces around a particular issue shapes the zone of mediation for that issue. Such forces may include such far-reaching items as legislation, judicial decisions, foundation support, demographics, housing and nutritional needs, economic and market forces, social/state political climates, educational influence groups (such as teacher unions), district history, individual players within districts, their political ambitions, and the media. (Welner, 2001, p. 95)

Each reform proceeds within a unique context. This context, . . . the zone of mediation, is shaped by a myriad of forces. When forces are added, subtracted, strengthened or weakened, the zone shifts. With each shift, the zone becomes more receptive or more hostile to the reform. From this perspective, the reform process is a battle over contextual turf. (Welner, 2001, p. 223)

The zone framework calls our attention to the forces that continually shape and reshape the context for reform. Each new reform rests atop multiple layers of social and political history, as well as past experiences with education reforms.

The zone framework also highlights why a reformer attentive to just technical interventions will likely fail to advance equity-focused change. Such change requires a fundamentally different understanding than do changes in the overwhelmingly technical realm – for example, changing approaches to teaching mathematics, acquiring and using new instructional technologies, or even most reforms designed to foster healthier school cultures. These technical changes are not simple, particularly when they deviate from the culturally established “grammar of schooling” (Tyack & Cuban, 1995), but compared to equity-focused change, they do not implicate substantial normative and political issues. That is, they tend to require only relatively small changes in core normative beliefs about who can learn and in the need to overcome political opposition related to issues of race and social class. If reformers create an environment where technical needs are met (i.e., where school structures changes and resources are put in place), but they neglect the political and normative environment, an equity-focused change is unlikely to be successfully initiated or implemented (Welner, 2001; see also Oakes & Rogers, 2006).

We’ve also criticized mainstream school change literature for “emphasiz[ing] concerns that are normatively and politically neutral, such as the need for schools to become ‘learning organizations’ where teachers and administrators act as ‘change agents’ skilled at dealing with change as a normal part of their work” (Welner, 2001, p. 12; see also Oakes & Rogers, 2006). This same approach can be seen in recent attempts at so-called “whole school reform,” which is similarly focused on carefully planned organizational change (see Berends, Bodilly, & Kirby, 2002). In the service of implementing the school improvement plan, whole-school reformers address such items as getting the pieces in place, creating buy-in, instituting staff development, acquiring resources, and developing and empowering leadership. While careful planning, resources, buy-in and leadership certainly do help to create a more hospitable environment for reform, this is what we call a “neutral” reform approach. When it comes to equity-focused reform, these neutral elements are insufficient to create a healthy change context.

In this regard, we think it important to draw a distinction between *school improvement*, which depends overwhelmingly on a healthy within-school culture, and *third-order change* (Welner, 2001), which depends not only on within-school culture but also greatly depends on the context surrounding the school. Third-order changes are “fundamental changes which seek to reform core normative beliefs about race, class, intelligence and educability held by educators and others involved with our

schools” (Oakes et al., 1998, p. 968).¹ While school improvement is intended to better accomplish current school goals, third-order reform is intended to shift those goals to become more equity-focused.

Third-order changes tend to directly oppose and confront prevailing external forces and, therefore, are most likely to fall outside the zone of mediation. Moreover, the process of implementation often results in a watering down of reforms’ equity-focused aspects. We call this process “downward mutual adaptation:”

[T]he changes [to an equity-focused reform] that arise as a result of interaction with pre-existing school context will almost always be in the direction of less equity. That is, the pressures from the school and the community will likely favor the dominant societal actors (the local elites) at the expense of the reform’s intended beneficiaries. (Welner, 2001, p. 228)

As explained throughout this chapter, these concepts of the zone and of downward mutual adaptation illustrate why political mobilization is crucial for the success of third-order, equity-focused reform. Community organizing and other forms of political mobilization can help shape a zone of mediation in the direction of more equity. The principal at a school with a recently initiated detracking reform, for example, is more likely to push forward with the reform if any voices of discontent are balanced by voices praising the effort.

This chapter fleshes out these ideas, again considering the equity-focused reform dynamic and again applying the zone framework to help explain the importance of addressing norms and politics. Our specific emphasis in this chapter concerns social movements. In our chapter a decade ago, we illustrated the zone concept while describing the role of court orders. Like such mandates, social movements and community organizing can play an important reform role, and we contend here that this role has generally been misunderstood and underestimated and has too often been ignored.

Our current emphasis on social movements should not, however, detract from our broad contention about the zone of mediation: many scholars and policy makers have fallen into the trap of looking to just one type of “force” – whether technical, legislative, judicial, or social movement – as having the sole potential to bring about change. By pushing social movements to the forefront, we are in no way minimizing the importance of other forces shaping the zone; rather, this chapter serves to introduce social movement organizations as one critical and increasingly active force.

¹Larry Cuban (1992) set forth a framework with a two-part typology for educational change, distinguishing between changes of different magnitude. He categorized changes that simply improve the efficiency and effectiveness of current practices as “first-order” or “incremental” changes, and he categorized those changes that seek to alter the basic ways that organizations function as “second-order” or “fundamental” changes. Our “third order changes” are fundamental (second-order) changes that also seek to reform educators’ and community members’ core normative beliefs about such matters as race, class, intelligence, and educability.

Reshaping the Zone Through Social Movements

The role of social movement organizations in equity-focused education change is perhaps best understood in the context of recent social movement theories, which focus on both political processes and identity formation. Pursuant to this approach, social movements are first and foremost identified by the presence of protest, or “contentious actions” (Tarrow, 1998). By definition, social movements challenge the technical, political, and normative aspects of the existing political system. Social movement organizations are also defined as organizations that engage in forming new collective identities (Whittier, 2002). That is, at the same time that social movement organizations aim to transform the external political system through protest, they also aim to transform the role of individuals and groups in that system (generally by increasing the power of traditionally marginalized groups). And social movement organizations share common features of all organizations: internal structures, regular participants, defined goals, and technical skills and resources (Della Porta & Diani, 1999). Social movement organizations vary significantly – some are multinational, are well funded and engage in multiple issues; others are small and focus on just a single local issue. Most exist somewhere in between.

Current social movement organizing for school equity builds on the long history of activism in African American, Latino, Asian American, and Native American communities. The Civil Rights Movement is perhaps the most well-known social movement in American history. Though the Civil Rights Movement was focused on achieving equity for African Americans across all sectors of society, educational equity was clearly at its center. Similarly, prior to *Brown*, Latino communities in California and elsewhere organized and litigated to fight segregation and inadequate educational opportunities (Donato, 1997). Beginning at the time of the Treaty of Guadalupe Hidalgo, which annexed the American Southwest, and continuing to the present day, organizing in Latino communities has included student protest, leadership development, and the creation of Latino community organizations (Delgado Bernal, 2003; San Miguel & Valencia, 1998). Some of the established organizations that currently work on education reform around the nation, such as the NAACP and MALDEF, have direct roots in the Civil Rights Movement.

A small but growing body of literature is beginning to document the recent wave of social movement organizing focused on education reform. The Industrial Areas Foundation (IAF) is perhaps the best-studied example of modern education organizing. The IAF began with Saul Alinsky’s work in Chicago’s poor neighborhoods in the 1930s, helping ordinary people organize to solve local community problems. Self-interest, collective power, and relationships were central to Alinsky’s organizing approach. Drawing from labor organizing movements, he taught neighborhood residents to identify problems in their communities and use confrontational tactics such as sit-ins and boycotts to improve their lives. In Alinsky’s view, collective power was the only tool available to poor people for wresting concessions from the rich and powerful and for countering their use of wealth and political position to maintain their advantages (Alinsky, 1971). These ideas remain at the core of contemporary organizing, although today’s grassroots efforts also reflect the legacy of

the Civil Rights Movement, which infused organizing with an emphasis on learning and leadership development (Oakes & Rogers, 2006; Payne, 1995; Ransby, 2003).

Shirley (1997, 2002) and Warren (2001) provide extensive case studies of the development and impact of the Alliance school network built by the Texas IAF. Ernesto Cortes and the group's organizers built on local movements to form the Alliance Schools Project in Texas. Local parents and community members learned to use contentious action to develop what they called "fear and loathing relationships" with elected officials, which held those officials accountable for improving schools in some of the state's most impoverished neighborhoods of color (Shaw, 2001). At the same time, however, the Alliance Schools Project augmented their repertoire of strategies beyond direct confrontation to include mutually supportive, if sometimes confrontational, relationships between communities and local schools.

Over time, this productive combination of "relational" strategies – powerful community engagement and strong accountability – was recognized and supported by the state legislature and department of education. The network of Alliance schools has been granted financial resources supporting teacher professional development and student academic assistance. Teachers, principals, and parents within the network of schools meet to collaborate, learn, and campaign for additional resources, helping to enhance and sustain the reform. Notably, throughout the evolution of the project, the work has maintained its organizing edge – with community members judging educators and officials by actions and results (rather than promises), giving them credit when they have advanced the group's agenda and criticizing them loudly when they have not.

Setting aside for a moment the normative and political context, one can identify within this reform elements that are often advocated by mainstream school reformers: collaborative school environments, professional development, resources to help students succeed, and even waivers from restrictive top-down rules. These can be thought of as the "technical" elements of the Texas IAF reform. But describing the reform only in terms of those technical elements neglects the reality that in most jurisdictions normative and political forces, as well as inertial forces, would likely keep this reform from going forward; what differed in Texas was the social movement (Oakes, 1992; Oakes & Rogers, 2006; Welner, 2001).

The Texas IAF challenged the forces that created the preexisting zone of mediation as well as the inequitable education system in Texas. The participation of community members, parents, teachers, and others who developed the Alliance schools brought about the technical changes, but they did so by also bringing about political changes (community members gained an authentic role in school decision making) and normative changes (IAF members countered stereotypes, increased the social capital of their community, and helped to shift fundamental ideas about the cause of inequity in Texas schools). That is, these political and normative changes made possible by organizing strategies shifted the zone to make it more hospitable to the technical changes. While the technical knowledge likely existed prior to the social movement, the reform could not feasibly have been initiated or implemented without that movement.

The impact of social movement organizing on the zone of mediation is also illustrated by the normative changes resulting from the activities of Comité de Padres Latinos (COPLA), a community organization of Latino parents in Carpentaria, California. Delgado-Gaitan (2001) describes how engaging in school reform “changed [the parents’] perception about their lives from one of deficit to empowerment [which] led to the cultural changes in the family, the community and in their personal lives” (p. 175). These are not isolated, insignificant examples. A national study by Gold, Simon, Mundell, and Brown (2004) located over 140 education organizations with an active membership base, working on equity, building cross-community alliances, developing democratic leadership, and aiming to improve the civic participation and power of low-to-moderate communities. After synthesizing information about these organizations, they concluded that organizing “creates the political will to address problems that would otherwise go unattended for lack of an organized constituency demanding attention to them” (p. 705). Most recently, Mediratta and her colleagues (2008) found that by creating political contexts (zones of mediation) hospitable to equitable education change, community organizing in eight communities around the country produced tangible effects on policy and resource decisions, school-level improvements, and student outcomes.

This emerging body of literature documents the increasing engagement of social movement organizations in education reform, as well as the ways in which social movement organizations intentionally and explicitly address the political and normative aspects of reform and thereby reshape the zone. Yet, as we explained above, no single force is responsible for shaping the zone; in each of the case studies we encountered, social movement organizations interacted with other forces (many hostile to the reform efforts) to reshape the zone and redefine their schools.

To further illustrate the role of social movement organizations, we present two case studies of social movement organizing from our research in California (Oakes & Rogers, 2006; Renee, 2006). These examples demonstrate how the organizations act as a force and how they interact with other forces (economy, history, courts, politicians, school administrators, etc.) to shape the zone. The first focuses on a statewide campaign to ensure all California students have an equal opportunity to learn. The second is an example of education reform at the local level – a coalition of grassroots organizations formed to advocate for the implementation of a curriculum policy extending college preparation to all students in the Los Angeles Unified School District (LAUSD). Both cases involve the joining together of grassroots, advocacy, legal, and research organizations to form coalitions capable of generating enough power to alter technical policies, political relationships, and normative beliefs.

Case Study #1: Education Adequacy and Opportunities to Learn in California

By the turn of this century, California’s once first-rate education system had crumbled. The state ranked below almost every other state in the number of counselors and teachers per student; hundreds of schools and thousands of classrooms were

overcrowded; only 69 students of every 100 who were in 9th grade 4 years earlier actually graduated from high school, and only 27 of those 69 graduates had passed the courses required for entry into any of the state's 4-year public colleges (Rogers, Oakes, Terriquez, & Valladares, 2007). Layered on top of this inadequacy was significant inequality; the state's growing Latino and African American student populations were far more likely to bear the brunt of resource shortages and lack of educational opportunity. Subsequently their rates of graduation and college preparation lagged far behind those of Whites and Asians.

Little meaningful reform had been forthcoming to counter these problems. Students ill-served by the schools 20 years earlier found their own children to be equally ill-served, or worse. And, as easy as it was for some policy makers to recognize and decry inequalities and other weaknesses in the school system, it had been extraordinarily difficult to initiate and implement policies that substantially reform the system. To some extent, this is because change must overcome inertial forces, such as educators and others who want to continue doing things the way they've always been done. To some extent, too, it is because of normative and political forces.

Challenging these forces in California were forty-eight students and their parents, supported by a team of advocates, who filed a lawsuit (*Williams v. State of California*) in the spring of 2000. These families argued, on behalf of a class of over a million students, that California's governor, State Board of Education, and State Superintendent of Public Instruction failed to provide them with qualified teachers, basic educational supplies, and safe classrooms and school facilities. Their case alleged that the state violated the students' constitutional right to an education. The plaintiffs, who were nearly all African American, Latino, and Asian Pacific Islander students attending predominately non-White schools, also argued that students of color and low-income students disproportionately experienced the lack of basic educational resources. Their bottom line was that all students must receive certain basic resources in order to learn and that the state had a legal responsibility to ensure that schools are adequately resourced.

As is generally the case with major education rights litigation, a cadre of public interest law firms represented the interests of the *Williams* plaintiffs.² Unique to *Williams*, however, was the extent of engagement from the very outset between the lawyers and a group of grassroots community advocates and educational researchers. Aware of past long-term failures of much equity-focused litigation, this coalition determined that sustained community engagement was critical to maintaining public pressure on policy makers and in particular for ensuring that the equity intent of any new laws or regulations survived through implementation. In this regard, it is noteworthy that the legal team set aside staff time and organizational resources to support the learning and mobilization of community organizations engaged with the *Williams* litigation. The result was that the inertial, normative,

²In this case, the firms included the ACLU of Northern and Southern California, Public Advocates, and MALDEF, as well as pro bono counsel from the San Francisco firm, Morrison & Foerster.

and political forces shaping the zone of mediation were all challenged – by the litigation itself, but also by grassroots organizing that targeted political and normative resistance to change.

For a group of California social justice organizations, *Williams* was an opportunity to collaborate with each other, building their own base of members concerned about education, and helping to address the inequalities in California's education system. A newly formed collection of local community organizations, state chapters of national grassroots organizations, research institutes, and advocacy groups approached philanthropic organizations with a proposal for a collaborative campaign to further the education justice goals of the *Williams* litigation. Two statewide collaboratives were formed – the Campaign for Quality Education (CQE) and the Educational Justice Collaborative (EJC). The CQE is a loose coalition of California education justice organizations that meet to build alliances and coordinate statewide campaigns. Its structure and development were facilitated by Californians for Justice, a statewide student organization. The EJC is a collaborative effort between UCLA's Institute for Democracy, Education, and Access (IDEA) and over 30 activist and advocacy organizations, with the express goal of improving the equity of California schools. The EJC does not run campaigns. Rather, it provides the time and space for different organizations to study issues, form relationships, exchange ideas and strategies, and build organizational capacity to engage with policy makers and the media. These two statewide collaboratives overlap in membership as well as in their focus issues (Oakes & Rogers, 2006).

As the *Williams* litigation made its way through the courts and the eventual negotiated settlement, California's educators, students, and policy makers were debating a related policy: the impending implementation of a new high school exit exam. Organizers participating in the CQE and EJC began to look for ways to address this combination of issues. At a grassroots level, students, parents, and advocates pointed to the unfairness of denying high school diplomas to students denied opportunities – those who attended poorly maintained and under-resourced schools. From their perspective, the exit exam seemed to be punishing students for politicians' failure to adequately fund schools. As these community groups began to develop campaigns, they collectively turned for assistance to the researchers at UCLA's IDEA (including authors Renee and Oakes) affiliated with the EJC.

During these meetings, we heard them articulate their concerns and recognized the match between their theories and the "opportunity to learn" theories discussed in the education literature. Specifically, we heard in these ideas the call for resource and practice standards needed to ensure that all students have the opportunity to perform at a high level (Guiton & Oakes, 1995; O'Day et al., 1993). In daylong retreats with these community activists and advocates, researchers shared studies on opportunities to learn, and the community activists applied the research concepts to their campaigns around *Williams* and the high school exit exam policy. The research was helpful to them, but it was not received without critique; many lamented that the published research had missed key components of equal educational opportunity, such as the need for standards to address access to culturally relevant curriculum, respectful teachers, and dignity. The process of learning about research and,

more importantly, of engaging and exchanging ideas with researchers allowed organizers and advocates to grapple with key concepts and apply empirically derived knowledge to their campaigns.

Armed with the “opportunity to learn” framing, several EJC organizations embarked on multiple education equity campaigns across the state. As one example, professional legal advocates at the organization *Public Advocates* used the opportunity-to-learn framing to develop legislation to create opportunity-to-learn standards.³ At the same time, the CQE focused its opportunity-to-learn campaign on delaying the high stakes consequences of the high school exit exam. The mobilization against what they termed “the diploma penalty” began in 2002 and continues as we write this. It has included many forms of protest: rallies, petition drives, policy advocacy, public testimony, publication of reports, and litigation.

The impact of this work is neither straightforward nor easy to measure. The campaign to derail California’s high school exit exam had an important “win,” in the form of a 2-year delay in the requirement that high school students pass the exam in order to graduate. Nevertheless, the diploma penalty was implemented for the Class of 2006 – a result at direct odds with a key goal of the organizations. Yet the implementation did include exceptions for English Learners and special education students, something the organizations and others fought hard to bring about. The campaigning also resulted in new state funding and education programs to assist students not initially able to pass the exam. But the impact of this social movement organizing can only partially be measured by dollars spent, legislation passed, or test scores raised.

We have, in the past, described how the success of equity-focused reform efforts is found, in part, simply in the struggle to improve schools (Oakes & Rogers, 2006; Renee, 2006; Welner, 2001). During that struggle, educators and others learn about their own values and beliefs, challenge accepted norms and politics, and develop technical skills, as they pave the way for future efforts. Similarly, a large part of the success of the organizing against the California High School Exit Exam is found in the broader, ongoing political and normative arenas. Students and parents from low-income communities of color forced their concerns and ideas directly into this state-level policy debate. Their steady and determined protest and demand to be included provoked a very public debate around the implementation of the exam and the inadequacy of California’s public schools. Young people testified at the State Board of Education, community organizers lobbied the legislature, and the media covered much of the protest. The result was a shift in the zone of meditation surrounding state education policy. The parameters of a feasible exit exam policy correspondingly shifted. The resulting zone – in particular, the new political context – became more hospitable to conversations about the adequacy and equity of the education system.

³Though the legislation was introduced in the California Senate, it did not pass (SB 495, 2003; SB 550, 2003).

Organizing also created a normative shift. By being physically present in the debate, low-income parents and students directly challenged the deficit notion that the achievement gap is the result of their apathy or low desire for an education. Instead, the public and policy makers were confronted with the reality that parents and students were not only concerned but were also demanding that the education system change. One visible result was that policy makers began talking more about providing all students in California with basic learning resources alongside their more conventional concerns about the “achievement gap” and “failing students.”

The *Williams* litigation itself resulted in a more traditional, technical change, although the plaintiffs did not secure a legal victory that established these opportunities to learn as a constitutional right. Instead, Governor Arnold Schwarzenegger settled the *Williams* lawsuit at the outset of his first term in office. The settlement included nearly a billion dollars set aside to correct the most egregious resource shortages in the state’s lowest performing schools. It also included significant new accountability requirements for monitoring students’ access to basic education resources that make state and county governments more accountable to students and parents. Importantly, and in contrast to much earlier litigation focused on civil rights and education rights, the settlement did not end the involvement of the plaintiffs and their supporters. Grassroots organizations around the state continue to use the new complaint process created by the *Williams* settlement as a tool for engaging parents and students in improving schools. This new process allows parents, students, and community members to file a grievance about inadequate educational resources or unsafe school conditions. School and county officials are required to respond to and, as appropriate, fix the problems.

In this way and others, *Williams* brought about ongoing political change in addition to the structural, technical changes in state policy. The relationships and alliances built during the litigation have continued, as groups work toward the equitable implementation of the settlement. Advocacy organizations have helped draft implementing legislation in the California legislature. When these organizers and advocates come across technical problems, they turn to the research and researchers they know and trust. Grassroots organizations have testified, written letters, and met with elected representatives to ensure that the legislation moves through the policy process. Acting in concert, these organizations – advocacy, grassroots, and research – are developing community-led research projects as well as student and parent campaigns to ensure that the equity intent of the legislation is maintained through implementation.

In our earlier work (Oakes et al., 1998; Welner, 2001), we warned that a zone of mediation hospitable to equity-focused reform could not be maintained unless one of two things happened. Pursuant to the first possibility, the forces that originally created the hospitable zone remain in place, although we have viewed this possibility as particularly problematic when reform was initiated with court involvement. A second possibility involves the emergence of new force or (preferably) set of forces to sustain a hospitable political and normative environment. The California case study illustrates the potential of this latter approach.

Case Study #2: College Preparation for All in the Los Angeles Unified School District

The second case study takes place during the same timeframe as the opportunity-to-learn campaign described above. Although education adequacy and the California High School Exit Exam were dominating state policy debates, grassroots organizations in Los Angeles were beginning to look for ways to engage in education equity reform at the local level. If the data about student opportunities and outcomes looked bad statewide, they paled in comparison to those in Los Angeles. The second largest school district in the nation, LAUSD, educates more than 700,000 young people, including high percentages of low-income students and English learners. In 2002, the district produced only about 48 graduates for every hundred 9th graders 4 years earlier, and only 20 of these hundred 9th graders graduated from high school qualified for a 4-year college. These low numbers of college-prepared students were not terribly surprising, given that most of the LAUSD high schools provided the college preparatory course sequence to only a fraction of their students. Moreover, many of the district's college preparatory courses were being taught by teachers without the proper subject matter certification, took place in overcrowded schools and classrooms, and often proceeded with inadequate curriculum materials. As in the state, LAUSD students of color and low-income students disproportionately experienced these resource shortfalls (UCLA IDEA, 2004).

In 2003, community organizers in Los Angeles decided to challenge these inequities. Early on, they contacted researchers at UCLA IDEA and asked for data regarding high school graduation and college preparation rates in the communities' schools. Community organizers, parents, and students were outraged when they saw, across the large district, the stark disparities in access to college preparatory coursework. The data (presented on straightforward maps and tables) showed that schools in low-income communities of color offered significantly fewer opportunities offered significantly fewer opportunities for students to graduate high school prepared to enter California colleges and universities. At the time these meetings were taking place, the United Way published a "Latino Scorecard" grading the quality of life for Latinos in Los Angeles. The education system received a "D" grade.

Moving from outrage to action, the organizers pursued approaches to change LAUSD policy to make a college preparatory curriculum the default curriculum for all students – students would have to affirmatively opt out in order to enroll in classes with a less-challenging curriculum. The organizers quickly found an ally in LAUSD School Board President Jose Huizar and his chief of staff, Monica Garcia. The region of the school district President Huizar represented had some of the lowest rates of college preparatory offerings, undoubtedly influencing his decision to take on the issue. Community organizers guiding the emerging campaign made a concerted effort to broaden the base of their coalition – reaching out to other community organizations, the teachers union, and school district insiders. They organized themselves into key teams to create a policy proposal, develop political support in the district and community, and produce a media campaign around the issue. For a year, they worked to increase the sense of urgency around the issue and to build a critical mass of supporters.

Prior to the school board vote, the organizations involved in this effort formalized their collaboration by officially creating Communities for Educational Equity (CEE). By June 2005, CEE had helped President Huizar draft and pass a districtwide resolution making the college preparatory sequence of courses the default curriculum for all students; this sequence also became a graduation requirement beginning with the high school graduating class of 2016.⁴ Members of the community had built effective alliances with researchers, teachers, administrators, and elected officials, changing the nature of policy discussions and solutions. Their involvement and the alliances they formed helped policy makers to understand the academic desires and needs of their communities, building a zone of mediation – a policy making context – that was hospitable to this equity-focused reform.

Yet passing this resolution turned out to be just the beginning for the CEE. With their sweeping new reform in place, CEE organizers are ensuring that the equity intent of their resolution survives implementation. Most of the pressures and forces that preexisted their reform effort – that created a relatively inhospitable zone for the reform – were undoubtedly still in place, so if the CEE's own pressures had disappeared, the zone might have quickly shifted back. Implementation of the reform would then have looked very different from the CEE intent.

Accordingly, CEE members pushed to ensure that community organizations had an official role within the LAUSD team charged with implementing the reform. They also insisted that their concerns continue to be addressed by district officials during the reform's implementation. In addition, the CEE organizations collectively, and successfully, applied for a grant from the Bill and Melinda Gates Foundation. With significant support from this foundation, and with input from the community as well as education researchers, CEE has developed an effective community-based implementation strategy at eight core families of schools (high schools and the junior high and elementary schools that feed into them). The goals and new resources for these "collaboratives" were celebrated at a widely reported joint press conference held by the CEE groups, the LAUSD superintendent, and city officials. In each of these sites, the community groups now have both dollars and legitimacy as they use social movement strategies (relationship building, contentious action when needed, and constant monitoring) to fight for changes in schools' structures, curriculum, and teaching.

This ongoing effort – the "insider" involvement of the community groups on district implementation teams and their "outsider" monitoring of that implementation – has taken place with much less public attention compared to the initial campaign. But this long-term commitment to the issue has elevated the reform to a different level of sustainability and potential success. These community members and the ones discussed in the first case study realized that state policy debates, local outrage, and their increased capacity to collaborate change the nature of the policy discussion, shifting the zone to one now open to new equity-focused reform efforts.

⁴Resolution to Create Educational Equity in Los Angeles Through the Implementation of the A-G Course Sequence as Part of the High School Graduation Requirement (Board President Jose Huizar, author), passed 6-1 by the LAUSD Board of Education in June 2005.

They researched reform ideas, built collaborations across organizations, agencies, and political offices, and thus increased their ability to disrupt established norms and politics. The result on a technical level was unambiguous: the passage of a resolution that structurally changed the curriculum of the second largest school district in the nation. But this was only the most visible success. At a political level, community concern was legitimized and responded to, from policy development through passage and now into implementation. On a normative level, a policy that prepares all children to have the choice to go to college challenges deficit notions about who is capable of high academic success. Another normative and political shift arises from the long-term engagement of low-income communities and communities of color, defying common beliefs that these communities are not invested in the education system.

Conclusion

Community organizations and community involvement are really about the full participation of all voices – of all segments of that community. In our earlier discussion of top-down reform, we warned that court orders and policy mandates provide, at best, temporary disruptions of an inequitable status quo. Once the mandate disappears, the reform's survival depends on the presence of some other set of forces that will create a hospitable zone. We argued that to remain receptive to an equity-focused policy, reformers must build a normative, political, and technical foundation (Oakes & Rogers, 2006; Welner, 2001). The needs and concerns of all parts of a school's community should be considered. Although the voices of so-called "local elites" (Oakes & Lipton, 2002; Wells & Serna, 1996) have long been heard, the same is not true of voices representing students of color and those whose parents have less wealth and formal education. As described in this chapter, community organizing has the potential to create balance among all these voices and concerns and, as a result, the potential to create equitable schools.

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Community Organizing and Educational Change

Dennis Shirley

As recently as the late 1990s, the concept of *community organizing for educational change* would scarcely have registered a blip on the proverbial screen of most change theorists. The first foray into research on this topic, documenting the origins, growth, and impacts of the “Alliance Schools” of the Industrial Areas Foundation (IAF) in Texas (Shirley, 1997), generated some interest, but many considered the Alliance Schools to be an idiosyncratic appearance on the educational landscape and expected community organizing for educational change to dissipate as had so many other change efforts before it. After all, what were the chances that a network of schools organized through community-based organizations (CBOs) founded by the flamboyant, willfully adversarial Saul Alinsky, with institutional membership made up of inner-city African American and Latino churches, could have any lasting impacts on low-achieving schools in a state as famously conservative as Texas? Furthermore, unlike the Accelerated Schools, the Comer Schools, or the Coalition of Essential Schools, the Alliance Schools lacked a powerful, well-positioned academic leader such as Hank Levin (at Stanford), James Comer (at Yale), or TedSizer (at Brown) heading the network, with a resultant diminished impact on education anticipated.

But contrary to expectations, community organizing for educational change – referred to here interchangeably with “education organizing” for reasons of brevity – did not disappear into the ever-expanding roster of failed change initiatives. Although Ernie Cortés, the Southwest Executive Director of the IAF, was not based in a university, his talents as a community organizer and his successes in launching the Alliance Schools led him to receive a prestigious MacArthur “genius” award as well as a Heinz award for civic leadership. Cortés skillfully recruited dozens of academic allies to leadership seminars for community leaders in Texas, and soon prominent authors as diverse as psychologist Seymour Sarason (2002), political scientist Robert Putnam (Putnam, Feldstein, & Cohen, 2003), and economist Paul Osterman (2003) were writing about the Alliance Schools. Significantly, they were

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not only seeking to understand, but actively promoting the Alliance Schools as a new model of educational and social change.

Texas was not the only site experiencing a renaissance of community organizing with a concomitant expansion of organizing into education in the 1990s. In 1999 a second study, Marion Orr's *Black Social Capital: The Politics of School Reform in Baltimore, 1986–1998*, appeared and documented the capacity of a predominantly African–American CBO named BUILD (“Baltimoreans United In Leadership and Development”) to bring corporate and civic leaders in that city to sign a “Commonwealth Agreement” pledging unprecedented support for urban high school graduates to receive scholarships at area colleges and universities or well-paying jobs with health care benefits in the private sector. Soon, cities around the United States were imitating Baltimore’s Commonwealth Agreement, thereby demonstrating the ability of a relatively small CBO in an aging industrial city to expand the educational “zone of mediation” (Welner, 2001, p. 94) to enhance the public good.

From those early efforts to today, the field of community organizing for educational change has exploded. Leading scholars at schools of education in the United States increasingly are focusing their research and graduate-level courses on this area. Mark Warren at Harvard, initially trained as a sociologist, has turned from his first masterly overview (2001) of the multifaceted political agenda of the IAF in the Southwest to focus exclusively on community organizing and educational change throughout the United States (2005; forthcoming). Milbrey McLaughlin at Stanford, dismayed by the findings of “misery research” (2008, p. 176) indicating the inability of policy reforms to impact school-site issues without considerable grassroots leadership at the local level, has come to focus her latest research (2009) on community organizing as a powerful resource for knowledge utilization and capacity enhancement. Jeannie Oakes, John Rogers, and Martin Lipton, at the University of California Los Angeles, have broken new ground (2006) by reconnecting community organizing explicitly with the democratic theorizing of John Dewey and extending it in new directions that blend on-the-ground research with equity-driven change strategies. A cohort of scholars affiliated with Brown University and the Annenberg Institute (Mediratta, Shah & McAlister, 2009) have developed a sophisticated blend of research strategies that have pushed beyond the earlier almost exclusive reliance on qualitative research to include hierarchical regression analyses that document strong correlations between high levels of intensity of community organizing in Alliance Schools in one city (Austin, Texas) and pupil achievement gains on Texas’ standardized tests. In March 2008, a Community and Youth Organizing Special Interest Group (SIG) was approved by the American Educational Research Association, thereby adding an important academic imprimatur for this new scholarly field. Finally, during the US presidential campaign of 2008, the fact that Hilary Clinton had written her undergraduate senior thesis on Saul Alinsky and Barack Obama had been a community organizer in Chicago brought international attention to the continuing relevance of organizing as a change strategy.

These gains of community organizing as a field of scholarship have not been hermetically sealed off from broader research developments and policy

recommendations in the area of educational change. David Cohen (1990), Linda Darling-Hammond (1990), and Seymour Sarason (1974, 1995a) have all long argued that local adaptations and leadership are indispensable if any policy reforms at the state or federal level are to have a chance of success, with Sarason (1995b) taking the lead in insisting that at some point power relations and strategic conflict are necessary to disrupt the ossified patronage machines that have corrupted too many public school systems. Michael Fullan began his *Turnaround Leadership* (2006) not with a focus on superficial gimmicks to “game the system” to raise pupil test scores but with a deep and probing examination of the impacts of rising inequality on a wide variety of indicators including education outcomes, income levels, and life expectancy. His foremost recommendation for attacking this inequality was simple and direct: “First, focus on the societal problem of income differential and employ direct community-based short-term and long-term strategies,” he wrote (2006, p. 9). Likewise, Andy Hargreaves (2002) has written of the need to conceptualize educational change as part of a broad, equity-driven social movement that engages all sectors of the public, and Andy Hargreaves and Dean Fink (2006), in identifying social justice as one of seven key principles of sustainable leadership, have viewed a renewal of public engagement with public education as a central component of any durable change strategy.

On the basis of the foregoing observations, one could argue that we are now approaching an important confluence between a rising tide of community-organizing efforts and broader developments in theorizing and enacting educational change. Yet, the rapid rise of education organizing has in many ways outpaced the ability of change theorists to keep pace with developments. Furthermore, occasional fireworks such as Aaron Schutz’s in-depth critique (2007) of Jeannie Oakes and John Rogers’ *Learning Power*, Francesca Polleta’s (2002) forthright description of a macho organizing style that is still evident in many CBOs, and the “marriage made in hell,” which was described by one grantmaker who tried to build a coalition between two CBOs (MacKinnon, 2006, p. 11), indicate that community organizing for educational change is much more incomplete and contested than the more positively inflected earlier accounts (Shirley, 1997, 2002; Warren, 2001) suggested.

Three Questions

Community organizing as a new field of study in educational change is thus characterized by a rapid rise in visibility, a plurality of different forms of organizing that blend with other approaches to change, and scholarly controversies about the theories-in-action and outcomes of organizing. In light of this situation, the present chapter seeks to answer the following sets of questions:

- First, what is it that makes education organizing different from other forms of parent and community relationships with schools, as articulated by Joyce Epstein (2001) in her oft-cited six-fold model of parent involvement? How many groups currently are engaged in education organizing, and what kinds of change strategies do they typically use?

- Second, what evidence do we have that education organizing improves conditions in struggling schools and communities? Do we have evidence of improved pupil achievement, high school graduation rates, or greater civic engagement among students and parents in schools that have been the foci of organizing efforts? On the other hand, when education organizing appears to be ineffective or counterproductive, what seem to be common problems that lead to such outcomes?
- Third, how might education organizing best be understood in regard to recent reforms related to high-stakes testing and accountability? In light of these reforms, what role should organizing play in a repertoire of change strategies in the future? Furthermore, how might researchers best study education organizing in the future?

Origins of Community Organizing for Educational Change

Although some recent work (Orr, 2007; Payne, 1995; Ransby, 2003) has directed attention to Ella Baker, Fannie Lou Hammer, and other leaders of the civil rights movement in regard to community organizing, the genesis of most historical scholarship (Horwitt, 1992; Santow, 2007; Warren, 2001) on community organizing begins decades earlier, with attention focused on Saul Alinsky's work in the "Back of the Yards" immigrant neighborhood in Chicago in the 1930s. Alinsky, a biographer of Congress of Industrial Organizations (CIO) founder and leader John Lewis (Alinsky, 1949), took from Lewis key principles of union organizing and essentially transferred them with some modifications to the neighborhood or community setting. To do so, Alinsky had to shift his focus from attacks simply upon employers alone to include the complex web of governing elites and private and public social service providers that failed to improve conditions in the poorest communities. By garnering a number of unexpected victories in neighborhoods filled with immigrants who neither spoke English nor enjoyed high levels of social trust with one another, Alinsky demonstrated that the democratizing potential of the labor movement could be extended beyond the workplace into the community, thereby inspiring thousands of activists and community leaders to study the principles of community organizing and to enact them in their own settings (Alinsky, 1946; Horwitt, 1992).

Scholars have noted that Alinsky generally kept his distance from issues of educational change, preferring to deal with more familiar bread and butter issues such as job creation services, housing provision, and health care (Fish, 1973; Shirley, 1997). When Alinsky organizations in Chicago attempted to become involved in school reform in the late 1960s and early 1970s, they were outmaneuvered by the district's ability to contain and ultimately destroy their attempts to start experimental schools through a strategy of attrition (Fish, 1973). The lesson seemed to be that schools, with their complex bureaucracies, specialized knowledge and modes of operating, and vast professional apparatuses, were off limits to and impenetrable by the urban poor. While many community groups sprang up in the 1970s and 1980s to support or battle school busing, or to champion or to denounce various court orders

of federal mandates to support English-language learners or children with disabilities, when it came to their understandings of power, these groups often shared more in common with single-issue organizations such as the National Council for Learning Disabilities or the National Association for Bilingual Education than they did with the Alinsky model of multi-issue and multi-class “people’s organizations” that focused on fundamental political change across the social spectrum.

It was not until 1985 that the Allied Communities of Tarrant (ACT), an affiliate of Alinsky’s IAF, demonstrated that community organizing could turn around a troubled school in an urban setting. Morningside Middle School, located in an African–American working-class neighborhood in Fort Worth, Texas, was in such trouble at that point in its history that even an Alinsky-affiliated group was welcome to try its hand at turning it around. The school was besieged with gangs who made a mockery of its educational aspirations; the recently retired principal had had his jaw broken when trying to break up a scuffle on a basketball court; and when the new principal, Odessa Ravin, arrived for her first day, she found that her office had been firebombed the night before and she had to set up shop in the school’s library.

Ravin connected with ACT, and together they rolled out classic community organizing strategies. Drawing upon local leaders affiliated with churches and schools, ACT began making *home visits* to all of the parents of Morningside students – a task that was expedited by the concentration of parents in two large housing projects adjacent to the school. *House meetings* were convened in the homes of parents and teachers who met with organizers to air grievances and to identify *winnable victories* that they could pursue to build confidence and establish momentum. *Research actions* into school district policies, Texas state laws on education, and potential political allies unfolded. *Accountability sessions* in which public officials and business leaders promised to support ACT’s agenda for educational change and community development created vivid public dramas that allowed local leaders to develop new political voices and to create long-term strategies that would improve community conditions. In the course of 2 years, the middle school went from dead last – twentieth of twenty middle schools on Texas’ standardized tests in the Fort Worth Independent School District – to third.

This kind of education organizing is quite different from the traditional forms of parent–teacher involvement that have been documented by Epstein (2001). As several scholars have noted, those traditional forms really have no public-forming dimension, but in many ways exemplify the individual client, consumer, or even customer-oriented approach that has become dominant in many privatized, market-driven analyses of educational change (Schutz, 2006; Shirley, 1997; Warren, 2005). Such approaches largely restrict parents to the role of passive consumers of pre-established school curricula, with their involvement limited to volunteering at the school, tutoring the child at home, or enriching the child’s learning through accessing educational resources affiliated with but not embedded in the school. Indeed, Epstein’s original model did not even include community (rather than just parent) involvement, and when it was belatedly added (Epstein, 2001), it altogether failed to address asymmetrical power relationships between communities and schools – a shortcoming noted by scholars more attuned to the manner in which

schools actively reproduce social inequalities (Lareau & Shumar, 1996; Schutz, 2006).

Community organizing for educational change, then, must be understood as a form of *public* engagement for *public* schools. The emphasis by community organizers is not on an individual's *human* capital, nor even on his or her *social* capital, but more on the development of *political* capital to change power relationships in a community, city, or state to empower the marginalized and disenfranchised (Alinsky, 1971; Chambers, 2003; Stone, Henig, Jones, & Pierannunzi, 2001). Nor is community organizing directed toward establishing programs – a point of view that emerged most famously when Alinsky (1965, p. 41) attacked the War on Poverty as a form of “political pornography” for providing services disconnected from community empowerment. While programs often are battled for and their acquisition can be celebrated as real advances, the ultimate goal, Alinsky contended, should be to develop power through authentic “people’s organizations” that effectively articulate community concerns and impact the overall distribution of power and influence in a city or state.

Even among social justice activists, community organizing is often conflated with advocacy or social movements, although organizers themselves take great pains to avoid such confusion. Organizers do not view themselves as conducting advocacy as much as developing independent, non-partisan CBOs that will impact politics from the position of intermediary institutions that are beholden to no special interest groups. Nor do they view themselves as part of social movements, which they typically view as driven by single issues that lead to the loss of organizing capacity when goals are achieved (Chambers, 2003). Rather, the intention is to attack a broad array of community issues through multiracial, multiclass organizations that endure over time and that continually are reorganizing and expanding, by identifying and training grassroots community leaders.

Estimates suggest that there are approximately 800 community organizing groups in the United States today (Warren, 2010). Roughly 500 of those 800 groups are now working in the area of school reform. These groups span a broad spectrum, from entities like the Oakland Community Organization (OCO) affiliated with the national People’s Institute for Community Organizing (PICO) to groups such as the Dudley Street Neighborhood Initiative (DSNI) in Boston and the Logan Square Neighborhood Association (LSNA) in Chicago. These latter groups are unaffiliated with larger national networks and have truly developed grassroots campaigns that have successfully improved their communities and schools (Medoff & Sklar, 1994; Warren, 2010).

What kinds of strategies and campaigns do CBOs engaged in education organizing typically develop? They usually are working in the poorest communities of color in a metropolitan region in the United States and are concentrating their efforts on those schools that have the least qualified teachers, most staff turnover, and worst records in a district in regard to pupil achievement and high school graduation rates (Mediratta et al., 2009). Conditions of concentrated poverty, higher rates of unemployment, and environmental racism make for challenging work, so organizers need to be selective in choosing organizing “handles” (in the argot of

organizers themselves) that will lead to palpable victories rather than reinforce a sense of fatalism and despair.

In my early work with the IAF in Texas, many of these early organizing efforts focused on what some might consider to be insignificant, almost trivial matters, such as the circulation of petitions to install a new traffic light at a busy intersection near an urban elementary school or efforts to press city councillors to fund a community center or library close by a school. Many of the early efforts did not begin in schools themselves. Rather, they emanated from community conditions close by schools that threatened children, such as a crack house across the street from a middle school or a junkyard infested with rats behind an elementary school that outraged community residents.

By attacking those visible insults to their communities, parent leaders, educators, and community organizers have developed increasingly sophisticated campaigns in recent years that have capitalized upon the human capital of academic allies situated in universities and, in some cases, developed their own research and development projects. In New York City, for example, the Community Collaborative to Improve District 9 Schools in the South Bronx developed a teacher support program with that city's public schools that reduced teacher attrition from 28 to 6.5% in targeted schools in the space of a single year (Academy for Educational Development, 2006). In Philadelphia, high school activists with "Youth United for Change" exposed the way in which one of the only three secondary schools in the city that achieved "adequate yearly progress" (AYP) cheated by posting answers to anticipated test questions on walls where tests were administered (Shah & Mediratta, 2008). In Chicago, the LSNA and other community groups created a "Grow Your Own" teacher preparatory program linked with area universities to prepare poor and working-class parents, many with immigrant backgrounds, to become certified teachers (Warren, 2005). Beyond an immediate metropolitan area, statewide campaigns by CBOs have persuaded policymakers to pass legislation providing additional resources for schools that collaborate with CBOs in Texas (Shirley, 1997) and have led to litigation to improve funding for children in the poorest and most disenfranchised communities in California (see chapter "Social Movement Organizing and Equity-Focused Educational Change: Shifting the Zone of Mediation" by Renée, Welner, & Oakes, this book).

However, while these kinds of strategies and outcomes are encouraging, most of the CBOs engaged in education organizing have only one or two organizers focused on education, and they operate with small budgets, generally in the range of \$150,000–\$200,000 per year (Mediratta, Fruchter & Lewis, 2002; Warren & Wood, 2001). With such small staff and financial resources, the CBOs have to develop the unpaid leadership of community members. For groups such as the IAF and PICO that rely on congregationally based community organizing, churches, synagogues, temples, and mosques contribute annual dues to support the CBO. Other groups solicit individual memberships, such as is the case with the many affiliates of the Association of Communities Organized for Reform Now (ACORN). Still, for comparative purposes, we should note that just two direct service providers in the San Francisco Bay area have combined annual budgets of over \$13 million, 179 staff

members, and over 100 regular volunteers (McLaughlin et al., 2009). Hence, in spite of the growth of education organizing and a string of victories in the past 15 years, organizing remains a comparatively small phenomenon in a larger social ensemble of diverse public, nonprofit, and private entities.

Questions of Evidence

It is difficult to conduct rigorous research on education organizing because the process of organizing is so multifarious and unpredictable. In many ways, only case studies, with appropriate analysis of pupil achievement data and other school district records, enable one to get an overview of the organizing process and its impacts. My own early examination of the impact of education organizing on pupil achievement in the Alliance Schools of the IAF in Texas documented modest gains at the elementary school level and none at the middle or high school level (Shirley, 1997). My subsequent examination of three Alliance Schools in the Rio Grande Valley of Texas showed no test score gains in one elementary school with high levels of parent engagement, high gains in a second elementary school with high levels of parent engagement, and modest gains in a middle school with a faculty that was polarized with the school administration about the Alliance Schools project (Shirley, 2002). Other authors (Osterman, 2003; Putnam et al., 2003; Sarason, 2002; Warren, 2001) who studied the Alliance Schools generally relied on that earlier research or did not discuss test score results beyond brief presentations of achievement gains of individual schools.

In 2002, the Charles Stuart Mott Foundation funded the Institute for Education and Social Policy, then at New York University and now at Brown, to begin a systematic investigation into the diverse modalities of education organizing and their impacts on pupil learning. The research team identified seven urban school districts and targeted schools that were working closely with CBOs for in-depth study. Their research methods included 321 interviews, 509 teacher surveys, 124 youth member surveys, and 241 surveys of non-educators involved in community organizing for educational change (Mediratta et al., 2009). School district pupil achievement results, graduation rates, and enrollments in college preparatory courses were also studied to illuminate correlations between organizing strategies and orthodox measures of educational improvement. Among the findings were the following:

- People Acting for Community Together (PACT) in Miami used a congregationally based organizing approach matching parents with partner schools to focus on literacy instruction in elementary schools, and those schools improved from 27% pupils at proficiency in 2001 to 49% in 2005, far outpacing a demographically similar comparison set of schools in grades 3 and 4;
- Measuring the intensity of collaboration with the local IAF affiliate, Austin Interfaith, the Alliance Schools in Austin, Texas, with higher levels of faculty engagement in education organizing showed larger percentages of students

meeting minimum standards on Texas' state test when controlled for student SES, limited English proficiency, and after controlling for the effect of baseline test scores;

- A campaign by the OCO broke up that city's largest and most dysfunctional high schools, with the new, small schools showing improved graduation rates, increased enrollment in college-preparatory coursework, and improved ratings on California's Academic Performance Index;
- On a survey distributed across seven sites, young people who affiliated with education organizing projects reported on a higher level of civic engagement than a national comparison group and organizing experience was a significant predictor of enhanced academic motivation ($p = 0.004$).

Perhaps the most interesting finding of the research team was that community organizing is correlated with higher levels of social trust within schools and between schools and community members. Previous research has found social trust in schools to be a prerequisite for raising pupil academic achievement (Bryk & Schneider, 2004). Surveys of teachers in the Alliance Schools in Austin showed that schools that had high levels of involvement with Austin Interfaith had higher levels of teacher–parent trust, sense of school community and safety, an achievement oriented culture, and parent involvement in the school than schools with less involvement. High levels of community organizing were also associated teacher–teacher trust, teachers' commitment to their school, and teachers' peer collaboration. The survey data indicate that organizing appears to be associated with a dilution of the individualism (Lortie, 1975) and privatism (Little, 1990; Zahorik, 1987; Zielinsky & Hoy, 1983) among teachers that research has found to be inimical to the creation of learning-enriched schools (Rosenholtz, 1989). Given organizers' stated rhetoric about drawing individuals out of their isolation and creating new political capacity for attacking tenacious social problems, the survey data point to significant success in achieving these goals.

Education Organizing in the Age of Accountability

It would take too long to provide a full history of the rise of the standards and accountability movements in the United States since the issuance of the Nation at Risk report by White House in 1983 (National Commission on Excellence in Education, 1983). Much scholarly ink (Center on Education Policy, 2007a, 2007b; Gamoran, 2007; Hamilton et al., 2007; Nichols & Berliner, 2007) has been spilled documenting the rise of standardized testing to increase accountability in education, and the (hotly debated) blessings and curses that have ensued. In general, most of these debates have focused on student achievement results on test scores, with special attention devoted to the impact of the No Child Left Behind (NCLB) Act on schools.

Yet from the very first plan for a system of public schools in Virginia proposed by Thomas Jefferson in 1779 through Horace Mann's advocacy of "common schools"

in the 1830s through battles for equity and integration that animated the Civil Rights movement and galvanized further social justice struggles that continue up to the present day, American education has always been closely intertwined with ideals of civic engagement (Shirley, 2010). An inclusive definition of “accountability,” therefore, must include themes of *community* and *public accountability* that have become marginalized from mainstream educational discourse since *A Nation at Risk* was issued. We know that many sectors of the public – especially those who do not speak English and the have least financial capital and the least formal education – are not in a position to influence the formation and implementation of policy in the United States (Rogers, 2006). Hence, new forms of community and public accountability need to be developed to create a truly inclusive public sphere, such as the following:

- Through modalities of “empowered participatory governance” (Fung & Wright, 2003) that place a premium on easily accessible deliberative forums that allow individuals and groups to engage in the political process without presuming a high level of technical and bureaucratic skill;
- Through creating new cultures of “collaborative transparency” (Fung, Graham, & Weil, 2007) that use house meetings and home visits to enable parents and community members to understand not just pupil test score results, but also educational choices that teachers make and why;
- Through school-based “accountability sessions” in which public officials and business leaders commit to community-initiated policy reforms, with ongoing evaluation and reporting embedded into accountability processes (Shirley, 1997, 2002).

Still, while all of these forms of community and public accountability are desirable, they need to be placed in relationship to recent educational changes that have radically restructured education today. How, for example, does community organizing for educational change interact with the recent drive for clearer standards, more testing, and more accountability in terms of pupil achievement?

To answer this question, Michael Evans and I (2007) studied three CBOs and their interpretations of the impact of NCLB on organizing. The three groups were ACORN Chicago, PACT in Miami, and the IAF in Texas. Drawing upon interviews of educators and organizers, CBO reports, and a wide range of school district data, the following findings emerged:

- ACORN Chicago used the “highly qualified teacher” definitions provided by NCLB as a point of departure to document a crisis of teacher quality in Chicago, with high schools in particular unable to retain certified teachers over time; this documentation then contributed to the creation of a “Grow Your Own” teacher preparatory program (www.growyourownteachers.org) that tailored teacher education coursework to community members with a commitment to teaching in their neighborhood schools;

- PACT in Miami found that public achievement data gave organizers a “handle” for working with parents and community members to understand low pupil test score results in PACT-affiliated schools; this access to information was then utilized to adopt a literacy program in PACT partnership schools that led to improved test scores;
- The IAF found that educators in Texas were becoming skilled at “gaming the system” by excluding low-achieving pupils from schools on test days, reclassifying them as special education students, and narrowing the curriculum to tested subjects; in addition, educational administrators used NCLB as a pretext to exclude parents from schools, arguing that they needed to focus all of their efforts on meeting AYP under NCLB guidelines.

These findings indicate that NCLB and the broader accountability movements have had multiple impacts on the field of education organizing. In the case of Chicago ACORN and PACT in Miami, CBOs were able to use provisions of the act to gather and interpret data and to shape policy in such a way as to improve teacher quality and to raise pupil achievement. Here, the two CBOs served as policy mediators that used provisions of the act to increase civic engagement and improve educational outcomes.

In the third case of the Texas IAF, however, community organizers experienced the more heavy-handed and ethically dubious strategies of “educational triage” (Booher-Jennings, 2005) that appear to have led a mere 15% of American educators to believe that NCLB is improving American education (Public Agenda, 2006). These findings indicate that in the Texas setting a new form of “civic triage” (Shirley, 2008) has occurred that resembles the “decline of the local” in contemporary education articulated by Foster (2004, p. 176) in one of his last papers. Rene Wizig-Barrios, an organizer with The Metropolitan Organization (TMO) affiliated with the IAF in Houston, described the conditions there as follows:

One of our principals was told by her district to make sure that homeless kids in a shelter shouldn't show up on testing day because they would depress the scores. Other principals have abolished free time for kids in first, second, and third grade. Principals tell us that they want to meet with us and work with us but that they're so much under the gun to raise test scores that they just can't make the time. And now we have this new law in Texas which says that if kids don't pass the TAKS [Texas Assessment of Knowledge and Skills] reading test in third grade they can be held back. That kind of pressure seems to us to be way too great to put on kids who are that little, and it's a major source of fear and stress for the teachers.

Wizig-Barrios noted that it was unclear how many of these actions were caused by NCLB. “It's hard to tell what comes from the principal, the district, the state, or NCLB,” she said. Nonetheless, when the larger “policy narrative” places such enormous stakes on test score results, the exact source of the pressures on schools may be less important than understanding the cumulative effect (Gerstl-Pepin, 2006, p. 146).

The Three Contradictions of Education Organizing

In this chapter, three sets of permanent tensions in the field of education organizing have become salient. These are contradictions that are inherent in the very different kinds of organizational settings community organizers and educators inhabit and are related to the compatible but also distinct goals aspired to by educators and organizers. On the one hand, each of the contradictions can appear somewhat abstract and ambiguous; however, in the daily, street-level work of education organizing, they surface repeatedly and illuminate the different ways that educators and organizers frame issues and seek to bridge, amplify, and extend them across settings (Snow & Benford, 1988). The ability of educators and organizers to adjudicate these differences successfully is crucial, I argue, to their ability to engage in cross-organizational learning and field-building processes that are needed to restructure relationships between schools and communities beyond single-shot, grant-funded programs that expire far too quickly when budgets get tight and inadequate capacity has been developed.

The first contradiction concerns the *tension between the educational and the political*. Ideally, political processes support learning, but we know of many cases in which struggles for power come to preoccupy educators and community members. In the case of one Alliance School in the Rio Grande Valley, for example, my earlier research (2002) showed that battles over educators' autonomy, administrators' exhortations to teachers to support the IAF organization, and teachers' intense identification with their academic subject areas and relative disinterest in pupil's community backgrounds led to a long, grinding stalemate. Other research describes educators who resent the intrusive interventions of special interest groups who seek to mobilize power to foist their particularistic agendas on the public schools (Binder, 2004; Bryk, Sebring, Kerbow, & Rollow, 1999; Nespor, 1997). On the other hand, researchers with social justice values (Oakes & Lipton, 2002; Welner, 2001) have found that educators' claims to specialized professional knowledge are sometimes used to undermine efforts to develop more democratic and inclusive schools. The point here is not to adjudicate the veracity of either interpretation, but simply to note the presence of a major fault line that can separate and polarize schools and communities.

The second contradiction concerns *the relationship between the community and larger macro-level contexts of change*. Leading change scholars (Elmore, 2004; Fullan, 2001; Hargreaves & Fink, 2006; Hopkins, 2007) often emphasize the national or even international contexts of educational change, but grassroots organizers generally prefer activating community actors to develop "civic capacity" (Stone et al., 2001) to solve local problems. On the one hand, this preference for the local bespeaks a long-standing Jeffersonian tradition in American political thought and, in the case of congregational community organizing, extends the notion of "subsidiarity" that is a cornerstone of Catholic social thought. However, the increasingly transnational nature of urban populations – with millions of immigrants moving regularly in well-defined circuits between their home nations and employment centers in remote corners of the globe – is requiring new elasticity of

approaches and a fundamental rethinking of traditional organizing strategies. For example, the IAF increasingly frames its work in terms of “broad-based organizing” rather than community organizing, and groups such as ACORN, the Center for Community Collaborations, and the Public Education Network have developed a sophisticated repertoire of digitally-mediated campaigns and reporting that are accessible around the globe to those with a PC, an electrical outlet, and a modem. Yet, as this greater technical capacity and professional expertise of organizers expands, one may anticipate that it will be increasingly difficult to maintain credible and deep connections with local communities. It surely can be done, but only with exceptionally adroit and principled leadership.

The third contradiction concerns issues of *representation and legitimacy*. Who really represents “the community”? The term is often used as a simplistic slogan-system. City councilors, school board members, and mayors are all elected through democratic processes, but in some framings, they are seen as not only distant from but opposed to the individuals who elected them (as well as those who abstained from voting or could not vote). On the other hand, CBOs generally only represent a sliver of a population, yet are able to advance claims of universality for a given neighborhood or part of a city while avoiding normal electoral processes altogether. In many cities there are numerous CBOs, often with conflicting agendas, that contend with equal assertiveness that they are the “authentic” representatives of communities. Such claims can give way to demagoguery and de facto misrepresentation of the diversity that exists in communities. At the same time, however, it is by no means clear that elected officials do not distance themselves from their communities for a variety of complicated reasons, and hence need continual pressure from below to assure that they indeed serve their constituencies.

These contradictions are pervasive in community organizing for educational change. Educators learn that a community organization is coming to a school to attend a faculty meeting and fears of intrusiveness and manipulation are raised immediately. A second community organization seeks to develop local political capital to attack academic underachievement and dangerous neighborhood conditions, but is not able to negotiate the maze of local, state, and federal guidelines that lead educators to pay more attention to the requirement to reach AYP than to improve school safety and student learning. A third community organization develops a campaign to provide health clinics in inner-city schools but then is outmaneuvered by school committee members who mobilize religious fundamentals who raise fears that contraceptives will be distributed through the clinics.

Such is the complicated political terrain in which education organizing occurs. Such organizing involves a never-ending oscillation between the educational and the political, the local and the cosmopolitan, and the community and its representatives. In this dynamic and contested field, there are abundant opportunities to improve neighborhood safety, increase student achievement, and advance community development. There are also, however, an equally large number of opportunities for individuals to derail promising school improvement initiatives by defending professional prerogatives, failing to develop effective guiding coalitions, and simply failing to understand the complicated internal workings of schools in the first place.

Yet lest these many problems with educational organizing be misunderstood as grounds for inaction, one must hasten to add that opportunity costs of a particularly devastating kind and scope are incurred when educators marginalize community engagement, overemphasize top-down management rather than bottom-up activism, and mystify the role of power and politics in educational change (Ginwright, Noguera, & Cammarota, 2006; Sarason, 2005b). Educators often overstate technical considerations in educational change that advantage their own status and knowledge and minimize political and cultural factors that parents and community members seek to bring to their relationships with schools (House & McQuillan, 2005). On the one hand, this reliance upon technical procedures in adjudicating conflicts is understandable for educators or for any “street-level bureaucrats” who engage with a fractious and assertive public (Lipsky, 1983). But educators cannot forget the political decisions that shape the broader social context and have an enormous import for children and their schools.

In one recent study, for example, the United States ranked next to last in a roster of 30 nations ranked by child poverty rate, exceeded only by Mexico (United Nations Children’s Fund, 2004, p. 28). Thirteen million children in the United States now grow up below the poverty line, and numerous indicators of child well-being reflect steady declines in the past two decades (Annie E. Casey Foundation, 2005). Who should be held “accountable” for leaving so many children behind in poverty when other nations with far less wealth and power outperform the United States on these indicators? The consequences of neglectful policies and values injurious to children spill over into schools and communities on a daily basis and suggest that educators have a civic responsibility, as part of their vocation, to remedy the most egregious forms of social injustice that afflict the most vulnerable members of their schools and communities.

Conclusion

We now have a significant and ever-growing body of literature indicating positive consequences from community organizing for educational change. The findings discussed in previous sections indicate that education organizing has an important role to play in contemporary educational change. Positive impacts were found when organizations such as Chicago ACORN and PACT in Miami studied data and used it to develop new strategies of school site and district-level change; when groups such as the OCO promoted a small school reform that improved Oakland’s ratings on the multifaceted indicators of California’s Academic Performance Index; and when young people affiliated with education organizing in Philadelphia rated more highly on civic engagement than a national comparison group of students.

On the whole, the research on education organizing has been positive in tenor. Nonetheless, some areas of concern must be addressed for the future of this change approach if it is to expand beyond its first innovative phase and is to become anchored in schools and districts as a visible, effective, and sustainable strategy. First, community organizers and educators need much more assistance with capacity

enhancement to overcome the fault lines that can divide local political leaders from the professional autonomy and respect sought by educators. Second, the balance between the local grassroots nature of change and broader national and even transnational developments will need to be reconceptualized to link the ensemble of strategies developed by community organizers in the past to the complex new demographic and technological challenges of the present. Finally, issues of representation and legitimacy will continue to need to be adjudicated and clarified so that single individuals or small groups do not assert themselves as community representatives when they in point of fact may only be representing themselves.

In the years to come, it will be necessary for community organizers and educators to deepen their collaborations and to structure educational change in such a way that community development and school improvement are mutually supportive undertakings that are sustainable over time. To do so, at a certain level, it will be necessary for community organizations to continue their crucial contribution by revitalizing democracy and expanding the public sphere. Educators in turn will need to find new ways to network not only with one another but also to reach out to community members to confront common problems, to share expertise, and to slowly but surely transform schools from islands of bureaucracy to centers of civic engagement. The interdependent relationship between democracy and education may remain fractious and demanding, but it also remains indispensable.

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Recent Developments in the Field of Educational Leadership: The Challenge of Complexity

Bill Mulford

In this “golden age” of school leadership (Anderson et al., 2007; Day & Leithwood, 2007) the field is faced with the fact that “new managerialism” which embraced managerial efficiency and effectiveness through bureaucracy and accountability as key levers for reforming schools has failed. It is argued that it is time that the professionals and educational leaders strive to ensure what happens now and in the future is what they want to happen (Gronn, 2003; Hargreaves & Fink, 2006; Hyman, 2005; Leadbeater, 2004a; MacBeath, 2006; Mulford, 2003a; OECD, 2006). However, overcoming the gap between dependence on, or a feeling of the inevitability of, system or school bureaucracies as the means of achieving what they want and their preferred model of seeing schools as social centres and learning organisations remains a challenge.¹

In order to achieve greater professional control, educational leaders need to understand and be able to act on the context, organisation and leadership of the school, as well as the interrelationship among these three elements. A single input by a leader can have multiple outcomes. Success, therefore, will depend on which elements and in what sequence the educational leader chooses to spend time and attention on (Mulford, 2007b; NCSL, 2007). Recent developments in the field suggest the elements for successful educational leadership involve being contextually “literate”, organisationally “savvy” and leadership “smart”. To add to the complexity, successful educational leaders are the prime vehicle for linking all three elements.

This chapter draws on mainly Western literature to examine each of these elements and then the interrelationships among them.

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¹See, for example, the OECD (2001a) scenarios for future schools and feedback from educational leaders on the most likely and preferred scenarios in the next 5–10 years (Mulford, 2007a).

Contextually “Literate”

Context matters. School leaders need to be contextually literate. A context involving rapid advances in science and technology, increased globalisation, changes in demography, including in the nature of work, and pressures on the environment argues for educational leaders achieving balances between and/or choosing between competing forces and a broadening of what counts for good schooling (Mulford, 2008).

Choices between competing forces make the most sense when they foster stability (in the form of a school’s collective capacity to learn) for change, independence rather than dependence, community rather than individualism and heterogeneity rather than homogeneity. Broadening what counts for good schooling needs to include excellence and equity as well as cognitive and non-cognitive (especially personal and social skills) (Mulford, 2002; Mulford and Edmunds, 2010). In such a context school leadership has been found to be intense, varied, accountable and rewarding (NCSL, 2007).

Achieving Balance and/or Choosing between Competing Forces

There are at least four sets of competing contextual pressures on schools. In what follows, these are examined under the following broader headings: continuity and constant change, dependence and independence, individualism and community, and homogeneity and heterogeneity.

Continuity and/or Constant Change

In contrast to past continuity, recent times have been witness to constant change, a stream of new movements, new programs and new directions. Unfortunately, some in education seem to be forever rushing to catch the next bandwagon that hits the scene – “unfortunately” because there is increasing evidence that many a school and school system and their children have been badly disillusioned by the galloping itinerant peddlers selling the new movements (sometimes the new and ever changing ministers of education and/or departmental officials).

The main challenge in such a situation, a world of massive and constant change, is how to foster enough internal stability in people and the organisation in which they work and study in order to encourage the pursuit of change. Stability for change, moving ahead without losing our roots, is the challenge (Peters, 1987).

It is quite incorrect to assume that a school is effective only if it is undergoing change. Change may be in an inappropriate direction, for example, towards a facade of orderly purposefulness (Sergiovanni, 1990). Change may also involve the use of inappropriate measures of success, especially when they are merely procedural illusions of effectiveness (Meyer & Rowan, 1978). The difficulty of providing output measures by which education’s success can be measured has often led to the elevation in importance of “approved” management processes. These processes include program planning budgeting systems, school-based management,

charters/partnership agreements and strategic plans. Such processes contribute an illusion of effectiveness and become desired outputs in themselves, thus deceiving outside observers and many of those in schools as well. Such deception should have no place in good education.

In a changing world it might be more helpful to remember Noah's principle: One survives not by predicting rain (change) but by building arks. Amid uncertain, continually changing conditions, many schools are constructing arks comprising their collective capacity to learn; they are striving to become intelligent, or learning, organisations (Mulford, 2003c).

Dependence and/or Independence

A second fundamental issue relates to the balance between the competing factors of dependence and independence and the current imbalance favouring dependence. This situation is most easily seen in the over-dependence many of those in schools place on "leaders" outside schools, often engendered by the overconfidence of these "leaders" in their own abilities or importance.

There seem to be a lot of people who want to tell those in schools what to do. This situation is unfortunate because many of those doing the telling do not seem to want to accept responsibility for their advice, are not around long enough to take responsibility for their directions and may even seek to prevent fair and open assessment of the changes they promulgate.

We cannot avoid change; indeed we may wish to seek, embrace and even thrive on it. Education is an integral part of our society and must anticipate change as being one of the constants it will face. Whether these changes result in Frankensteins, or gentle, functional, collaborative and sustainable butterflies, depends largely on the response of those in schools. Hyman (2005), for example, who left 10 Downing Street after many years as speech writer and advisor to the prime minister to work as an assistant to the head teacher at London's Islington Green School, concludes that:

Perhaps the biggest eye-opener for me on my journey has been how the approach I had been part of creating, to deal with 24-hour media and to demonstrate a decisive government, was entirely the wrong one for convincing frontline professionals, or indeed for ensuring successful delivery. Our approach to political strategy has been based on three things: momentum, conflict and novelty, whereas the frontline requires empowerment, partnership and consistency. (Hyman, 2005, p. 384)

Individualism and/or Community

Religious institutions no longer attract or have an impact on the young, families are dysfunctional more often than ever before, some children are malnourished, drug addiction is a scourge and many prime-time television programs can be vacuous and educationally bankrupt. It is a time when advertisers and their clients have succeeded in not only rushing children through their developmental stages into a false sense of maturity but have also managed to link identity and status to brand names,

and gang members; athletes, and narcissistic celebrities are the admired adolescent role models (Goodlad, 1994).

Although schools do have the responsibility of care for students, at the same time debate continues as to whether schools should be dealing with these broad social issues (Bernstein, 2000). It may be unreasonable to expect the schools to pick up the slack in such situations but if the home cannot and the school does not pick up the responsibility for our young then who will? Who will counter, for example, the pressure inherent in much of our “modern” society to act alone rather than with, or for, the community? We need to be reminded that change for the sake of change, including technological change, is not necessarily good; it must be tempered with wisdom, compassion and justice.

A different generation, those born from the 1980s onwards, the New Millennial Learner (NML), now populate our schools – as students and, increasingly, as staff. The NML are the first generation to grow up surrounded by digital media, and much of their activity involving peer-to-peer communication and knowledge management is mediated by these technologies (Howe & Strauss, 2000). Also called “Homo Zappiens” (Veen, 2003), this generation has made popular the less controllable “socially” oriented technologies such as blogs, wikis, tagging and instant messaging (Pedro, 2006).

In this individualistic, technology-mediated world, a skills crisis would indeed be bad enough but a values crisis would be devastating. For example, turning back the tide of a “virtual”, computer-based cyberspace existence, with its stress on individualism and encouragement to dissociate oneself from an increasingly challenging world, is vital for our future survival. For, as Peck (1987) has reminded us, a community is a place where conflict can be resolved without physical or emotional bloodshed and with wisdom as well as grace. A community is a group that “fights gracefully”.

A generation that is unable to feel for others is incapable of creating the social trust that is so essential to maintain culture. And, as it is in the broader culture, so it is in schools. For example, it has been demonstrated that where teachers’ trust in principals is undermined by perceptions of principal co-option of top-down system change initiatives, especially when unsupported by teachers, it results in teacher alienation and feelings of disempowerment, which can then bring teacher strategies of resistance to the fore (Bishop & Mulford, 1999).

Homogeneity and/or Heterogeneity

If you look for common denominators in successful schools, you will see that a strong indicator is to find a way to get some of the staff and students to do a radical thing, to take the initiative, to take risks. If a system is too tight for this there will be no search and no development and if there is no search and no development there is no learning.

One lesson in this context is that reductionist approaches in education, to the complexity that is the world of the teacher and the student, should not go unchallenged. Uniformity for schools and education systems in aims, in standards and in

methods of assessment is a complexity-reducing mechanism. It is far tidier to have a single set of aims for all, a single curriculum for all, a single set of standards for all and a single array of tests for all than to have locally developed approaches to school improvement.

Homogeneity of outcome for the future of our schools and society is not necessarily the highest pinnacle and attempts to reach it may have backfired in terms of student attitudes to school. International research (OECD, 2004) shows, for example, that more than a quarter of students agrees or strongly agrees that school is a place where they do not want to go. In countries such as Belgium, France and Hungary, where there is a high level of homogeneity in the education system, the proportion ranges from 35 to 42% while in countries such as Denmark, Mexico, Portugal and Sweden, where there is less homogeneity, the figure is less than 20%.

In fact, UK researchers are:

beginning to encounter students expressing doubts about the genuineness of their school's interest in their progress and well-being as persons, as distinct from their contributions to their school's league table position. [The result is that] contract replaces community as the bond of human association. (Fielding, 1999, p. 286)

Broadening What Counts as Good Schooling

The forces and factors increasingly permeating our schools show that to achieve their purposes there is a pressing need to broaden what counts for "good" schooling. Measures of successful student achievement in a knowledge society are increasingly being seen as wider than the cognitive/academic; it is more personalised and involves achieving both excellence and equity (DfES, 2005; Leadbeater, 2004a; OECD, 2001b; World Bank, 2005). If we stress only scientific and technological knowledge, or only literacy and numeracy, we could languish in other respects, including physically, aesthetically, morally and spiritually.

Howard Gardner understood the need to broaden what counts for good schooling with his conceptualisation of multiple intelligences. His most recent work (Gardner, 2007) continues this understanding by defining the abilities that will be needed in times of vast change as his five "minds for the future"; that is, disciplinary, synthesising, creating, respectful and ethical minds. In linking this broadening of what counts for good schooling to school leadership, Leo (2007) points out that:

a key question for school leadership is how to develop more imaginative approaches to educational assessment that illuminate how schools develop capabilities such as motivation and creativity and to ensure that these are among the outcomes of education for all students. (Leo, 2007, p. 10)

Consistent with this argument to broaden what counts is a range of impressive research using data from the British cohort study. This data base followed all children born in the United Kingdom in the first week of April 1970 and surveyed them again in 1975, 1980, 1986, 1991 and 1996. At age 10, in 1980, over 12,000 children were tested for mathematics and reading ability and the psychological attributes of

self-esteem and locus of control. The children's teachers were questioned about their behavioural attributes of conduct disorder, peer relations, attentiveness and extraversion. In 1996, at age 26, information was collected on highest qualification attained, earnings and periods of unemployment.

The author of one of these studies, Leon Feinstein, an economist, summarises his findings as follows:

... attentiveness in school has been shown to be a key aspect of human capital production, also influencing female wages even conditioning on qualifications. Boys with high levels of conduct disorder are much more likely to experience unemployment but higher self-esteem will both reduce the likelihood of that unemployment lasting more than a year and, for all males, increase wages. The locus of control measure ... is an important predictor of female wages ... Good peer relations are important in the labour market, particularly for girls, reducing the probability of unemployment and increasing female wages. ... [These results] suggest strongly that more attention might be paid to the non-academic behaviour and development of children as a means of identifying future difficulties and labour market opportunities. It also suggests that schooling ought not be assessed solely on the basis of the production of reading and maths ability. (Feinstein, 2000, pp. 22, 20)

These results have been confirmed in other longitudinal research by Carneiro, Crawford, and Goodman (2006) where it was found that 7- and 11-year-old children who exhibited social maladjustment were less likely to stay on at school post-16 (after taking into account cognitive ability and other family background factors); did less well in terms of performance in higher education; were more likely to display negative adolescent outcomes, such as trouble with the police by age 16 and teenage motherhood; and even conditioning on schooling outcomes were more likely to have both lower employment probabilities and lower wages at age 33 and 42.

Carneiro and colleagues (2006) believe their findings are consistent with another research (e.g., Cunha, Heckman, Lochner, & Masterov, 2005) which shows that non-cognitive skills are more malleable than cognitive skills. This finding suggests that schools can have a greater effect on students' non-cognitive than cognitive outcomes. Cunha and colleagues (2005, p. 1) also remind us that "remediation of inadequate early investments [in such areas of social skills] is difficult and very costly".

Organisationally "Savvy"

School organisation also matters. Educational leaders need to be organisationally savvy. They need to be able to build capacity. Broadening the way schools are organised and run would see a move from the mechanistic to an organic, living system; from thin to deep democracy; from mass approaches to personalisation through participation; and from hierarchies to networks. The emphasis would very much be on social capital, learning organisations, collective teacher efficacy and communities of professional learners.

From Mechanistic to Organic, Living Systems

In her book, *Finding Our Way: Leadership for an Uncertain Time*, Wheatley (2005) employs two competing metaphors – “organisations as machines” and “organisations as living systems” – as explanation for both organisations and leadership that differ radically in their functioning and outcomes. The “machine” metaphor encourages a view of organisation as a fixed structure of some sort, a structure consisting of parts that need to be “oiled” if they are to function together smoothly. From this view, organisations require effortful monitoring, coordination and direction by someone, typically a “leader”.

Wheatley (2005, p. 4) notes that “in the past few years, ever since uncertainty became our insistent twenty-first century companion, leadership strategies have taken a great leap backward to the familiar territory of command and control”. Such leadership, aiming to increase employees’ certainty about their work (and increase the school’s level of accountability to government and the public) is mostly transactional. This means that, in the case of school organisations, teachers are assumed to be motivated by the promise of such extrinsic, positive rewards as money and status and opposing, extrinsic, negative impacts such as school reconstitution and public shaming through the publication of league tables.

Transactional, command and control forms of leadership on the part of principals further manifest themselves in the close supervision of teachers, specification of the one best model of instruction which all teachers must use, centralised decisions about how time in the classroom is to be used together with very long lists of curriculum standards or expectations which teachers are required to cover with students. Teachers are allowed little autonomy over their work in classrooms, their voices are heard weakly, at best, in school-wide decision making and yet they are held almost entirely accountable for student achievement (Day & Leithwood, 2007).

An organic, or “living systems”, metaphor encourages a view of organisation as a process, one of constant adaptation, growth and becoming that occurs naturally and inevitably in response to a strong desire for learning and survival. As Wheatley describes it:

the process of organizing involves developing relationships from a shared sense of purpose, exchanging and creating information, learning constantly, paying attention to the results of our efforts, co-adapting, co-evolving, developing wisdom as we learn, staying clear about our purpose, being alert to changes from all directions. (Wheatley, 2005, p. 27)

A description of organisation-as-living-system bears a strong resemblance to accounts of organisational learning in schools (Mulford, Silins, & Leithwood, 2004; Silins & Mulford, 2002a), professional learning communities (Stoll et al., 2006) and the OECD (2001b, 2006) scenarios for future schools as social centres and learning organisations. The ongoing eight-country research project on successful principalship (see, for example, Gurr, Drysdale, & Mulford, 2005; the edited book by Day & Leithwood, 2007) strongly suggests that successful principals thought of their organisations as living systems, not machines.

From Thin to Deep Democracy

Furman and Shields (2003) argue that there is a need to move our schools from “thin” conceptions of democracy based in the values of classical liberalism, and its concern with the right of the individual to pursue his or her self-interest and the resolution of conflict through “democratic” majority voting, to a notion of “deep” democracy. Dewey (in Furman & Shields, 2003) saw “deep” democracy as involving respect for the worth and dignity of individuals and their cultural traditions, reverence for and the proactive facilitation of free and open inquiry and critique, recognition of interdependence in working for the common good, the responsibility of individuals to participate in free and open inquiry and the importance of collective choices and actions in the interest of the common good.

Furman and Shields (2003) state that “deep” democracy needs to be practised in schools. However, as a consequence of risk of chaos and loss of control from the forces on schools, the typical pattern they perceive is that students

are expected to conform to hierarchically imposed decisions about what they study and teach and when, what the outcomes of instruction should be, how to behave and talk, and even how they look. . . . [In fact,] learning democracy may be one of the least experiential aspects of K–12 curricula. (Furman & Shields, 2003, p. 10)

The results of a recent analysis of school principal training in the Australian State of Tasmania (Mulford, 2004) leads one to suggest that the same could be said about the adults in schools within bureaucratically designed systems. “Deep” democracy needs to be practised by them but it may be the least experienced aspect of their working world, especially when it comes to their own professional development.

Personalisation through Participation

A major debate taking place in the United Kingdom about the future shape of public services picks up on the confused organisational situation for those in schools. This debate is pitched into the chasm between the way public institutions work and how users experience them. For example, in the education sector it has been argued by Leadbeater (2004a) that efficiency measures based on new public management as reflected in:

[t]argets, league tables and inspection regimes may have improved aspects of performance in public services. Yet the cost has been to make public services seem more machine-like, more like a production line producing standardised goods. [And, I would add, increasingly create dependence on the system.] . . . It is . . . clear that the State cannot deliver collective solutions from on high. It is too cumbersome and distant. The State can only help create public goods – such as better education – by encouraging them to emerge from within society. . . . That is, to shift from a model in which the centre controls, initiates, plans, instructs and serves, to one in which the centre governs through promoting collaborative, critical and honest self-evaluation and self-improvement. (Leadbeater, 2004a, pp. 81, 83, 90)

It is further argued (Leadbeater, 2004a, 2004b, 2005) that public services can be improved by focussing on what is called “personalisation through participation”.

The “pay off” of personalisation is believed to be increased knowledge, participation, commitment, responsibility and productivity. Thus personalisation can be seen to be both a process and outcome of effective public organisations, including schools.

A personalised public service is seen as having four different meanings:

- Providing people with a more customer-friendly interface with existing services.
- Giving users more say in navigating their way through services once they have access to them.
- Giving users more direct say over how the money is spent.
- Emphasising users are not just consumers but co-designers and co-producers of a service.

As we move through these four meanings, dependent users become consumers and commissioners then co-designers, co-producers and solution assemblers. In schools, learners (students and staff) become actively and continually engaged in setting their own targets, devising their own learning plan and goals and choosing among a range of different ways to learn. As we move through these four meanings, the professional’s role also changes from providing solutions for dependent users to designing environments, networks and platforms through which people can together devise their own independent and interdependent solutions. (NCSL, 2005a)

From Hierarchy to Networks

Leadbeater (2005) believes that personalised learning will only become reality when schools become much more networked, collaborating not only with other schools, but with families, community groups and other public agencies. Arguably one of the best funded and continuous school networks – The Network Learning Group (NLG) with its hub at the United Kingdom’s National College for School Leadership (NCSL) – summarises its learning about the advantages of networks in comparison to traditional hierarchically designed organisations (NCSL, 2005b) as greater sharing, diversity, flexibility, creativity, risk taking, broadening of teacher expertise and learning opportunities available to pupils, and improved teaching and pupil attainment. They point out that while there is no blueprint for an effective network, it is possible to identify factors that successful networks have in common:

- Design around a compelling idea or aspirational purpose and an appropriate form and structure.
- Focus on pupil learning.
- Create new opportunities for adult learning.
- Plan and have dedicated leadership and management.

But Leadbeater (2005, p. 22) warns that the collaboration needed for effective networks “can be held back by regulation, inspection, and funding regimes that encourage schools to think of themselves as autonomous, stand-alone units”. Levin (NCSL, 2005b, p. 6) agrees, pointing out that there “are inevitable tensions between the idea of learning networks, which are based on ideas of capacity building as a key to reform, and . . . reform through central policy mandate”. Rusch (2005), in fact, concludes that networks cannot be controlled by the formal system. She questions the role of the system in effective school networks, identifying competing institutional scripts between what is likely to be required by networks as opposed to the system as follows:

- Structures are seen as malleable in networks but fixed and hierarchical in the system.
- Conflict is open and valued in networks while it tends to be hidden and feared in the system.
- Communication is open and unbounded in networks but controlled and closed in the system.
- Leadership tends to be fluid in networks while it is hierarchical and assigned in the system.
- Relationships are egalitarian in networks but meritocratic in the system.
- And, finally, knowledge and power based on inquiry and learning is valued in networks while expertise and knowing are valued in the system.

Social Capital and Communities of Professional Learners

Arguably, the two organisational concepts that underpin schools as social centres and learning organisations, organic systems, deep democracy, personalisation through participation, and networking are social capital and communities of professional learners.

Social Capital

The idea of social capital has enjoyed a remarkable rise to prominence. By treating social relationships as a form of capital, it proposes that they are a resource, which people can then draw on to achieve their goals. It also serves alongside other forms of capital (e.g., economic, human, cultural, identity and intellectual) as one possible resource and accepted contributor to our individual, community and national wellbeing. International bodies such as UNESCO, OECD and World Bank have engaged in extensive conceptual, empirical and policy related work in the area and a number of websites are devoted entirely to the area.²

²For example: <http://www.socialcapitalgateway.org/>

What do we mean by “social capital”? The World Bank (Grootaert, Narayan, Jones, & Woolcock, 2004, p. 3) concludes that social capital “is most frequently defined in terms of the groups, networks, norms, and trust that people have available to them for productive purposes”. As well as this generally accepted definition, Grootaert et al. (2004, p. 4) point out that common distinctions are made among “bonding”, “bridging” and “linking” forms of social capital. “Bonding” social capital refers to “ties to people who are similar in terms of their demographic characteristics, such as family members, neighbours, close friends and work colleagues”. “Bridging” social capital is also horizontal in nature but refers to “ties to people who do not share many of these characteristics”. However, it continues to connect “people with more or less equal social standing”. “Linking” social capital operates across power differentials and thus is seen vertical in nature. It refers to “one’s ties to people in positions of authority such as representatives of public (police, political parties) and private (banks) institutions”.

Knowing the definition of social capital and its different forms is helpful, but it does little to assist educational leaders with the challenges in building social capital in schools. A way through this situation is for the educational leader to see bonding social capital as that occurring among work colleagues within schools. It is the most developed area in the research literature (Goddard, Hoy, & Woolfolk Hoy, 2004; OECD, 2004; Ross, Hogaboam, & Gray, 2004; Somech, 2002; Stoll et al., 2003). Bridging social capital can be taken as that occurring between schools. This area is a recent but growing one in the research literature, especially in the area of networking (see the previous subsection) (Hopkins, NCSL, 2005b; Kanter, 1994; Leadbeater, 2005). Linking social capital can be understood as that occurring between a school and its community. While there is a long research tradition in this area it tends to be unidirectional, concentrating on what the community can do for the school, rather than the other way around (Jolly & Deloney, 1996; Kilpatrick, Johns, Mulford, Falk, & Prescott, 2001).

The research evidence is clear in its strong support for all three forms of social capital. The outcomes are impressive, not the least of which being improved student engagement, academic performance and later life chances, improved teaching and learning, reduced within school variation and retention of teachers in the profession, and increased individual and community capacity to influence their own futures.

However, the research also points to many challenges to overcome at the contextual, organisational and individual levels including the current accountability press, especially system preoccupation with a limited number of academic performance outcomes; the micro politics of schools such as contrived collegiality, groupthink and conflict avoidance; differences between policy development and its implementation; dedicated leadership; large, secondary, high-poverty schools; and professional autonomy.

Communities of Professional Learners

Where do we take this research evidence on the importance of and challenges to social capital? The way forward is to see the task as establishing communities of

professional learners (CPL) and to see it as developmental *starting* with the building of social capital. A message arising from the research is that those in schools must learn how to lose time in order to gain time. Awareness of, and skill development in, group and organisational processes is a first step towards any effective change. Instead of others trying to insert something into a school's (or community's) culture, the school, and especially its leadership, should first be trying to help that culture develop an awareness of and responsiveness to itself (Scribner, Hager, & Warne, 2002).

In brief, the position taken identifies three major, sequential and embedded elements in successful school reform. It takes the two elements in the definition of social capital, "groups, networks, norms, and trust" and "for productive purposes", and extends them to include a third element, learning. The first element in the sequence relates to the community, how people are communicated with and treated. Success is more likely where people act rather than are always reacting, are empowered, involved in decision making through a transparent, facilitative and supportive structure, and are trusted, respected, encouraged and valued. It is a waste of time moving to the second element until such a community is established. The second element concerns a community of professionals. A community of professionals involves shared norms and values including valuing differences and diversity, a focus on implementation and continuous enhancement of quality learning for all students, de-privatisation of practice, collaboration, and critical reflective dialogue, especially that based on performance data. However, a community of professionals can be static, continuing to do the same or similar thing well. The final element relates to the presence of a capacity for change, learning and innovation – in other words, a community of professional learners (CPL) (Mulford, 2007d).

Each element of a CPL, and each transition between them, can be facilitated by appropriate leadership and professional development. Also, each element is a pre-requisite for the other; they are embedded within each other with only the emphasis changing. For example, when learning is occurring there is still a need to revisit the social community and the professional community, especially where there has been a change of personnel and/or a new governmental direction announced.

Using this analysis of bonding, bridging and linking social capital to understand the importance of, challenges to and developmental nature of CPLs can assist the educational leader in better translating the research into policy and practice. It can help him or her to do the following:

- understand better and be able to take action on the intricacies involved in moving a school, or part of a school, from where it is now to becoming truly a place of ongoing excellence and equity without those in schools being "bowled over" by the demands for change that surround them;
- target appropriate interventions to ensure more effective progression through the stages. In targeting interventions recognition will need to be given to the fact that it is a journey and that actions at one stage may be inappropriate, or even counterproductive, at another stage; and,
- support the position that a school will need to be evaluated differently depending on the stage it has reached.

Changing the organisation of and leading schools and school systems so they become CPLs will not be for the faint of heart. It will require schools and their leaders to radically rethink how they operate. As Leadbeater (2005) points out, many of the basic building blocks of traditional education – such as the school, the year group, the class, the lesson, the blackboard and the teacher standing in front of a class of 30 children – could be seen as obstacles. All the resources available for learning – teachers, parents, assistants, peers, technology, time and buildings – will have to be deployed more flexibly than in the past. School leadership in such organisations will certainly be less lonely and more collaborative and professionally interactive than ever before (NCSL, 2007).

Leadership “Smart”

Educational leadership matters (Day & Leithwood, 2007; Fullan, 2005; Hallinger, 2007; Hargreaves & Fink, 2006; Leithwood, in press; Leithwood, Day, Sammons, Harris, & Hopkins, 2006; Marks & Printy, 2004; McREL, 2005; Silins & Mulford, 2004), is changing (Leithwood et al., 2006; NCSL, 2007) and, given the changing context and organisational response, needs to be smart. Unfortunately, in this situation the plethora of advice about “strong”, adjectival, one-size-fits-all school leadership (e.g., instructional, transformational and distributed) is anachronistic. Successful educational leadership is more complex; it needs to be able to see and act on the whole, as well as on the individual elements, and the relationships among them over time (i.e., in a developmental manner). As Hargreaves and Fink (2006) point out, it is a meal not a menu, with all pieces needing to fit together in different ways at different times.

A lack of time and professional isolation are major barriers to collaborative endeavours. Donaldson (2001, p. 11) describes some major attributes of schools that contribute to what he calls a “leadership-resistant architecture” reflected in a “conspiracy of business”. There is, according to Donaldson, little time for the school leader to convene people to plan, organise and follow through. Contact and the transaction of business often take place “catch-as-catch-can”. Opinion setting and relationship building in schools, he argues, are mostly inaccessible and even resistant to the principal’s formal attempt to guide and structure the direction of the school. Consistent with the findings from the Australian LOSO project (see the next section), it was found that the larger the school the more complex and impersonal the environment and the fewer the opportunities a principal was likely to have for individual relationship building or problem solving.

It may in fact be that “strong”, visible, visionary leadership is dysfunctional. A research by Barnett, McCormick, and Conners (2001) is key in this context, showing as it does the positive effects of principals demonstrating individual concern and building relationships but the negative effects of being inspirational and visionary. While one leadership style or approach may work well for some leaders, most have a range of leadership styles.

Dinham’s (2007, p. 37) research examining schools achieving outstanding educational outcomes found that “the turning-around and lifting-up processes can take

around 6–7 years to accomplish”. In this situation, successful leaders adapt and adopt their leadership practice to meet the changing needs of circumstances in which they find themselves (see, for example, Hallinger, 2007; Leo, 2007). As schools develop and change, different leadership approaches will inevitably be required and different sources of leadership will be needed so that the development work keeps moving. A one-size-fits-all, adjectival style or approach to leadership, or checklists of leadership attributes, may seem superficially attractive but can often limit, restrict and distort leadership behaviour in ways that are not always conducive to school development and improvement.

On this point, it is interesting to note that proponents of instructional (Hallinger, 2005), transformational (Leithwood et al., 2006) and distributed leadership (Spillane, 2006) have, over time, moved well away from the one-size-fits-all, charismatic, heroic model of school leadership and expanded their understandings to include aspects of the context, antecedent conditions (e.g., school level, size and SES) and school mission, culture and a reinforcing structure (especially developing people, collaboration and monitoring) and instructional program. For example, Hallinger (2007) calls for an integrative model of educational leadership which links leadership to the needs of the school context, Leo (2007) focuses on the role of social context and socio-cultural factors on achievement motivation and Mulford (2003b) calls for an awareness of balance and learning.

Interrelationships among Context, Organisation and Leader: Two Models Meeting the Challenge of Complexity

The final section of this chapter outlines two models based on an Australian research that take the evolving, broader and more complex approach to educational leadership. The models are fully consistent with the advice in other sections to meet the following: achieve balance and/or choose between competing contextual forces; broaden what counts as good schooling; and broaden the way schools are organised and run, especially as social centres and learning organisations, organic, living systems, deep democracies, networks, personalisation through participation, and social capital developers through communities of professional learners.

The first is a model of successful school principalship based on the evidence from qualitative in-depth case studies of five best practice Tasmanian schools that constitute part of an eight-country exploration of successful school leadership (the Successful School Principals Project – SSPP) (see, for example: Gurr et al., 2005; Mulford, 2007b, 2007c). The second is a model of leadership for organisational learning and student outcomes (LOLSO) based on quantitative survey evidence from over 95 principals, 3,700 teachers and 5,000 15-year-old high school students in South Australia and Tasmania. Details of the samples, methodologies, related literature reviews and so on can be found elsewhere (see, for example: Silins & Mulford, 2002a, 2002b; Silins, Mulford, & Zarins, 2002; Silins & Mulford, 2004), as can the application to policy (Mulford, 2003a, 2003d).

Successful School Principals Project (SSPP)

Findings from the SSPP case studies suggest that successful school principalship is an interactive, reciprocal and evolving process involving many players, which is influenced by and in turn influences the context in which it occurs (see Fig. 1). Further, the findings demonstrate that successful principalship is underpinned by the core values and beliefs of the principal. These values and beliefs influence the principal’s decisions and actions regarding the provision of individual support and capacity building, and capacity building at the school level, including school culture and structure. The principal’s core values and beliefs, together with the values and capacities of other members of the school community, feed directly into the development of a shared school vision, which shapes the teaching and learning – student and social capital outcomes of schooling. To complete the proposed model requires a process of evidence-based monitoring and critical reflection, which can lead to school maintenance, change and/or transformation. The context and the successful school principal’s values form the “why” of the model; the individual support

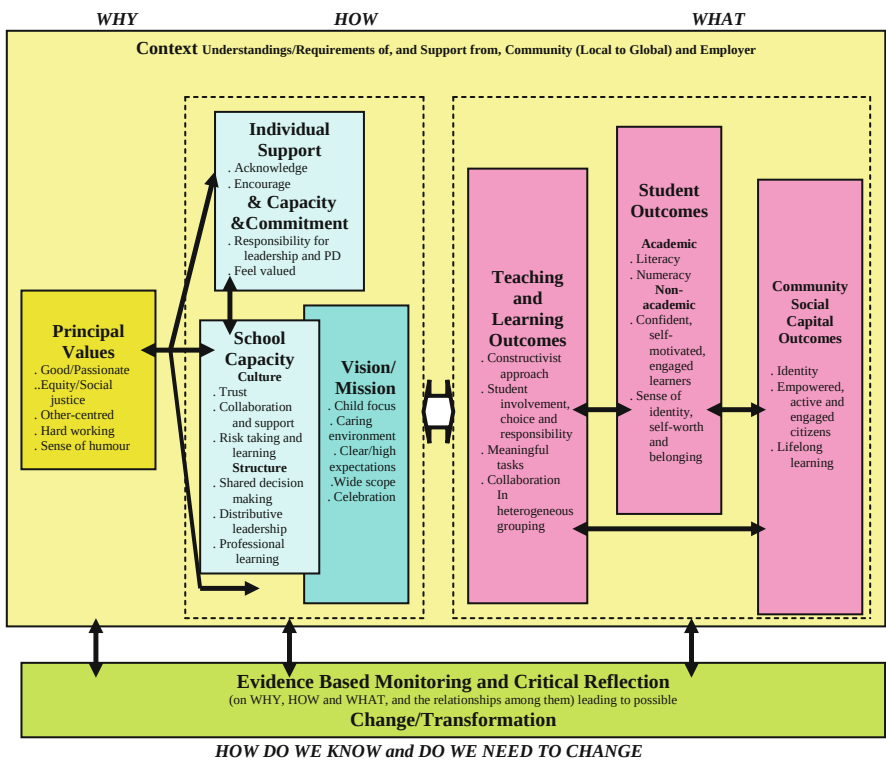


Fig. 1 SSP model

and capacity, school capacity and school vision/mission form the “how”; and the teaching and learning, student and community outcomes form the “what”. The evidence-based monitoring and critical reflection on the “why”, “how” and “what” and the relationship among them form the final section of the model, the “how do we know” and “do we need to change” element.

Leadership for Organisational Learning and Student Outcomes (LOLSO)

Evidence from LOLSO surveys clearly demonstrate that leadership that makes a difference is both position based (principal) and distributive (administrative team and teachers) (see Fig. 2). Further, it was found that the principal’s leadership needs to be transformational – that is, providing individual, cultural and structural support to staff; capturing a vision for the school; communicating high performance expectations and offering intellectual stimulation. However, both positional and distributive leadership are only indirectly related to student outcomes. Organisational learning (OL), involving three sequential stages of trusting and collaborative climate, shared

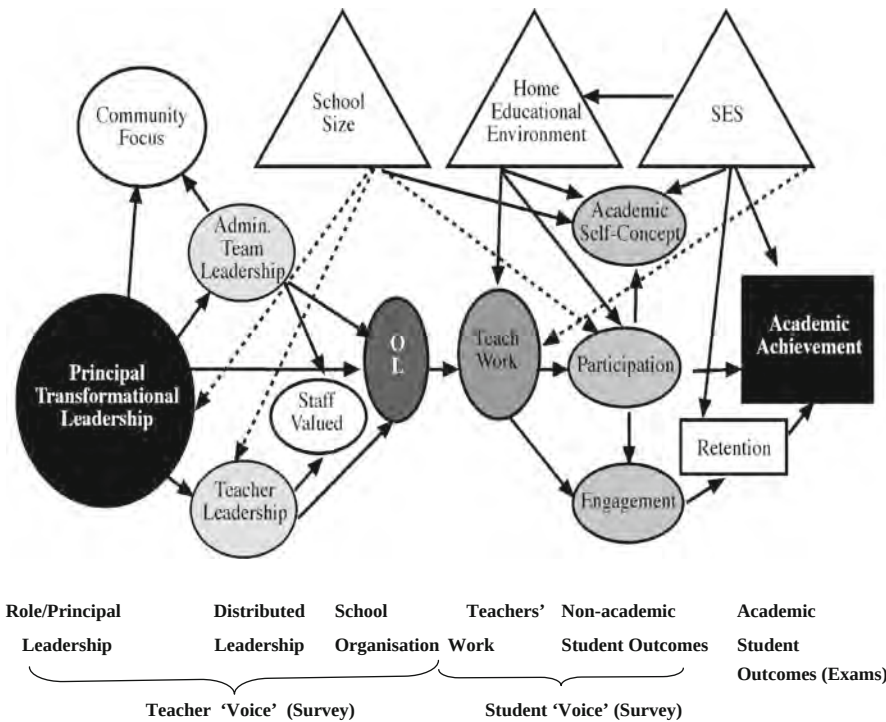


Fig. 2 LOLSO model (→ = positive and --→ negative relationship)

and monitored mission and taking initiatives and risks supported by appropriate professional development, was found to be the important intervening variable between leadership and teacher work and then student outcomes. That is, leadership contributes to OL, which in turn influences what happens in the core business of the school: teaching and learning. It influences the way students perceive that teachers organise and conduct their instruction and their educational interactions with, and expectations of, their students.

Students' positive perceptions of teachers' work directly promote their participation in school, academic self-concept and engagement with school. Student participation is directly and student engagement indirectly (through retention) related to academic achievement. The contextual variables of school size, socioeconomic status (SES) and, especially, student home educational environment make a positive or negative difference to these relationships (as indicated in Fig. 2). However, this was not the case in terms of teacher or leader gender or age, having a community focus or student academic self-concept.

Summary

As we have seen over the course of this chapter, a great deal of a school's success depends on which areas of school life the educational leader chooses to spend time and attention on. As a single input by a leader can have multiple outcomes, a leader needs to be able to see and act on the whole, as well as on the individual elements, and the relationships among them (NCSL, 2005c).

The chapter moved through evidence on three elements: context, organisation and leaders. Context related to the forces currently pressing on schools and the implications of these forces for schools and their leaders. School organisation focused on evolving models that moved beyond the outmoded and ineffective bureaucratic model to communities of professional learners. Evidence on leaders questioned whether one type of leadership fits all contexts and organisations and subsequently what it meant to be a successful leader. A great deal of promise was found in the evidence on successful leaders building school capacity and doing this in a developmental way.

To be successful on all these fronts and how they interrelate is the biggest current leadership challenge. Within this complex challenge, school leaders must be part of ongoing conversations about context and its implications for schools. Leaders need to understand and be able to act on the evolving and preferred organisational models for schools. And, leaders need to be able to understand and act on the quality evidence that is now accumulating on being a successful school leader.

With the eminent retirement of a larger-than-normal proportion of our nation's school leaders (Anderson et al., 2007), there is no better time to act on these challenges. Will education systems and, more importantly, the profession take up the challenges? And, will they actually use quality evidence (OECD, 2007), such as that provided in this handbook, in schools and school systems to enable us to move

forward? This is a plea for us to move beyond mere technical competence in school leadership. Galton (2000, p. 203) makes this point well in terms of teachers:

By making certain techniques mandatory you run the danger of turning teachers into technicians who concentrate on the method and cease to concern themselves with ways that methods must be modified to take account of the needs of individual pupils. As we face the demands of a new century, creating a teaching profession which while technically competent was imaginatively sterile would be a recipe for disaster. (Galton, 2000, p. 203)

As it is for teachers, so it is for school leaders. (PricewaterhouseCoopers, 2007)

There is clearly a need to achieve better balances in our world, including between learning what the political and bureaucratic systems require of individual leaders and what practising professionals require of themselves and their colleagues. On the basis of the available research, I believe this balance can best be achieved by groups of educational leaders, or professional collectives and alliances, setting, negotiating and delivering their own agendas. This position is also consistent with the emerging priorities for successful educational leadership detailed in this review. After all, participation in context, organisation and leadership, including policy making, not only enhances efficiency in implementation, but also contributes to the creation of more pluralistic and democratic political systems (Lecomte & Smillie, 2004).

A Concluding Comment

Recent developments in the field of educational leadership demonstrate that it is more complex, nuanced and subtle than previously portrayed. It may be that we need to take models such as SSPP and LOLSO, as well more recent work by Heck and Hallinger (2009), Mulford and Edmunds (2009) and Sammons et al. (2009), further by having a set of models representing different groupings of variables and their relationships and sequences, for example for high-poverty, rural, inner city, primary and/or public schools. On the other hand, when lost in the complex, “swampy” ground of schools and their environments a simple “compass” (head roughly west, be “instructional”, “transformational” and/or “distributive”) may be felt to be much more helpful than the detailed road maps in linking leadership with improving learning in schools. However, in an age of “global positioning systems” and models based on quality evidence that are complex enough to come close to the reality faced by schools and are predictive in that they link leadership and student outcomes, such a simplistic response does education and its continued reform a deep disservice.

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Large-Scale Reform in the Era of Accountability: The System Role in Supporting Data-Driven Decision Making

Amanda Datnow and Vicki Park

The contemporary education policy marks a shift away from the idea that change happens organically, one school at a time. Instead, there is a focus on creating a systematic infrastructure to support change across a large number of schools at once. Within this decade, we have witnessed several types of large-scale reform efforts in the United States and across other Western countries, including state and federal systems of standards and accountability and system-wide implementations of literacy and numeracy programs, among others.

In the United States, the shift to large-scale reform was crystallized in the No Child Left Behind Act (NCLB) of 2001 which instituted a new accountability system based on assessments and standards. As the reauthorization of the Elementary and Secondary Education Act (ESEA), NCLB followed up on the ideas laid forth in governmental plans and policies beginning in the 1990s. However, this new policy gave the federal government unprecedented authority in several ways by “crea[ting] stern directives regarding test use and consequence; put[ting] federal bureaucrats in charge of approving state standards and accountability plans; set[ting] a single nationwide timetable for boosting achievement; and prescrib[ing] specific remedies for under-performing schools” (Finn & Hess, 2002, p. 2).

NCLB is the first federal comprehensive educational framework consisting of standards, assessments, and accountability. NCLB is particularly noteworthy because it moves past the traditional focus on schooling “inputs” and holds educators responsible for student performance results (Dembosky, Pane, Barney, & Christina, 2005; Ingram, Louis, & Schroder, 2004; Lafee, 2002). Under this system, the mechanisms for accomplishing these goals emphasize data-driven decision making (i.e., test scores, yearly progress reports), the implementation of evidence-based practices, and increased school choice for parents. NCLB requires states to have standards detailing content for student learning. Testing is also mandatory for students in most grades, and results are intended to be used to drive instruction and teaching practices. In addition, student performance data must be disaggregated

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based on major demographic classifications such as race/ethnicity, socioeconomic status, gender, disability, and language. Systematic testing is also coupled with prescriptive intervention remedies for schools not meeting Adequate Yearly Progress (AYP). Schools are pushed to improve under threat of sanctions that ultimately allow parents to opt out of low-performing schools. Additionally, guidelines for enhancing teacher quality are laid out.

Thus, the current era of large-scale educational reform is marked by standards, assessments, and accountability. These policy tools are held together by assumptions of the need for policy coherence, system alignment, and coordination among various education agencies. Standards, tests aligned to standards, and accountability systems are stronger policy instruments because they attempt to directly influence instruction and student outcomes. However, the instruments are still relatively weak because the how and why of teaching and learning remain unaddressed. Standards provide guidance on classroom content but do not assist teachers in translating standards into effective instructional practices. Given the flexibility that states have in determining standards and proficiency levels, metrics of student performance can also be misleading, since some states opt for less rigorous standards and minimum competency measures of learning rather than the world-class standards touted by NCLB (NCES, 2007).

Even in the era of large-scale educational reform ushered in by NCLB, determining effective instructional practices and measuring learning remain elusive goals. Moreover, capacity building for the core technology of education (Spillane, Reiser, & Reimer, 2002) – teaching and learning – has not been apparent in NCLB. Thus, the work of changing practices to meet more stringent accountability demands has been left to educators at the school and district levels, hence setting the stage for system-wide movements toward data-driven decision making (DDDM).

In this chapter, our purpose is to open up the “black box” of large-scale educational change, specifically focusing on a reform movement that results from the current era of accountability: data-driven decision making. We first present the “co-construction” framework as a way to understand large-scale reform and then examine research and theories of action behind DDDM. Our focus here is on the system, or school district level, where large-scale efforts to engage educators in the use of data often are initiated. We summarize with conclusions and implications for further research.

Understanding Large-Scale Educational Reform Through the Co-construction Framework

In our earlier work (e.g., Datnow, Hubbard, & Mehan, 2002; Datnow, Lasky, Stringfield, & Teddlie, 2006), we have found the “co-construction” perspective to be a useful heuristic for examining the dynamics involved in the implementation of large-scale educational change. The co-construction perspective extends the mutual adaptation theory coined in the Rand Change Agent study (Berman & McLaughlin, 1978) and elaborates on how the interconnections between actors and the wider

social and political sphere shape policy implementation (Datnow et al., 2002). Co-construction draws upon the socio-cultural tradition which identifies personal, interpersonal, and community “levels” or “planes” of interaction (Rogoff, 1995; Tharp, 1997). Furthermore, co-construction, like mutual adaptation, views organizations as embedded within successively contextualized layers (McLaughlin & Talbert, 1993), but it extends the context to include the broader social system and political economy.

The co-construction approach has a number of specific dimensions. Most important is the idea of a relational sense of context (Datnow et al., 2002). By this we mean that people’s actions cannot be understood apart from the setting in which the actions are situated; reciprocally, the setting cannot be understood without understanding the actions of the people within. A relational sense of context does not privilege any one context; rather it highlights the reciprocal relations among the social contexts in the policy chain (Hall & McGinty, 1997). Because contexts are inevitably connected (Sarason, 1997), multiple layers of the social system must be considered (Datnow et al., 2002). Of course, at a given point in time, a researcher will foreground interactions among social actors in one context and locate others in the background; but in order to allow for complete analysis, the interconnections among contexts throughout the system need to be described (Hall & McGinty, 1997; McLaughlin & Talbert, 1993; Sarason, 1997).

The relational sense of context builds on but also moves beyond the embedded sense of context notion that has dominated many analyses up to now. While definitions vary, embedded context typically refers to classroom as nested in broader system layers (Fullan, 1991) or interactional “planes” (Rogoff, 1995). This conception is important because it calls attention to the fact that face-to-face interaction occurs within wider dimensions of social life. However, it often puts only one site in the center. Furthermore, the embedded sense of context can be susceptible to the conceptual traps of structural determinism and uni-directionality, implying that policy only travels in one direction, usually from the top to down (Datnow, Hubbard, & Mehan, 2002). By contrast, the relational sense of context does not automatically assign a sense of importance to any one context but rather highlights relationships among contexts as key focus for analysis. As Cohen, Moffitt, and Goldin (2007) noted, implementation of policy is a complex process; policy aims, instruments, implementers’ capabilities, and the environment of practice all interact to produce policy outcomes (p. 71).

Accordingly, the co-construction perspective rests on the premise of multi-directionality: that multiple levels of educational systems may constrain or enable policy implementation and that implementation may affect those broader levels. In this view, political and cultural differences do not simply constrain reform in a top-down fashion. Rather, the causal arrow of change travels in multiple directions among active participants in all domains of the system and over time. This grammar makes the reform process “flexible” and enables people who have “different intentions/interests and interpretations [to] enter into the process at different points along the [reform] course. Thus many actors negotiate with and adjust to one another within and across contexts” (Hall & McGinty, 1997, p. 4).

Given that it takes into consideration political and cultural differences, co-construction also acknowledges the role of power (Datnow et al., 2002). The co-construction perspective recognizes that people in organizations at all levels contribute to the policy-making process and that process is characterized by continuous interaction among agents and actors within and between levels of the system. However, differential access and use of power are affected by a person's position in the system (Firestone, Fitz, & Broadfoot, 1999). For example, unlike policymakers whose main role is to help design policy, implementers (whether they are situated at the state, district, or school levels) are simultaneously the object of reform and the agents of change. Consequently, implementers tend to carry the bulk of the weight in adjusting or conforming to policy mandates.

Most studies that look across contextual levels take an embedded sense of context. If we were to take an embedded sense of context, we would assume that events at higher levels of the context occur first and are more important analytically. We might also assume that policies originating in "higher" levels of context cause or determine actions at lower levels. However, this may limit our understanding of educational reform, as we will explain. This conceptualization makes the reform process flexible, with people who have "different intentions/interests and interpretations [and who] enter into the process at different points along the [reform] course. Thus many actors negotiate with and adjust to one another within and across contexts" (Hall & McGinty, 1997, p. 4). As with Elmore's (1979–1980), "backward mapping" concept, we also do not assume that policy is the only, or even major, influence on people's behavior. Individuals at the local level do indeed make decisions that affect not only policy implementation, but sometimes also the policy itself. This emphasis upon multi-dimensionality marks the co-construction perspective of reform implementation and departs from the technically driven, uni-directional conceptions of educational change.

We believe that formulating implementation as a co-constructed process coupled with qualitative research is helpful in making sense of the complex, and often messy, process of large-scale educational reform. Even when policies are seemingly straightforward, they are implemented very differently across localities, schools, and classrooms (Elmore & Sykes, 1992). We will call up the co-construction framework as we discuss DDDM.

District Level Reform and Data-Driven Decision Making

In the current policy environment, districts have emerged as key players in educational reform. More than ever before, districts are helping schools to focus on student achievement and quality of instruction (McIver & Farley, 2003; Togneri & Anderson, 2003). They have done so by learning to strategically engage with state reform policies and resources, with DDDM being a key ingredient.

When the term data-driven decision making is raised, people often ask, exactly, "what data are you referring to?" When using the phrase data-driven decision making, we refer to the process by which individuals or groups think about and

use data. Some scholars make delineations between concepts such as data, information, and knowledge (Mandinach, Honey, & Light, 2006). In these cases, data are defined as “raw” pieces of facts while information and evidence are described as an interpretation of data. Since all data, including those collected from formal research projects, are designed and gathered based on theoretical and methodological perspectives, this distinction narrowly defines data and ignores the importance of data collection methods. In contrast to these narrow definitions, Earl and Katz (2002) adopt a broader view on what constitutes data. They argue that data are “summaries that result from collection of information through systematic measurement or observation or analysis about some phenomenon of interest, using quantitative and/or qualitative methods” (p. 4). Data are not characterized based on their visual representation (e.g., whether they are numbers or words or “raw facts”) but by the quality of their collection and synthesis. Furthermore, evidence refers to the interpretation arising out of data synthesis and analysis that is then used as a justification for specific purposes such as supporting a course of action or confirming or disconfirming assumptions (Lincoln, 2002).

When referring to data use by individuals in schools and districts, we specifically refer to broad categories of information including (Bernhardt, 1998):

1. Demographic data, including attendance and discipline records;
2. Student achievement data, which encompasses not only standardized data but also formative assessments, teacher developed assessments, writing portfolios, and running records;
3. Instructional data, which focuses on activities such as teachers’ use of time, the pattern of course enrollment, and the quality of the curriculum; and
4. Perception data, which provides insights regarding values, beliefs, and views of individuals or groups (e.g., surveys, focus groups).

As noted above, with the advent of No Child Left Behind, many districts are relying on these kinds of data (though often primarily those listed in number two, student achievement data) to inform decisions. A recent national study of the impact of NCLB reveals that most districts are allocating resources to increase the use of student achievement data to inform instruction in schools identified as needing improvement (Center on Education Policy, 2004). Similarly, summarizing findings across several major recent studies of high-performing school districts, Anderson (2003) writes:

Successful districts in the current era of standards, standardized testing, and demands for evidence of the quality of performance invest considerable human, financial and technical resources in developing their capacity to assess the performance of students, teachers and schools, and to utilize these assessments to inform decision-making about needs and strategies for improvement, and progress towards goals at the classroom, school, and district levels (p. 9).

Supporters of data-driven decision making practices argue that effective data use enables school systems to learn more about their school, pinpoint successes and

challenges, identify areas of improvement, and help evaluate the effectiveness of programs and practices (Mason, 2002).

Previous research, though largely without comparison groups, suggests that DDDM has the potential to increase student performance (Alwin, 2002; Doyle, 2003; Johnson, 1999, 2000; Lafee, 2002; McIntire, 2002). Student achievement data can be used for various purposes including evaluating progress toward state and district standards, monitoring student progress, evaluating where assessments converge and diverge, and judging the efficacy of local curriculum and instructional practices (Cromey, 2000). When school-level educators become knowledgeable about data use, they can more effectively review their existing capacities, identify weaknesses, and better chart plans for improvement (Earl & Katz, 2006).

Data-driven decision making is also critical to identifying and finding ways to close achievement gaps between white and minority students (Bay Area School Reform Collaborative, 2003; Olsen, 1997). One of the expected outcomes of using evidence to base decisions is the questioning of long-held assumptions about students and student achievement. In some instances when educators are confronted with evidence that challenges their views about students' abilities, data can act as a potential catalyst for changing perceptions (Datnow & Castellano, 2000; Skrla & Scheurich, 2002). Armstrong and Anthes (2001) indicated that comparisons to high-performing schools with similar student demographics helped teachers in lower-achieving schools to stop blaming students' background for low academic results. Skrla and Scheurich (2002) suggested that the Texas accountability system's emphasis on disaggregating student data by subgroups helped to displace, but not eliminate, deficit views of students. Similarly, Woody's (2004) survey of educators' views on California's accountability system found that larger data patterns increased teachers' awareness of inequities in student outcomes.

Prior research on DDDM indicates several key strategies, or areas of work, particularly when the reform is initiated by a system as part of a large-scale educational reform effort. First of all, studies indicate that using data must be a key feature in reform plans rather than a supplemental or sporadic activity (Datnow, Park, & Wohlstetter, 2007; Supovitz & Taylor, 2003; Togneri & Anderson, 2003). Becoming a learning organization necessitates a collaborative environment in which teachers and administrators have multiple opportunities and resources to examine and interpret data, followed by time to develop an action plan to change behavior. Furthermore, the effective use of data must occur at the district, school, and classroom levels (Armstrong & Anthes, 2001; Datnow et al., 2007; Kerr, Marsh, Ikemoto, Darilek, & Barney, 2006; Supovitz & Taylor, 2003; Togneri & Anderson, 2003; Wayman & Stringfield, 2006). Because DDDM is a system-wide activity, the co-construction framework is a helpful way for thinking about the activities and interrelationships of the individuals involved, up, down, and around the system.

Also, in districts where DDDM is prevalent, there is often a culture of inquiry (Earl & Katz, 2006) that supports data use at all levels. Districts are actively transforming their professional development practices from ones that focus on compliance to support in order to build the capacity of their staff to participate in decision-making processes and create an organizational culture of inquiry

(Petrides & Nodine, 2005). A culture of continuous improvement accompanies this culture of inquiry. Also, inclusiveness in the DDDM process is often prevalent. Not only are principals privy to repositories of assessment data, but teachers are as well. Teachers are often encouraged to take a close look at grade-level and classroom data and share and discuss the data with each other (Armstrong & Anthes, 2001).

As part of engaging in DDDM, districts often create a closer alignment between the curriculum and state standards. This typically involves creating benchmarks and standards for each grade level. Increasingly, districts are also implementing regular assessments throughout the school year in order to make sure that student progress toward standards is regularly monitored and that instructional adjustments are made accordingly (Armstrong & Anthes, 2001; Petrides & Nodine, 2005). Scorecards are also utilized as a management tool to monitor and measure the progress of schools as well as to assist districts and school in aligning their goals (Petrides & Nodine, 2005).

However, data need to be actively used to improve instruction in schools, and individual schools often lack the capacity to implement what research suggests (Wohlstetter, Van Kirk, Robertson, & Mohrman, 1997). The implementation of NCLB has set the stage for schools to become “data-rich” but not necessarily for teachers to be effective data users; in other words, the presence of data alone does not lead to substantive and informed decision making. Thus, districts play a key role in developing capacity and structures to enable effective data use. Previous studies on the implementation of DDDM confirm that structural enablers, effective leadership, and positive socialization toward data use impact its effectiveness (Armstrong & Anthes, 2001; Datnow et al., 2007; Ingram et al., 2004).

In districts that support DDDM, the superintendent and school board members often know how to lead and support data use. Districts often have staff that work as liaisons with principals and individual schools (Armstrong & Anthes, 2001). Some districts are hiring instructional guides for each school to help faculty interpret student achievement data and to develop plans for improving outcomes. Overall, strong leaders, committed to utilizing data for decision making and knowledgeable about the process, are essential to ensuring that a positive culture for data use is implemented at the school level (Dembosky et al., 2005; Marsh et al., 2005; Petrides & Nodine, 2005). They lead by creating an atmosphere where data use practices are relevant for instructional decision making.

School systems that are more successful in data use also tend to balance both standardization and flexibility (Datnow et al., 2007; Marsh et al., 2005). A degree of autonomy and flexibility for teachers is necessary in order to maintain the perspective that decisions are based on data rather than predetermined conclusions. In schools where DDDM practices became a core element for improvement processes, central office administrators, principals, and lead teachers expected data to be used to inform and justify decisions. Whether teachers have the flexibility to reorganize their student groups based on benchmark assessments, re-teach previous topics outside the scope and sequence of the curriculum, or alter the pace of the curriculum impacts the degree to which data will be used to guide decisions.

Teachers need time to review and make sense of data if it is going to affect their instruction. In districts and schools that use data effectively, time is reallocated in the school day for reflection and professional development (Datnow et al., 2007; Feldman & Tung, 2001; Halverson, Grigg, Prichett, & Thomas, 2005; Marsh et al., 2005). Group-based inquiry or “collaborative data teams” have been found to be successful in implementing DDDM across a system due to the broad participation from a diverse array of staff including teachers and administrators (Mason, 2002). School systems are also starting to data reflection protocols in order to guide these data meetings (Datnow et al., 2007). These structured data discussions provide teachers with continuous and intensive opportunities to share, discuss, and apply what they are learning with their peers (Garet, Porter, Desimone, Birman, & Yoon, 2001; Wilson & Berne, 1999). Once teachers identify instructional and learning gaps, improvement efforts may be blocked if teachers are unaware of intervention or instructional strategies. Leaders can address these needs by developing external partnerships to help build system-wide capacity (Anthes & Armstrong, 2001; Datnow et al., 2007).

Studies consistently suggest that as part of their capacity-building efforts, districts often provide professional development for principals and teachers so that they can learn to use data effectively (Petrides & Nodine, 2005; Togneri & Anderson, 2003). This is very important, as a perpetual problem that many schools face in making data-driven decisions is the lack of training regarding how to incorporate data into the school improvement process (Cromey, 2000). The onslaught of “drive-by” training sessions (Elmore, 2002) that do little to address the specific needs of schools and teachers cannot support the ongoing learning that is required for capacity building (Darling-Hammond & McLaughlin, 1995). Instead, effective professional development provides teachers with continuous and intensive opportunities to share, discuss, and apply what they are learning with other practitioners (Garet et al., 2001; Wilson & Berne, 1999). In order for this to occur, system-level support needs to be in place. In addition to consistent structured time for collaboration and professional learning, schools need strategies for planning, sharing, and evaluating their efforts.

Thus, developing teachers’ capacity to become effective at using data to inform their instruction requires actions at multiple levels. Studies have suggested that school systems empower teachers to use data to inform their instruction and learning by: (1) investing in user-friendly data management systems that are accessible to teachers; (2) offering professional development for staff in how to use data and how to make instructional decisions on the basis of data; (3) providing time for teacher collaboration; and (4) connecting educators within and across schools to share data and improvement strategies (see Datnow et al., 2007). However, it is important to note that teachers need not only the capacity but also the *empowerment* to make instructional decisions based on data. School and system leaders need to provide scaffolds of support, but at the same time allow teachers enough flexibility to act on the basis of an informed analysis of multiple sources of data about their students’ progress.

Overall, school systems play an increasingly pivotal role in leading and partnering with school sites to make data-driven practices an engine of reform. However, it is at the school level where everything comes together – and where DDDM is co-constructed by local educators (Datnow et al., 2007). School leaders provide time for meeting to discuss data, flexibility for re-teaching, and curriculum and material resources in order to facilitate data-driven instruction. Schools also develop their own assessments and tools for acting on data, which were often created by teachers working together. Like the systems, schools also function as places to build human and social capital in the form of building the knowledge and skills of teachers, a process which happened through professional development, instructional leadership, and networking among teachers. Schools also play a critical role in providing the expectations for data-driven instruction among teachers, as well as creating a climate of trust and collaboration so that teachers can work in professional learning communities to improve their practice (Datnow et al., 2007).

Thus, in DDDM, we see that reform success is a joint accomplishment of individuals and policies at multiple levels of the system. Broader federal and state accountability policies provide an important frame for the work that happens at the system and school levels. Although the crux of the work around data use takes place at the school and district levels, NCLB has helped to provide the political leverage needed in order for districts to stimulate improvement at the school level. The federal government holds states, districts, and schools accountable for student performance. States set curriculum standards and also hold schools and districts accountable. However, DDDM is in the work of teachers and administrators. As Dowd (2005) explains, “data don’t drive,” and therefore local educators co-construct the outcomes of this reform in their daily work with each other and with students.

Conclusion

When we examine events and actions across various contextual levels in the policy chain, we find that conditions at the federal, state, district, school, and design-team levels all co-construct the implementation of large-scale educational reform. Whereas a technical-rational view of educational change might suggest that implementation is an activity restricted to a group of people in schools at the bottom of the policy chain, we see here that implementation is a system-wide activity, even when the desired change is mainly at the school level. However, the various policy levels have varying degree of influence, and varying levels of connection with each other in the schools and districts. These findings point to the need for viewing events in broader contextual levels not just as “background” or “context” but as important, dynamic shaping forces in the large-scale educational reform process.

In order to fully understand the co-construction of a multi-level reform like the ones discussed here, researchers would ideally gather detailed, longitudinal case-study data on the district, state, community, and other systemic linkages that might influence large-scale educational change efforts. Multiple schools and school

systems would be involved. The study might employ a mixed-methods design that supplements the qualitative data with valid and reliable measures of student achievement over at least a 3-year period. Survey data gathered from teachers and principals would also be very useful in assessing the extent to which educators at the school level have been engaged in reform efforts. For example, teachers and principals could be asked about the presence of systemic structural supports (e.g., collaboration time, networks), professional development, and resources devoted to assist in the reform effort.

Examining the co-construction of reform and the linkages across the educational system would likely provide insights that can inform the fields of educational research, policy development, and evaluation. However, there is a dearth of empirical research with the primary goal of identifying or describing such linkages. This gap in the reform literature reflects a systemic weakness in understanding why reform efforts have not been more successfully sustained. Clearly, educational reform involves formal structures, such as district offices, state policies, and so on. It also involves both formal and informal linkages among those structures. Yet, reform involves a dynamic relationship, not just among structures but also among cultures and people's actions in many interlocking settings. It is this intersection of culture, structure, and individual agency across contexts that helps us better understand how to build positive instances of large-scale educational change.

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Teacher Emotions in the Context of Educational Reforms

Michalinos Zembylas

The ever-expanding field of teacher change informs us that reform in schools is about conflict, unpredictability, resistance, and some loss in self-image. Teachers are considered by most policymakers, curriculum developers, and school change experts to be instrumental in the process of educational change (Datnow, 2000; Fullan, 1998; Hargreaves & Fullan, 1998; Hargreaves, Earl, & Ryan, 1996; McLaughlin, 1998). Yet teachers respond to school reforms in a variety of ways: Some teachers are happy to support and sustain reform efforts, whereas others feel fear, frustration, or loss and resist such efforts (Datnow, 1998; Datnow & Castellano, 2000; Hargreaves, 1994, 1997, 1998a, 1998b, 2004, 2005; Lasky, 2005; Van Veen & Slegers, 2006; Van Veen, Slegers, & van de Ven, 2005; Zembylas & Barker, 2007). However, reform efforts rarely address the emotions of change for teachers and the implications of educational reforms on teachers' emotional well-being (Hargreaves, 2004; Van Veen & Lasky, 2005).

Over the last few years, two reviews of research on teachers' meanings regarding educational practice (van den Berg, 2002) and policy implementation and cognition (Spillane, Reiser, & Reimer, 2002), and a special issue on emotions, identity, and change of *Teaching and Teacher Education* (Van Veen & Lasky, 2005), have brought attention to the emotional impact of reform efforts on teachers. Both of these reviews, as well as the articles published in the special issue of *Teaching and Teacher Education*, emphasize the need for research that pays attention to the emotional aspects of teacher practice and reform initiatives and moves beyond a "dispassionate cognitive perspective" (Spillane et al., 2002, p. 401) of teacher sense-making. Spillane and his colleagues state specifically that emotions are an "overlooked and understudied aspect of the social sense-making with respect to reform" (p. 411); similarly, Van Veen and Lasky (2005) assert that the ways teachers experience reform is fundamentally emotionally laden, and thus research on these issues can inform change theory and professional development.

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In this chapter, I offer a critical synthesis and analysis of contemporary work on the importance of teacher emotions in relation to educational change. My purpose is not to provide a comprehensive review of current literature on teacher emotions and educational reforms but rather to engage in a discussion of contemporary work, focusing on what seem to me two major issues that run through recent research on teacher emotions and educational change. These issues are: (1) space and time as sources of social and emotional support for teachers in reform contexts; (2) the interplay among teacher emotions, identity, and politics. My discussion is informed by and contextualized in my own research in the area for the last 10 years, and my goal is to make a contribution to the ongoing conceptual analysis of investigations on teacher emotions in the context of educational reform. This chapter also explores the implications for practice and policy from the development of spaces for teachers to process their feelings about change. While more work is being done in the area of teacher emotions and the impact of high-stakes accountability and stress-inducing reforms (e.g. Troman & Woods, 2000; Vandenberghe & Huberman, 1999), research on teachers' emotional efforts in the context of reforms has not been the subject of extensive research and thus requires more in-depth analysis (Day, 2002). In a world of unrelenting and even repetitive change (Abrahamson, 2004), understanding the emotional aspects of educational change is essential, if reform efforts are to be more meaningful and successful.

Emotionality and Educational Reform: An Overview

Emotion and change are closely linked (Hargreaves, 2004). Teachers' emotional responses toward change are the result of the ways teachers perceive, interpret, and evaluate their relationship with the changing environment (Blase, 1986; Troman & Woods, 2001). When teachers resist reform efforts, it is often because it threatens their self-image, their sense of identity, and their emotional bonds with students and colleagues by overloading the curriculum and intensifying teachers' work and control from the outside (Hargreaves, 1994, 2005; Nias, 1999a, 1999b; van den Berg, 2002; Zembylas, 2005b). Teachers' resistance to change has often been attributed to stubbornness, lack of imagination, and laziness. However, teachers grasp the negative consequences the reform agenda – often imposed from the outside – will have on them and their students; therefore, teachers resist reforms when the rhetoric of change does not match with the reality of their everyday classroom practices (Bailey, 2000; Schmidt & Datnow, 2005). Emotional disappointment with reform arises not only because of the unwanted imposition of reform demands, but also because of the cumulative effects of the repetitive and contradictory nature of such demands (Little, 1996, 2000). Van Veen et al. (2005) and Van Veen and Slegers (2006) extend the work of Little and further show that even when teachers subscribe to the reform agenda, the working conditions under which the reform has to be implemented elicit more negative emotions than one would expect on the basis

of the teachers' (cognitive) assent. It is not surprising, then, that attempts for educational change may be unsuccessful not only because they may exclude rather than include teachers, but also because these attempts may have predominantly negative emotional implications for teachers (Hargreaves, 2004).

There are many models of school reform that are based on the idea that change is a problem to be solved through appropriate needs assessment, followed by the implementation of appropriate strategies. Such perspectives on school reform are based on the idea that change is primarily a "rational" and "technical" process. The difficulty with such models of reform is that they overemphasize the rational and consequently do not take into account the complexity, ambiguity, and uncertainty acknowledged to be part of change in schools (Hargreaves, 1994, 2000, 2005; Nias, 1999a, 1999b). Rationality is often the driving force behind reform initiatives. In such circumstances, teachers' emotional responses to change are often seen less important.

However, change does not only occur as a result of outlining a set of problems to diagnose and solve (Vince & Broussine, 1996). It can also be approached through identifying the emotions (e.g., anxiety and loss) and relations of collegiality and trust that challenge the ways in which teachers think and feel about themselves and others. In the last two decades, educational reformers have emphasized the importance of collegial relations, collaborative networks, and trust among teachers in enriching the school organizational climate while also providing teachers powerful opportunities for self-renewal (Alfonso & Goldsberry, 1982; Hargreaves & Dawe, 1990; Little, 1990; Marlow & Nass-Fukai, 2000; Sergiovanni, 1992; Wallace, 1998). True collegiality, according to Marlow and Nass-Fukai (2000), involves ongoing professional interaction and trust; in these interactions there is validation of colleagues as equals. Despite the conceptual vagueness of the terms "collegiality" and "trust," professional collegial relationships are suggested as one way to reduce isolation and develop greater coherence and integration to the work of teaching (Little, 1990).

Several authors acknowledge the advantages of social and emotional support in teachers' efforts to cope with change (Hargreaves, 1994, 2001a, 2001b, 2004; Nias, 1998, 1999a, 1999b; Van Veen & Lasky, 2005). For example, Nias (1999a) argues that collegial relations appear to strengthen the moral perspectives and values of teachers. "Collegial" or "collaborative" teacher cultures (Nias, 1989) are characterized by mutual support and caring, in which

individuals feel able to express their emotions, negative and positive, to admit to failure and weakness, to voice resentment and frustration, to demonstrate affection. By contrast, a culture of individualism tends to increase emotional stress for its members by fostering an illusion that others are coping and that one's own fears are born of a unique incompetence; by requiring individuals to pretend to feelings they do not own; by failing to promote the habit of day-to-day communication so that small interpersonal or professional differences build up into major problems. (Nias, 1999a, p. 235)

Nias (1998) also emphasizes that teachers who have the time or subject matter relatedness value talking and listening as a means of sharing emotional experiences – especially, in times of frustration or despair such as during stressful reform efforts. The benefits of this kind of teacher talk are important: First, teachers get to

know one another much better, both personally and professionally; second, teacher talk builds trusting relationships and mutual openness; and third, teachers develop a shared language that contributes to the success of what they do (Nias, 1998). Interpersonal relationships among teachers contribute to the emotional health of the staff group; these relationships have added benefits such as improved cooperation, communication, and emotional commitment (Ashforth & Humphrey, 1995; Leithwood, Menzies, Jantzi, & Leithwood, 1999). Hence, trust and emotional support among teachers seems to facilitate effective and meaningful collaborative working relationships.

Increasingly, change theorists acknowledge that resistance to change is part of the process – in fact, it has a modifying influence – and that the ambivalence and confusion teachers have toward change can be understood on the basis of how individuals respond to change and why they change. To accept reform costs teachers some loss in self-image and vulnerability (Hargreaves, 1998a, 1998b, 2000; Nias, 1999a, 1999b). This threat to self-esteem and the resulting vulnerability can work against reform efforts (Lasky, 2005; Kelchtermans, 2005). There needs to be acknowledged, of course, that sometimes reform is needed, even conceding that it will be emotionally destructive for some teachers who are involved. Nevertheless, as Blackmore (1996, 1998a, 1998b) argues, the issue is not so much about the rational vs. emotional views of reform, but it is about issues of commitment to certain values and certain types of social relationships. That is, Blackmore asserts, change theorists still fail to consider how individuals' emotions intersect with the politics of change. Thus, any attempt to understand school reform needs to take into consideration both the individual and the collective coping practices of teachers. Evans (1996) suggests that change has emotional investment which cannot be altered by rational explanation or technical approach alone; change is part of the context of specific relationships with friends, colleagues, family and how change impacts on such relationships. Thus social, emotional, and material support for teachers during times of reform is necessary for the emotional well-being of teachers, as well as for the successful implementation of reform efforts (Hargreaves, Earl, Moore, & Manning, 2001; Van Veen et al., 2005).

Finally, in my own work, I have used the metaphorical term *spaces for coping* with change (Zembylas, 2005a; Zembylas & Barker, 2007) to identify the spatiality and politics of emotional relations and understandings of teachers' responses to educational reform. Space may sound like a vague metaphor until we realize that it describes experiences of everyday life (Palmer, 1993). We know what it means to experience a sunrise; we know what it means to be on a crowded rush-hour bus. In teaching, teachers know best what it is to be pressed, their space diminished by the urgency of demands, especially in the context of reform efforts that may exclude them. Needless to say, there is ample evidence of the chances of innovations when teachers feel some ownership of the change process (Fink & Stoll, 1996; Fullan, 1993; Sarason, 1990). But regardless of whether teachers feel ownership of the change process or not, they somehow have to make an affective meaning of change and move on. The term "spaces for coping" is used precisely to describe this notion: the literal and metaphorical spaces that teachers create to cope with change

and make sense of their feelings about the change processes; thus teacher emotions are unavoidably social and political.

The notion of “space” and its political implications are important because their relevance is seen as central to school reform efforts (Baker & Foote, 2006; Hargreaves, 2001b, 2004, 2005). The idea of “spaces for coping” may be utilized as an overarching concept, because it helps us identify the intersection between individual experiences and social power relations (Beatty & Brew, 2004; hooks, 1991) or structural and cultural working conditions (Kelchtermans, 2005). In other words, spaces for coping are places where it is possible to explore how teachers’ emotional responses are socially and politically contextualized (Zembylas, 2005a). Thus, spaces for coping imply defenses or resistances that may have to be breached for change to occur. But the creation of spaces of coping may also imply resisting those tendencies to clutter up a renewed consciousness about teaching; it is then that possibilities are opened up for real change.

Space and Time as Sources of Social and Emotional Support for Teachers in Reform Contexts

A key idea of spatial theorists is that space is fundamental to social life; social spaces are produced and transformed by our practices (Harvey, 1989; Rose, 1993). There is a co-constructive relationship among individuals, groups, and their environments; in other words, our social space is producing and is produced by us. Space is conceptualized as an arena of social, historical, and political relations that imply certain assertions about social interaction, race, class, gender, identity formation, and power (Soja, 1989, 1996). According to this conception, our being-in-the-world is simultaneously historical, social, political, and spatial; social acting, then, has to be understood within spatial contexts. The field of geography has contributed significantly to our understanding of the role of spatiality in human relations, although more often than not space has been theorized in ways that have been complicit to the exploitation of individuals (Rose, 1993).

What seems to be an important contribution of spatial theories to the discussion here is the notion that spatial aspects create emotional experiences in teaching. Spatial aspects such as physical closeness, social relations, moral values, professional ideas, and power relations are characteristics of schools. Hargreaves (2001a, 2001b) has utilized the term *emotional geographies* to emphasize the spatial and experiential patterns of closeness and/or distance in human interactions or relationships within schools. He identifies five key emotional geographies of teaching: sociocultural, moral, professional, political, and physical distance. It is important to reiterate the three caveats that Hargreaves (2001a) suggests regarding emotional geographies of teaching. The first one is that there are no “universal” rules of emotional geography in teaching, meaning that there is no ideal closeness or distance between teachers and others that is culture free. The second caveat is that emotions have imaginary geographies of psychological closeness as well as physical ones.

And the third caveat is that distance and closeness are not just structural or cultural conditions that shape teachers' interactions but active accomplishments by teachers who make or remake the emotional geographies of their interactions.

In addition to the social and political understanding of space, time also constitutes human experience and thus change over time has to be examined in relation to the spaces in which it acquires meaning (Louis, 2006). Again, Hargreaves' contribution is important here because as it is shown through his work, the issue of time is significant in understanding the emotions of change. For example, the sustainability of change is part of the social and emotional geography of a school (Goodson, Moore, & Hargreaves, 2006) and teachers' age and career stages are inextricable aspects of spaces of change (Hargreaves, 2005). Teachers' emotional responses to educational change, then, are as much a matter of spatial politics of reform as it is a historical matter of teachers' concerns. Time and space are inevitably interpreted through teachers' emotions and identities and thus the historical organization of spaces of reform is a constitutive element in teachers' professional development (Baker & Foote, 2006).

A similar term by Spillane (1999), *teachers' zones of enactment*, refers to the social and political spaces in which reform initiatives are encountered within the worlds of practitioners; it is within these zones that "teachers notice, construe, construct, and operationalize the instructional ideas advocated by reformers" (p. 144). Both Hargreaves' "emotional geographies" and Spillane's "zones of enactment" offer important contributions to discourses on educational reform: they emphasize the (positive or negative) "emotional labor" (Hochschild, 1983) involved in teachers' efforts to cope with change as well as the need that teachers' emotional responses must be considered when reform efforts are undertaken. More recently, Beatty and Brew (2004) have also examined how *emotional epistemologies* address the power of connecting with self and others in emotional meaning-making, which may very well underlie "emotional geographies" and "zones of enactment."

In my own work, I have built on these ideas and conceptualized a term that captures more specifically the collection of teachers' efforts and practices to deal with the emotional aspects of educational reform. For this purpose, I suggested the term *spaces for coping* to theorize space by bringing together the various kinds of modalities – emotional, political, cultural, and social – that produce an active (not a passive) locus of interactions and relationships among teachers (Zembylas & Barker, 2007). This term articulates a conceptualization of space as a *product* (Lefebvre, 1991) that contains (1) the social relations among teachers, students, and parents, along with the specific organization of the school; and (2) the emotional labor – positive and negative – of teachers as a result of their involvement in reform efforts. Spaces for coping are products of physical, social, moral, professional, and political processes enacted by teachers in the context of educational reform.

By spaces for coping, I mean those spaces emergent through the enactment of practices that attempt to deal with educational reform in terms of awareness, thinking, feeling, and relating. This term does not merely represent a metaphorical conceptualization of space but an understanding of coping in terms of signifying practices and processes. In other words, the term "spaces for coping" captures

the inseparable components of the dynamics of spatial production. The concept of spaces for coping explores how efforts to attend to and through processes and practices can work to extend rather than diminish the emotional field in which teachers move. This extension is facilitated by a deepening of the analysis of teachers' emotional entanglements with change. Therefore, the emphasis is on how spaces for coping with change provide contexts through which to apprehend issues of emotionality and educational reform.

For example, in many of the studies cited so far investigating teacher emotions and educational reform as well as in my own research, it is shown how teachers strive to balance their personal goals for reform, their emotional responses, and the external pressures. Opportunities like time and space set aside for conversations with their colleagues or for planning or practicing ideas provide teachers with sources of social and emotional support in their efforts to deal with change. Each teacher's understanding of the reform effort is clearly very different from that of other teachers within the same school. In a sense, then, teachers' struggles with the reform efforts constitute highly individual tales. Teachers embrace or reject reform for quite different reasons; they bring to the reform efforts certain commitments and have particular emotional responses that effectively undermine or support the proposed changes (Schmidt & Datnow, 2005). On the one hand, teachers, who are against the reform effort, may find ways to "adjust" the reform to their own needs and beliefs; on the other hand, others who embrace the reform efforts, value time and space opportunities so that they can be more successful in implementing the reform (see Zembylas & Barker, 2007). As it is shown through existing research, teachers who are in an environment of uncertainty use time and space in their own ways to create practices of coping with the reform efforts.

What I want to suggest here, then, is that sensitivity to teachers' needs for emotional and social support is essential to reform efforts. Creating networks of support that strengthen collegiality and trust can gradually make space for the feelings that help weave community and cultivate relationships. There are always the mixed feelings of excitement and anxiety teachers have at the outset of a new reform effort. Opportunities for time and space as sources of emotional and social support may work well for teachers, especially for those who resist change. On the one hand, having such opportunities might create opportunities for the future transformations of those teachers who initially resist change. On the other hand, it should not be ignored that such opportunities may in fact subvert reform efforts, despite the fact that "oppositional" teachers find their much-needed support to cope with change (see Zembylas & Barker, 2007).

Teacher collegiality and trust are based not only on contextual factors (e.g., time, subject matter relatedness), but also on personal moral values (Hargreaves, 1994; Van Veen & Slegers, 2006). Teachers' moral values contribute to the school emotional culture and subcultures and affect teachers' emotional practices in school reform efforts. Often, some teachers' coping practices with reform efforts have damaging consequences for their effectiveness in the classroom and for their capacity to connect with students (Hargreaves, 2000; Woods, Jeffrey, Troman, & Boyle, 1997), because external reform efforts can work against the moral values and beliefs held

by these teachers. In addition to the fact that the personal self-image and identity of teachers is usually at stake, teachers' efforts result in the adoption of often insufficient coping practices such as retreatism or downshifting (Troman & Woods, 2000). Thus, change for some teachers can invoke a sense of powerlessness (Smylie, 1999) and vulnerability (Kelchtermans, 1996, 2005; Lasky, 2005), when teachers evaluate their capacities, values, and will to respond to change as incompatible. Inevitably, then, teacher emotions are interwoven with issues of power, identity, and resistance in the context of educational reform (Zembylas, 2005a, 2005b).

The Interplay Among Teacher Emotions, Identity, and Politics

Recent research on teacher emotions and educational change also shows the multiple links among teacher emotions, identity, and politics (e.g. see Hargreaves, 2005; Kelchtermans, 2005; Van Veen & Lasky, 2005; Zembylas, 2003, 2005a, 2005b). This line of work provides evidence about the ways in which teacher emotions and identity formation play a central role in the circuits of power that constitute teacher-selves. The critical understanding of this process in contexts of educational reform is crucial, if we are also to explore the possibility of creating new forms of teacher-selves that escape normative responses to change. For example, it is shown that teacher identity is not fixed but is constantly becoming in spaces that are embedded in the interplay between emotions and actions, on the one hand, and the political conditions within a school, on the other; this interplay mediates the emotionally laden interpretation of reform policies (Zembylas, 2005b). This line of thinking – which is grounded on a poststructuralist theorization of emotions, identity, and power in education (Boler, 1999; Zembylas, 2005a) – provides a different lens than the usual sociocultural framework that has been used to understand teacher emotions and identity in school reform efforts (e.g., see Hargreaves, 1998a, 2000, 2005; Lasky, 2005; Van Veen & Slegers, 2005). Most sociological studies on this subject emphasize how teacher emotions are socially constructed but often assume a givenness to teacher-self and identity – the processes of social construction pertain only to how social situations shape the *expression* and *experience* of teachers' emotional states (Zembylas, 2005a). On the other hand, the approaches that are based on feminist and poststructuralist perspectives examine the transaction among larger social forces and the inner psychic aspects and highlight how teachers participate in emotional practices by adopting or resisting – *in action* – particular emotion discourses. The advantage of feminist and poststructuralist approaches compared to other approaches is that feminist and poststructuralist approaches focus on the role of emotional and social practices of teachers and avoid privileging self-consciousness, that is, they reject the assumption that one's awareness of being is separate from the socially constructed world (Boler, 1999).

In particular, feminist and poststructuralist approaches draw attention to a deeper and more complex understanding of the role of power relations in the context of educational change. As Abu-Lughod and Lutz argue, power is an integral part of

emotions, identity politics, and change, because “power relations determine what can, cannot, or must be said about self and emotion, what is taken to be true or false about them, and what only some individuals can say about them. [. . .] . . . [This idea] show[s] how emotion discourses establish, assert, challenge, or reinforce power or status differences” (p. 14). By recognizing the role power relations play in constructing emotions of change, a better understanding of the personal, cultural, political, and historical aspects of teacher identity formation might be gained. For this reason, I have termed this work *genealogies of emotions in teaching* (Zembylas, 2005a, 2005b). Following Foucault’s genealogical method (1983a, 1983b, 1984), I have argued that constructing genealogies of emotions in teaching casts light on how emotions are located and represented in teachers’ pedagogies and on teachers’ personal and professional development. In particular, genealogies of teacher emotions in contexts of educational reforms describe events, objects, persons, and their relationships that are present or absent in the realization of the emotions related to change, and the ways that these emotions are experienced in relation to teacher-self (individual reality), others (social interactions), and school politics and culture (sociopolitical context). For example, it has been shown that analysis of identity politics and power relations in the context of school reform enriches our understanding of the *fear* and *suspicion* that teachers often feel when they are faced with change (Zembylas & Barker, 2007).

The existing research on teacher emotions, identity, and politics in the context of reform highlights two important issues. First, it is valuable to gain an understanding of the constitution of teacher subjectivities within a historical and spatial framework of how meaning intersects with emotional experiences of change. Only by interrogating the temporal and spatial contexts from which questions of identity are posed can we trace how teacher identity is subjected to the social and emotional practices of change. As Bauman (1991, 2004) argues, identities in contemporary world are undergoing a process of continual transformation and emotional ambivalence is a compelling notion of understanding the changing nature of social life and personal experience. This kind of analysis problematizes the “emotional regulation” that is often demanded from teachers and highlights the process with which *emotional rules* are constructed in relation to change, that is, how power relations and identity politics shape the expression of emotions by permitting teachers to feel some emotions and by prohibiting them to feel others. This lesson turns our attention to the view that emotions are essentially embedded in identity politics and power relations; thus, emotional regulation is not only an individual process (which is how it is usually presented by psychologically grounded literature; see, e.g., Sutton & Wheatley, 2003) but also a political one. By understanding how emotional rules and expectations are historically contingent, teachers and teacher educators may begin to deconstruct the power relations and identity politics that seek to “regulate” teachers’ lives.

The second issue has to do with the importance of the emotional aspects of the negotiation of change in the context of school reforms and the role of self-discipline, self-esteem, and professional norms in teaching. Professional values and norms, as Kelchtermans (2005) points out, ought to be conceptualized as inextricable aspects

of teacher identity and the cultural and structural working conditions; these norms are continually (re)constructed and/or reproduced through interactions of domination and resistance. For example, it is shown in various studies that a teacher's relation to oneself is marked by self-policing of emotional conduct according to the demands of a particular educational reform (Hargreaves, 2005; Lasky, 2005). Thus, there is a lot to be gained from developing accounts that are suspicious of appeals to emotional well-being tied to rationalizations and instrumental goals of educational reforms. Such appeals to emotional well-being tied to rationalizations need to be examined in terms of how they shape the meaning and drive the direction, goals, emotional conduct, and motivation of teachers involved in reform efforts. New theoretical frameworks, such as those of feminist theories and poststructuralism, can be helpful in identifying how problematic are some of the underlying assumptions of reform and show that power and resistance can be productive in efforts to subvert normalizing practices (see Zembylas, 2005a).

Clearly, then, emotions in the context of educational reforms are not only a private matter but also a political space, in which students and teachers interact with implications in larger political and cultural struggles (Albrecht-Crane & Slack, 2003; Zembylas, 2005a, 2005b). The notion of "politics" here refers to "a process of determining who must repress as illegitimate, who must foreground as valuable, the feelings and desires that come up for them in given contexts and relationships" (Reddy, 1997, p. 335). That is to say, power is located in emotional expression (Campbell, 1997) – in who gets to express and who must repress various emotions. The *politics of emotions*, therefore, is the analysis that challenges the cultural and historical emotion norms with respect to what emotions are, how they are expressed, who gets to express them, and under what circumstances. It is in this sense that it may be argued that there is always something political in which teachers and students are caught up as they relate emotionally to one another in contexts of reform, because power relations are essentially unavoidable; there are always some norms influencing emotion discourses and emotional expressions during reform efforts. A careful analysis of the interplay among teacher emotions, identity, and politics provides openings for a critical intervention in a much larger debate about professional subjectivities in schools. The need for a deeper conceptualization of this interplay among teacher emotions, identity, and politics can guide future efforts to understand the power and the limitations of the political merits or demerits of any emotional regime within the space of educational reform efforts.

Implications

Overall, the findings from research on teacher emotions in the context of educational reforms highlight two issues: First, how schools structure teacher interactions in ways that hinder or promote the processing of teacher emotions; and, second, how teachers respond emotionally to professional expectations and norms (Ball & Cohen, 1996; Hargreaves, 2000; Kelchtermans, 2005; Spillane, 1999). My

analysis in this chapter has emphasized that a teacher's emotional development in the context of educational reform efforts is profoundly influenced by his or her participation in particular forms of discursive and emotional practices at school. By analyzing this idea in such terms, I wish to avoid a suggestion that subordinates the individual to the social and loses sight of the reciprocal relation between the two. As I have indicated, existing research shows that there is a great deal at stake in the emotional regimes of schools under reform. However, teacher communities are able to constitute spaces that have the potential to subvert disciplinary mechanisms and practices.

My analysis here also identifies an idea that is found in previous studies about teachers' responses to educational change. That is, it is shown how teachers differ in fundamental emotional ways with regard to how they create spaces for coping with reform efforts. Yet, more recent studies indicate that these differences are not idiosyncratic ones but are related to the sociopolitical culture of school. These findings suggest that working conditions, social relations, and moral/personal values and concerns engage teachers emotionally with the reform effort and signify what is at stake for them, regardless of whether teachers support or object the reform initiatives (see also Hargreaves, 2004, 2005). Educational change, then, is inevitably a deeply emotional sense-making experience for teachers. Consequently, allowing emerging feelings to be dealt with is not about helping teachers to feel "better" about reform pressures, but is a valuable contribution to teachers because it helps them practically to find ways of integrating and/or reconciling opposing or conflicting feelings about reform. On the one hand, teachers must understand that in the process of educational change, conflict, tensions, and disturbance to long-held beliefs are not to be feared; on the other hand, teachers also need the emotional and social support to take reasonable risks to cope with reform (Schmidt & Datnow, 2005).

However, it is often assumed that all or most teachers will produce a uniform set of responses to reform – that is, they will want to teach and behave in the manner expected of them (Hargreaves, 1994). Such demand for uniformity highlights the power relations involved in reform efforts and seeks to limit teachers' role to that of a technician. Therefore, an implication of this finding is that reformers have to acknowledge the significance of emotional diversity and provide opportunities for teachers to create their own spaces of coping with change. Change is not about forcing all teachers to subscribe enthusiastically to new ideas; a reform process needs to allow teachers to carve out spaces for themselves in order to work individually and collaboratively and find ways to reflect on their practices. Teachers need space and time to make sense of change and to make reform efforts part of their own teaching. In their own classroom, teachers hold the power for the success or failure of school reform efforts (Sarason, 1996).

The findings of existing studies in this area add support to the research which suggests that teacher emotions, identity politics, and power relations have substantial effects on classroom practice and reform efforts (Beatty & Brew, 2004; Hargreaves, 2001a, 2001b; Little, 1996, 2000; Nias, 1999a, 1999b). These findings are not so unusual; however, it seems that these issues need to be directly addressed in schools undergoing reform, because stressed and unhappy teachers can subvert

reform efforts in unexpected ways (Datnow, 1998; Datnow & Castellano, 2000). In some respects, the success of reform efforts that are based on collaborations among teachers is directly related to the relationships that these teachers develop. Not surprisingly, then, teacher collegiality and trust create distinctive emotional geographies that influence reform efforts in two ways. First, teacher collegiality that is also based on friendship and trust may intensely compete with interests for a successful reform effort; and second, teacher collegiality that is based on politeness and avoidance of conflict may end up subverting the reform effort because the real issues are not addressed (Zembylas & Barker, 2007). The contribution of existing studies lies in the finding that while social sharing and collegial relationships create important spaces for teachers to cope with change in a nonthreatening environment, it is also possible that these spaces may simultaneously undermine the reform effort.

In an increasingly changing educational environment, it has never been more necessary to develop an in-depth understanding of teacher emotions in the context of reform. Building a better emotional understanding of educational reform expectations, teachers, administrators, and reformers will become able to form more productive alliances (Hargreaves & Fullan, 1998), and redefine the emotional geographies of their relationships to make them more effective in dealing with the emotional risks of change. Better emotional understanding, as Hargreaves (2001b) argues, implies a reversal in many educational policies and policy processes. Such policies must seriously consider the emotional implications of reforms that demand teachers to implement content and learning standards, to limit teachers' time out of class to interact with others, and to standardize teachers' interactions with those around them. Future research in this area needs to further clarify how different policies may enable productive spaces of dealing with change, while exposing the constraints of any taken-for-granted assumptions about educational reforms.

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The Micropolitics of Educational Change and Reform: Cracking Open the Black Box

Joseph Blase and Lars Björk

The first studies of micropolitics of education were published during the mid-1980s (Ball, 1987; Blase, 1987). Two decades later, a small but significant number of studies have been completed, some of which have centered on the micropolitics of educational change and reform. In 1998, Blasé conducted a comprehensive review of the micropolitics of educational change; this chapter highlights primary studies from that review but emphasizes more recent relevant work.

Micropolitics remains a fact of life in educational settings, and during times of change, such politics tend to increase and intensify. This chapter presents a review of studies that have generated findings on the micropolitics of educational change and reform. The chapter opens with an overview of macro- and micro-educational politics. Following this, a section focusing on the micropolitics of life in schools illustrates the ubiquitous nature of this important phenomenon in schools. Subsequent sections form the heart of this chapter and highlight findings about teachers, school principals, middle-level administrators (i.e., central office staffs), district superintendents, and school boards. Each section describes micropolitical factors that facilitate and impede school reform. The chapter closes with a brief discussion of directions for future research and a conclusion.

The Macropolitics and Micropolitics of Education

Generally speaking, the term “politics” refers to decisions about the allocation of valued goods for a particular society or organization – for example, who gets what, how, and when. Macropolitics and micropolitics (i.e., organizational politics), two broad aspects of the politics of education, refer to similar conflictual and cooperative processes and similar concepts including individual and group interests, power and influence, strategic interaction, values, and ideologies (Ball, 1987; Barott & Galvin, 1998; Blase, 1991; Blase & Blase, 2000; Marshall & Scribner, 1991; Spring, 1997,

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1998; Wirt & Kirst, 1992). In the United States, macropolitics of education may describe the school's external environment and its relationships at the local, state, and federal levels (Willower, 1991) as well as the interaction of private and public organizations within, between, and among levels (Cibulka, 2001; Marshall & Scribner, 1991; Spring, 1997; Wirt & Kirst, 1992).

In recent decades, several waves of school reform have dominated the macropolitics of education in the United States. Firestone (1990) notes that although efforts to improve public schools began in the late 1970s, the release of a *Nation at Risk* in 1983 launched an era of educational reform "that is arguably the most intense, comprehensive and sustained effort to improve education in America's history" (Bjork, 2001a, p. 19). Media coverage of the report heightened concern for the condition of public education, shaped the perception that the nation's schools had failed the nation's children and economy, and stimulated calls for reform.

Other reports over long periods have reflected separate yet related reform themes (Bacharach, 1990; Firestone, Fuhrman, & Kirst, 1990; Lane & Epps, 1992; Murphy, 1990). The first wave (1983–1986), which began with the release of the *Nation at Risk* Report (1983), was followed in rapid succession by similar commission and task force reports that called for using student test scores to hold schools accountable, increasing graduation requirements, lengthening the school day and year, and increasing the rigor of teacher licensure requirements (Björk, Kowalski, & Young, 2005). Legislative accountability measures lessened district policy-making prerogatives by shifting decision making to states.

An analysis of second-wave reports (1986–1989) suggests a continuation of accountability themes as well as greater emphasis on higher-order thinking skills, problem solving, computer competency, and cooperative learning. Importantly, many reports made a compelling case that schools should be responsible for ensuring that all children learn, particularly "at risk" children living in poverty (Murphy, 1990). In addition, efforts to establish teacher empowerment and strengthen teaching professionalism contributed to the devolution of decision making and governance from the district level to school councils. These shifts coupled with high stakes accountability attempted to alter both conventional practices and power configurations at the district and school levels (Björk, 1996; Murphy, 1990).

Third-wave (1989–2003) reform reports criticized previous commission reports for their focus on organizational and professional issues rather than on student well-being and student learning. These reports offered two canons to guide reform including recentring the profession to focus on student learning and realigning schools to support families as a way to enhance children's capacity to learn. In 2002, the enactment of the No Child Left Behind Act (NCLB) reiterated previous school accountability themes and underscored the importance of ensuring that all children learn. NCLB shifted accountability from the building level to the individual child and introduced the notion of holding school superintendents, principals, and teachers responsible for bridging the learning gaps for different groups of children. The NCLB coupled hardnosed accountability measures, performance timetables, and remedies with parsimonious federal support; consequently, many critics have

characterized it as the largest underfunded federal education mandate in US history (Björk et al., 2005). Although it is generally agreed that NCLB has heightened attention to glaring inequities in student academic performance, many speculate that raising the bar to successively higher levels of performance until 2014 may result in a declaration that schools have failed and thus justify the offering of vouchers as an alternative way to fund public education (Björk et al., 2005).

Indeed, nationally initiated legislation in the United States and the external collection of private and public organizations with interest in such legislation have had significant effects on politics at the district and school levels (Barott & Galvin, 1998; Blase, 1991, 1998; Cibulka, 2001; Datnow, 2000; Fuhrman & Elmore, 2004; Mawhinney, 1999; Oakes, Quartz, Ryan, & Lipton, 2000; Sarason, 1990, 2004; Smith, Miller-Kahn, Heineke, & Jarvis, 2004).

The building or site level is the immediate organizational unit within which the principal and classroom teacher work, children are instructed and direct supervision occurs. At the same time, it is important to recognize that the school is nested in multilevel governmental structures. The organizational politics of the building site is the micropolitics of a subunit of a larger complex organization: the school district. In turn, the school district is a local government unit, variously connected to other local governments, as well as to the state and national governments (Barott & Galvin, 1998, p. 312).

In fact, in recent years macropolitical influences have strengthened in many parts of the world, and this has resulted in increased political conflict at the local and school levels, notably in the context of reform adoption and implementation processes (Ball, 1994; Blase, 1998; Cibulka, 2001; Hoyle, 1999; Lindle, 1999; Mawhinney, 1999). Consequently, beginning in the early 1990s, policy studies in education have increasingly investigated implementation processes associated with school reform at the local level.

Those actually implementing policy in schools turned out to be the final policy makers, as evidence mounted that they could reshape or resist the intentions of policies adopted at higher levels. From these not entirely surprising revelations, it was only a short jump to the beginning of the systematic study of the dynamics of the “micropolitics” within the schools (Boyd, 1991, p. vii).

Not surprisingly, theoretical and empirical work has underscored stark differences between policy rhetoric and the reality of policy implementation, referred to as the “implementation gap” or “black box” of educational reform (e.g., Datnow, 2000; Mawhinney, 1999; Scribner, Aleman, & Maxcy, 2003).

Micropolitical Perspectives and Educational Change and Reform

Studies of the micropolitics of educational change and reform have relied heavily on Ball’s (1987) and Blase’s (1991) perspectives. Ball’s approach emphasizes the politics of conflict:

I take schools, in common with virtually all other social organizations, to be arenas of struggle; to be riven with actual or potential conflict between members; to be poorly coordinated; to be ideologically diverse. I take it to be essential that if we are to understand the nature of schools as organizations, we must achieve some understanding of these conflicts (Ball, 1987, p. 19).

Blase (1991) constructed a more inclusive definition of micropolitics from an exhaustive review of the literature that includes conflictive and cooperative processes:

Micropolitics refers to the use of formal and informal power by individuals and groups to achieve their goals in organizations. In large part political action results from perceived differences between individuals and groups, coupled with the motivation to use power to influence and/or protect. Although such actions are consciously motivated, any action, consciously motivated, may have “political significance” in a given situation. Both cooperative and conflictive actions and processes are part of the realm of micropolitics. Moreover, macro and micropolitical factors frequently interact (Blase, 1991, p. 11).

More recently, Blase and Blase (2002) have argued that micropolitics is a critical aspect of many organizational structures and processes, and often constitutes the *central mechanism* through which major organizational outcomes related to school change and reform are produced:

An organization’s political processes, for example, a school’s formal and informal (e.g., organizational stakeholders and their power sources, interests, ideologies, and interchanges) as well as its political culture (e.g., patterns of interests, ideologies, decision making, power distribution) dramatically influence most school outcomes, including teaching and learning. The degree to which political processes and political culture account for a given outcome (e.g., decision, policy, program, practice, event) varies, of course, from one school to another and, over time, within the same school. (p. 10).

In essence, micropolitics processes and structures make up the “political culture” of a school and account for both stability and change in school settings; certain political forces work to sustain (maintain) the status quo, while other political forces serve the interests of change and reform (Ball, 1987; Blase, 1991, 1998; Blase & Blase, 2002; Burlingame, 1988; Burns, 1961; Malen, 1994; Townsend, 1990). “The strong advocacy of some and the strong opposition of others. . . will be called into service to bring about or successfully oppose the innovation under consideration” (Mangham, 1979, p. 133).

Typically, externally imposed initiatives to change and reform schools must contend with existing internal political cultures that promote and protect the school’s status quo (Ball, 1994; Blase, 1991, 1998; Cusick, 1992; Elmore, 2004; Gronn, 1986; Gtazek & Sarason, 2007; Lukes, 1974; Sarason, 1990, 2004). With reference to the micropolitics of change, Mangham (1979) stated, “[S]o significant is the collection of forces which underpin behavior in organizations that it is surprising that any changes ever manage to be promulgated let alone implemented” (p. 122). Sarason (1990) wrote,

Schools will accommodate (change) in ways that require little or no change. . . the strength of the status quo—its underlying axioms, its pattern of power relationships, its sense of

tradition and, therefore, what seems right, natural, and proper—almost automatically rules out options for change in that status quo (p. 35).

During periods of externally imposed change and reform, school-based political interaction tends to intensify, and new micropolitical processes and structures emerge and become more visible in formal and informal areas of school life. Specifically, change dynamics – uncertainty, diversity, ambiguity, and goal disparity and complexity tend to exacerbate political interaction within the school (Blase, 1998).

The Micropolitics of Life in Schools

In the past two decades, empirical political studies have revealed strong findings about the ubiquitous and natural occurrence of micropolitics in the everyday life of schools. Topics studied include personnel evaluation (Bridges & Groves, 1999), superintendents and interest groups (Björk & Lindle, 2001), teacher induction (Kelchtermans & Ballet, 2002a), beginning teacher development and micropolitical literacy (Kelchtermans & Ballet, 2002b), teacher supervision and evaluation (Cooper, Ehrensall, & Bromme, 2005; Stronge & Tucker, 1999), school-level management teams (Cranston & Ehrich, 2005), educational interest groups (Johnson, 2001), and court-ordered desegregation (Goldring & Crowson, 2001).

A number of studies of teacher–student interactions and instructional and social issues in the classroom have demonstrated the degree to which micropolitics pervades life in schools (Anton, 1999; Bloome, Carter, Christian, Otto, & Huart-Faris, 2005; Cazden, 2001; Connell, 1985; Gilbert & Yerrick, 2001; Gutierrez & Rogoff, 2003; Lee, 2006; Lightfoot, 1983; McDevitt, 2004; McNeil, 1983; Morgan, 2001; Nias, 1989; Pauly, 1992; Pollard, 1985; Powell, Farrar, & Cohen, 1985; Sedlak, Wheeler, Pullin, & Cusick, 1986; Waller, 1932; Winograd, 2002; Woods, 1990). Powell et al. (1985) and Sedlak et al. (1986) found that interaction between classroom teachers and students was essentially political; interactions were based primarily on power dynamics; “negotiation” between teachers and students produced “understandings,” “bargains,” and “treaties” that defined and controlled all aspects of classroom life. These findings have been confirmed by Winograd (2002), who reported that students’ resistance to teachers’ authority resulted in negotiated political agreements in the classroom. Anton (1999) found that interactive exchanges between students and teachers in learner-centered, second language classrooms were characterized by negotiation of form, content, and classroom rules of behavior, and such political processes created environments conducive to learning.

McDevitt (2004) specifically studied issues of pedagogical and cultural appropriateness that arose between teachers and students from two disparate cultures of learning; she found that conflicts were resolved by negotiating course content and classroom procedures. Lee (2006) and Bloome et al. (2005) found that language, patterns of interaction, and activities used in classrooms were negotiated, a

finding consistent with Pauly's (1992) conclusion that "education is the result of working agreements that are hammered out by the people in each classroom, who determine the rules, the power relationships, and the kinds of teaching and learning that will take place there" (pp. 13–14). Such findings are also consistent with how informal language used in classrooms to promote learning (e.g., African American English paralinguistic practices) resulted from cultural negotiations and power relations linked to race, class, and ethnicity (Cazden, 2001; Gutierrez & Rogoff, 2003; Morgan, 2001). In contrast, Gilbert and Yerrick (2001) found that the quality of science instruction was subverted by negotiation between students and teachers in the context of low academic expectations in rural, underrepresented school contexts.

The Micropolitics of Educational Change and Reform

A growing number of micropolitical studies address relationships at various levels of school organization that range from the nature of teacher engagement in school reform processes to superintendent–board interaction in district governance processes. General studies of school reform can also be interpreted from a micropolitical standpoint. *Taken together, these studies demonstrate the critical role of micropolitics, a role that appears to facilitate and support as well as impede and inhibit educational change and reform.*

Teachers and Educational Change and Reform

A number of studies have demonstrated that teachers' political participation in school-wide decision making, classroom autonomy, empowerment, and reflective critique of curriculum and instruction have *facilitated* successful school reform efforts (Allen, 1993; Blase & Blase, 2001; Bredeson, 1989; Brimhall, 1993; Corbett & Rossman, 1988; Melenyzer, 1990). Smylie and Brownlee-Conyers (1990) described teachers' use of specific political strategies to develop innovative collaborative relationships with principals. Scribner, Sawyer, Watson, and Myers (2007) found that teacher problem-finding teams employed autonomy and relational leadership skills to facilitate collaboration and to avoid marginalization by principals. In a micropolitical study of a school's implementation of site-based management, Somich (2005) found that when teachers' political involvement in school increased, teachers' classroom instruction benefited significantly. Reed (1992) reported that teachers who defined efficacy as greater formal authority in school-wide decision making were seen as more politically important than colleagues who participated primarily to facilitate classroom instruction and implement site-based initiatives. The work of Chrispeels and Martin (2002), Goldring and Simms (2005), Firestone and Fisler (2002), Feuerstein and Dietrich (2003), and Goodman (2006) affirmed the significance of teachers' political involvement in school-wide and interorganizational relationships: when teachers participated in negotiating a redefinition of

roles, building trust, setting agendas and standards, and confronting sources of conflict, they frequently facilitated reform. Heck, Brandon, and Wang (2001) found that decentralized (school-based) decision making was successful when teacher participation focused on improving student learning and selection of issues addressed in Site-based Decision Making (SBDM) meetings. Achinstein (2002) demonstrated that collaborative reform efforts in schools with strong professional learning communities generated constructive political conflict crucial to organizational learning. Johnson (2004) reported that leadership teams in several Australian schools enacted school reform through primarily positive political approaches; they conceptualized, negotiated, and implemented reforms via consensually and morally based approaches sensitive to teacher professionalism.

There is also evidence that teacher-related micropolitical factors – classroom territoriality norms, protectionist orientations to outside intrusions, resistance to internal threats of work intensification, and relationships of power and negative forms of politics within classrooms *impede* school change and reform (Altrichter & Soukup-Altrichter, 2000; Cusick, 1992; Gitlin, 2001; Pauly, 1992; Powell et al., 1985; Sedlak et al., 1986). Moreover, confusion about roles and authority in school-level decision making, and structural factors (e.g., inadequate planning time and administrative control of planning topics and outcomes) interfere with collegial dialogue (Gitlin, et al., 1992). Other teacher-related micropolitical factors that interfere with reform include adversarial factions with competing interests that fail to share resources (Robertson & Briggs, 1994), domination of governance processes by particular teacher groups and the types of strategies teachers used to pursue their interests (Peterson & Solsrud, 1993), compliant orientations toward principals (Allen, 1993; Blase & Blase, 2001), resistance to decentralization by veteran teachers (Heck et al., 2001), and conflict arising from partial faculty involvement in school planning (Mintrop, Gamson, McLaughlin, Wong, & Oberman, 2001).

Micropolitical factions do not only facilitate or impede reforms, but also alter and adapt them. For instance, in a 5-year case study of inquiry-based school reform, Stokes (2000) reported that responses of teachers and other stakeholders, largely defined by political forces (e.g., emotional and ideological differences), transformed a “literacy” project into one that emphasized “equity.”

Principals and Educational Change and Reform

The importance of the principal’s role in *facilitating* school reform has been widely discussed in the restructuring literature. Studies of several models of school reform – Coalition of Essential Schools (Hall & Placier, 2003); the New American Schools project (Berends, Bodily, & Kirby, 2003), and the Bay Area School Reform Collaborative (BASRC) (Copeland, 2002) – have identified that principals are central to successful implementation. Maxey and Nguyen (2006) assume that distributing, sharing, and facilitating leadership are inherently political, and principals who engage in facilitative leadership and work with and through others are

engaged in the politics of power sharing. Principals' political role in facilitating reconfiguration of school structures and governance processes to ensure higher levels of collaboration and teamwork has been examined by a number of scholars (Berends, et al., 2003; Blase & Blase, 2001; Blase, Blase, Anderson, & Dungan, 1995; Etheridge & Hall, 1995; Firestone & Fisler, 2002; Freeman, Brimhall, & Neufeld, 1994; Hall & Placier, 2003; Murphy & Louis, 1994; Smylie, Wenzel, & Fendt, 2003; Somich, 2005; Reitzug, 1994; Rollow & Bryk, 1995; Rulfs, Crocker, Wright, & Petrie, 2001).

Successful school reform has been strongly associated with principals' facilitative leadership and specific political practices including empowering teachers (Berends et al., 2003; Blase & Blase, 2001; Hall & Placier, 2003; Smylie et al., 2003; Rulfs et al., 2001; Somich, 2005), team building (Farrell, 2003; Somich, 2005), enhancing parent and community participation in democratic governance processes (Berends et al., 2003; Copeland, 2002; Farrell, 2003; Flinspach, Easton, Ryan, O'Connor, & Storey, 1994; Goldberg & Morrison, 2003; Lopez, Scribner, & Mahitvanichcha, 2001; Rollow & Bryk, 1995), managing internal conflict (Beck, 1993; Goldberg & Morrison, 2003; Hall & Placier, 2003; Peterson & Warren, 1994), developing teachers' capacity for critique (Reitzug, 1994), maintaining balance between district-level initiatives and school-based initiatives (Conley & Goldman, 1994; Goldberg & Morrison, 2003), challenging teachers to transform schools (Prestine, 1994), maintaining accountability of organizational stakeholders (Bondy, Ross, & Webb, 1994; Feuerstein & Dietrich, 2003; Lopez, et al., 2001), and using high stakes accountability to garner support for school reform (Spillane et al., 2002). Moreover, these studies demonstrate that principals' facilitative leadership is correlated with the development of democracy in schools and substantial increases in teachers' sense of political efficacy.

In contrast, studies have demonstrated that a control-oriented political approach to school reform on the part of principals (i.e., unwillingness or inability to let go of power to enact democratic facilitative leadership approaches) has been a major *impediment* to successful school reform (Blase, 1991; Cooper et al., 2005; Datnow & Costellano, 2003; Kilgore & Jones, 2003; Finnan & Meza, 2003; Maxey & Nguyen, 2006; Robertson & Briggs, 1994; Rollow & Bryk, 1995; Scribner et al., 2007; Smith, 1995). Malen and Ogawa (1988) were among the first to report that even properly conceived structural approaches to educational innovation and reform (e.g., wherein school-based councils had broad jurisdiction and decision-making authority) were easily sabotaged by principals' predisposition to "control" interactions with teachers and parents. Implementation studies of school reform, including the *Success for All Project* (Datnow & Costellano, 2003), the *Comer School Development Process (CSDP)* (Payne & Diamond, 2003), *The Modern Red Schoolhouse* (Kilgore & Jones, 2003), *Accelerated Schools Project* (Finnan & Meza, 2003), and earlier studies of Chicago school reform initiatives (Rollow & Bryk, 1995) have also affirmed that principals who worked to control or mediate school reform impeded its success.

More specifically, studies have found that principals have impeded school reform initiatives by controlling discourse, maintaining power, and preventing power

sharing with teachers via a wide array of political tactics such as an unwillingness to facilitate shared leadership, failing to empower teachers, opposing collaborative work, dismissing agendas, marginalizing dissenters, intimidating teachers, postponing meetings with teachers, limiting access to information, providing misinformation, holding traditional expectations of self and teachers, undermining trust, and practicing favoritism and exclusion (Blase & Blase, 2003; Bredeson, 1993; Brown, 1994; Datnow & Costellano, 2003; Cooper et al., 2005; Etheridge & Hall, 1995; Finnan & Meza, 2003; Gitlin, et al., 1992; Kilgore & Jones, 2003; Lonnquist & King, 1993; Murphy & Louis, 1994; Reitzug & Cross, 1994; Scribner, et al., 2007; Smylie & Crowson, 1993).

Middle-Level Administrators and Educational Change and Reform

Central office efforts to *facilitate* processes and protect schools engaged in restructuring from interference have been important to achieving successful implementation of school reform. Although central office administrators are often viewed as technocrats responsible for carrying out bureaucratic operations such as program planning, budgeting, compliance, accountability, and reporting, politically, they are not benign functionaries. As professional staff, their expert knowledge enables them to influence strategic policy decisions at the district and school levels. Björk (2001b) found that a district financial officer institutionalized a building-centered financial system that was essential to implementing decentralized decision making in schools. Spillane et al. (2002) found that central office staff functioned as sense makers, mediated district accountability policies, and used accountability policies as levers to support educational reforms. Studies have also revealed that central office support for training principals and teachers in collaborative processes facilitated implementation of decentralized decision making (Slavin, Madden, Shaw, Mainzer, & Donnelly, 1993; Smylie & Crowson, 1993). A study of collaboration within an external coalition of partners (university, district, and computer manufacturer) highlighted the importance of both central office strategy and resource control for school-level innovation (Baker, 1994). Morgan and Peterson (2002) found that multilevel collaboration among central office staffs enhanced superintendents' work as instructional leaders in their districts.

In contrast, studies also indicate that central office administrators *impede* school reform. Skrla, Reyes, and Scheurich (2000) reported that male-dominated societal and district office professional norms, and the use of coercive political pressure, effectively prevented female superintendents from publicly acknowledging gender-based discrimination. Rusch (2005) described a similar pattern of influence—in particular, how organizational cultures at the district office level created institutional scripts that sanctioned talk about school reform and inhibited learning among professionals. Björk (2001b) found that central office staffs leveraged internal and external influence among community interest groups and school board members to resist school decentralization initiatives that reduced their influence and threatened

their positions. Honig (2003) reported that central office staffs defended conventional administrative roles until they were effectively threatened by school reform progress or marginalized by school reform initiatives. Glassman and Fuller (2002) found that superintendent evaluation practices illuminated the politics of local decision making and highlighted the role played by multiple and diverse constituency groups within central office professional staff, who required the inclusion of student achievement data in the evaluation protocol.

Superintendents and Educational Change and Reform

Superintendents who maintain high levels of involvement in instructional matters play a crucial role in launching and sustaining district-level-initiated educational reforms (Björk, 1996, 2000). Recognition of their contribution to the improvement of learning and teaching has advanced efforts to redefine their roles as instructional leaders (Björk et al., 2005; Peterson & Barnett, 2005); this has also heightened interest in the politics of the superintendency. Superintendents' capacity to work effectively within community and school board political dynamics and build community-based business coalitions has been directly related to the success of district reform initiatives. Such political capacities have provided the continuity necessary for long-term change initiatives (Björk, 2000, 2005; Glassman & Fuller, 2002).

The importance of district-and-school-level leadership in launching and sustaining educational reforms specifically in high-poverty schools has been described by Berends et al. (2003). These researchers found that superintendents were instrumental in building organizational political support needed to establish a professional climate to advance teaching and learning as well as effectively communicating with the public about the purpose and status of change initiatives. Goldring and Sims (2005) reported that superintendents' efforts to build collaborative partnerships in the community based on trust and power sharing were key factors in initiating and sustaining educational reforms.

A growing academic literature on the role of female superintendents in educational reform shows that relational ways of working have enabled them to survive in office and successfully engage in district-level educational reform efforts. Ortiz (2001, 2002) found that female superintendents' knowledge of community power structures and cultural practices in Hispanic communities contributed to their longevity and success in reforming educational programs. Owen and Ovando (2000) reported that superintendents who were knowledgeable about community cultural and political contexts were particularly adept at coalescing interest groups, building coalitions, negotiating agreements, forcing concessions when required, and empowering others, all of which were associated with effective educational change. In addition, Grogan and Blackmon (2001) and Skrla, Scott, and Benestante (2001) found that understanding constituent group interests, school board power structures, and competing community values enabled superintendents to protect their positions

and unify board members, build coalitions, counter adverse interest group politics, and achieve district educational reform goals.

Although the role of superintendents is pivotal to facilitating educational reform, the ways in which their political behavior *impedes* progress cover a wide spectrum of organizational issues (Björk, 2001b, 2005; Björk & Lindle, 2001; Bloom & Erlandson, 2003; Brunner, 2000; Hoffman & Burrello, 2004; Keedy & Björk, 2002; Kelsey & Lupini, 2001). Along these lines, Björk (2001c) found that a superintendent stalled district-initiated decentralization efforts when he acquiesced to pressure from the school board to retain a politically connected central office staff member who opposed the change. In addition, superintendents' failure to support school site policy decisions, provide adequate time for decision making, clarify the role of principals, and develop assessment criteria relevant to principals' new leadership roles has inhibited educational reform efforts. Hoffman and Burrello (2004) reported that superintendents' needs for power and control and their reluctance to release test scores to reduce unfavorable political exposure undermined attempts to improve teaching and learning in low-achieving schools. Superintendents have also hindered reform by failing to clarify ambiguous governance procedures (Bondy et al., 1994), trust the professional judgments of teachers, provide adequate funding and resources (Murphy & Louis, 1994), and support principals in conflicts with others (Crowson & Boyd, 1991). The use of top-down mandates to create school-based collegiality among teachers (i.e., "contrived collegiality Hargreaves, 1991)" and extending inordinate power to school principals involved in site-based management have also been linked to adverse effects on school reform (Smylie & Crowson, 1993).

School Boards and Educational Change and Reform

Throughout the history of American education, schools have been viewed as extensions of local communities bound by shared social, economic, and political circumstances. Alsbury (2003) and Björk (2000) found that political configurations of school boards were influenced by changes in community values and power structures, which, in turn, can *facilitate* or *impede* school reform. Shipps (2003) contends that school board policy making is influenced by multiple coalitions, the composition of which affects reform agendas. The dynamic relationship between communities and schools provides a framework for understanding school board responses to calls for school reform in the context of declining financial resources and politicization of educational policy making (Björk, 2005; Björk & Keedy, 2002; Johnson, 1996). Clearly, some view school boards as unworkable and detrimental; others see them as viable political forums in which individuals and groups openly express real needs and interests and reconcile differences through consultation and negotiation (Björk, 2005; Björk & Gurley, 2005).

Unfortunately, there is very little empirical research on school boards in general. Björk (2000) discovered that some boards were remarkably consistent and resilient in their efforts to engage community interest groups, factions, and

citizens to successfully advance school district reform. On the other hand, Glass, Björk, and Brunner (2000) found that many school boards' primary expectations for superintendents have emphasized effective management of district affairs rather than instructional leadership or school change and reform. Louis and King (1993) discovered that educational reform efforts were *impeded* because the school board required teachers to share negative feedback about reform that potentially threatened the board's willingness to continue its support. Feuerstein and Dietrich (2003) found that local political turbulence and interest group conflict frequently impeded the ability of schools to implement state-initiated academic standards and testing.

Future Research

Although research on the micropolitics of educational change and reform has increased significantly during the past decade, much more work will be required on all aspects of this incredibly complex, dynamic, and unpredictable phenomenon, particularly research on central office administrators and school boards. We suggest that future research employ a broad theoretical perspective of micropolitics that requires, among other things, investigation of cooperative and conflictive processes, overt and covert forms of political activity, the activities of relevant stakeholders, and the impact of school context, including macro-level factors. Methodologically, it will be important to employ both quantitative and qualitative research approaches at this early stage of inquiry. We especially need long-term, retrospective studies (Hargreaves & Goodson, 2006), and also real-time observational studies at the school level to capture the dynamic interplay of micropolitical factors that evolve in situ and that transform change and reform efforts and outcomes in unpredictable ways (Stokes, 2000).

Studies of both successful and unsuccessful school change and reform initiatives would provide invaluable insights about related micropolitical configurations. Recently, the effects of NCLB and high stakes testing legislation in the United States have begun to emerge (Jennings & Rentner, 2006). It will be important to examine whether such heavy-handed, top-down, control-oriented approaches to school reform spawn the type of positive, facilitating school-based micropolitical processes and structures that appear to be essential to authentic school reform. The evidence from a range of other countries that have previously adopted similar measures and from states that had already adopted more centralized curriculum along with high stakes testing suggests that they will not (Hargreaves, 2003).

In addition, future micropolitical studies must devote greater attention to the historical and cultural context of schools (Blase, 1998; Chrispeels & Martin, 2002; Pillay, 2004), including gender, race, and ethnicity (Datnow, 1998). Unfortunately, individuals and groups often experience intense stress and strain stemming from educational change and reform; however, very little research has addressed this crucial aspect of micropolitics (see Troman & Boyle-White, Durham, Leithwood, etc.). Furthermore, few studies have attempted to uncover subtle and covert types

of micropolitics such as the politics of powerlessness by stakeholders who practice “silence” in the face of school change (Pillay, 2004). Both of these areas provide fertile ground for political research. Datnow (1998) found that micropolitics was the centerpiece to adoption processes preceding implementation (i.e., how schools decide whether to implement a change project or approach); this suggests that greater attention to such factors would be worthwhile.

Smith, et al. (2004) have argued that educational reform at all levels of the educational hierarchy and in varying degrees is, in large part, a “political spectacle”; that is, more symbolic than substantive. Using Edelman’s (1985, 1988) theory of political spectacle (which includes elements such as symbolic language, dramaturgy, illusions of rationality, democratic processes, and front-and-back stages), Smith et al. contend that political spectacle currently dominates American politics, and NCLB is but one conspicuous example of political spectacle. Needless to say, under such circumstances, authentic reform cannot be expected. Relatedly, Ball (2003) has discussed the relationship between educational change and reform as “spectacle” and performativity whose performances of organizations and individuals represent their respective value. Study of these fascinating phenomena would open new and exciting aspects of the micropolitics of educational change and reform.

Conclusion

This chapter has focused on micropolitical studies of change and reform at the school and district levels. In each case, micropolitics *impedes* or *facilitates* school change and reform. Our examination of the extant research underscores the dramatic transformative effects of micropolitical processes and structures on internally and externally initiated school change. To be sure, cracking open the black box of educational change and reform reveals stunning differences between the intent of educational reform policies and the reality of school-based implementation efforts. Our review also reveals that, generally speaking, uses of positive forms of micropolitics (e.g., empowering, collaborative, problem centered) by political stakeholders, such as teachers, school principals, and central office administrators, are associated with facilitating school change and reform. Conversely, uses of negative forms of micropolitics (i.e., controlling and self-serving) is associated with impeding school change and reform. There is little question on the fact that school-based micropolitics pervade all aspects of educational change and reform and have the potential to promote successful and/or unsuccessful change. Despite this conclusion, educational policy makers and school district and building-level school administrators frequently fail to adequately acknowledge or address micropolitical features of their work. Further, university-based administrator and teacher education programs typically do little or nothing to equip students with relevant micropolitical knowledge and skill.

For these and other reasons, decades of research indicate that successive iterations of reform have failed to produce significant, enduring changes in school improvement. Oakes et al. (2000) are not alone in contending that the educational

“reform mill” (p. 264) rarely delivers improvements in student achievement. “[It] grinds out reworked versions of the status quo that do little to address whatever initially motivated the reform. . . . [D]isappointed policy makers, the public, and educators judge the reform to be misguided, poorly implemented, or both; and the next reform, waiting in the wings with new funding or new leadership, takes center stage” (p. 264). Long ago, in commenting on educational change and reform, Sarason (1971) observed, “The more things change the more they remain the same” (p. 297). Recently, he declared, “the one thing that history of educational reform indisputably proves is that the more things change the more they do not remain the same but rather do or will get worse” (2004, p. 25).

Schools and school systems are political organizations in which power is an organizing feature. Ignore [power] relationships, leave unexamined their rationale, and the existing system will defeat efforts at reform. This will happen not because there is a grand conspiracy or because of mulish stubbornness in resisting change or because educators are uniquely unimaginative or uncreative (which they are not) but rather because recognizing and trying to change power relationships, especially in complicated, traditional institutions, is among the most complex tasks human beings can undertake (Sarason, 1990, p. 7.)

The implications are clear. As scholars we must substantially increase our efforts to understand micropolitics and educational change and reform. As policy makers, educational administrators and teachers we must learn to create the positive, robust type of political processes and structures in schools that lead to school improvement.

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Part II

Systemic Change

How Government, Professions and Citizens Combine to Drive Successful Educational Change

Michael Barber

For much of the twentieth century, the story of education systems in developed countries was one of expansion – universal elementary education, then universal secondary education, and finally major growth in post-secondary and higher education. Details of how this occurred varied from country to country, but no one doubted its importance. Underlying economic and social imperatives drove it forward. Even unskilled work in developed industrial economies benefitted from universal education. As the century unfolded, the nature of work became more technically demanding and more specialised, resulting in a demand for higher standards of basic education and a capacity for individuals to specialise and keep on learning.

From the late 1970s onwards, the technological revolution and globalisation accelerated the demand for an educated workforce, and from the early 1990s, with the end of the Cold War, these forces intensified. The premium for an individual of a good education and for a country of a good education system became ever more apparent. Governments, from the 1980s onwards, began to demand more of public education. They were no longer interested just in quantity; they wanted quality. Where once they had asked about numbers of places, now they asked about results.

Furthermore, changes in the economy also limited the extent to which governments could go on raising taxes to provide public education systems. Increasingly governments wanted improved results without necessarily a commensurate increase in investment. In any case, these economic pressures coincided with social pressures. The growing evidence that achievement was strongly correlated with social class (in England, for example) or with race (in the US, for example) led to demands from many quarters for improved performance. Thus, by the end of the twentieth century, in ways that had not been true 50 years earlier, the social and economic drivers of educational change reinforced each other.

Public education systems struggled to respond to these pressures. They had, after all, not been established with change in mind; still less with any sharp focus on

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results. When the then British prime minister James Callaghan made a speech about education in 1976, he felt obliged to explain himself because at the time it was an unusual thing to do. “There is nothing wrong,” he said, “with non-educationalists, even a prime minister, talking about education now and again.” His main point was clear:

In today’s world higher standards are demanded than were required yesterday and ...therefore we demand more from our schools than did our grandparents. (quoted in *The Learning Game*, pp. 33–34, Indigo, 1997)

In England, the need to understand educational change can be dated from that moment. In most of the developed world, it can be dated from around that time. Since then we have become much better informed than we were about the ingredients of successful educational change. The development of this knowledge began at the level of school.

In the 1980s, a series of major reports from outstanding academics, such as Rutter et al. (1979) and Mortimore (1988), gave us for the first time a clear definition of school effectiveness. The picture they painted then has been refined somewhat in the decades since but has not been substantially altered. Then, in the mid-1990s, the focus shifted from school effectiveness (what an effective school looks like) to school improvement (how to achieve effectiveness). Since then we have moved on again. Now research about whole education systems, not just individual schools, is reaching a similar point not least as a result of the development of well-founded international comparison. We are becoming much clearer about what effective systems look like. The current picture will surely be clarified and refined in decades to come, but the central question of educational change is this: What kind of reforms and what approaches to implementation will be most successful in enabling systems to *achieve* effectiveness? This debate is only just beginning, and there is much more to learn.

In this chapter, I will set out some admittedly early thinking on the question of system improvement based in part on the research, in part on debates of education reform in more than 20 countries around the world, and in part on my direct experience in England with both managing reform of the school system (from 1997 to 2001) and leading the prime minister’s Delivery Unit (from 2001 to 2005) for Tony Blair, which provided the opportunity to learn about reform of other large public systems such as health and policing. The value here is that while some of the knowledge about improving education systems will, of course, come from within education research, much, I believe, will also come from examination of the reform of large public systems in general. What they have in common may well be more important than their differences. In this chapter, I will do the following:

- Describe the three paradigms of public service reform – “twenty-first-century solutions” – which I have put forward in previous and recent publications, relating them throughout to education reform and giving examples from around the world.

- Extend the argument by analyzing the relationship between government and professions, a central issue in all education reform and one that the three paradigms on their own do not sufficiently explain.
- Draw some conclusions both for government and for leaders of education systems.

The first two sections draw heavily on my pamphlet *Three Paradigms of Public Sector Reform* (Barber, 2007), while the third and fourth parts draw similarly on the postscript in my book *Instruction to Deliver* (Barber, 2008a). This essay is also a refinement of my chapter in *Change Wars* (Barber, 2008b). The aim is to arrive at a first sketch of a complete theory of educational change.

Twenty-First-Century Solutions

How do we go about ensuring that the public services, especially education, are good enough that increasing numbers of wealthy people still choose them, thus binding them to the system and thereby securing the support to generate enough revenue to ensure both steadily improving performance and increasing equity? Successful efforts to create effective education, health, policing, and social security systems suggest that there are three paradigms for reform in large-scale systems, that each is suitable in different circumstances, and that, regardless of which approach is selected, the government at the centre of the system has a crucial role to play. I should say at the outset, therefore, that full-scale privatization has not been included as an option. While it is theoretically feasible, no government of a developed country has applied it to education for the good reason that while it might in theory deliver efficiencies, it would be entirely inconsistent with equity.

Three Paradigms for Large-Scale Public Service

There are three paradigms for the reform of any large-scale public service: command and control, devolution and transparency, and quasi-markets. Figure 1 shows these three paradigms.

Command and Control

Command and control is often the first choice of governments that want urgently to enact change – and to be seen to be enacting it. As the phrase implies, it involves top-down management approaches and conveys at least an impression of government taking charge. If executed well, it can be highly effective. Good examples of this paradigm include the UK government's National Literacy Strategy from 1997 to 2001 and its approach to reducing health service waiting times from 2000 to 2005. It should be noted, however, that there is nothing worse than command and control incompetently implemented.

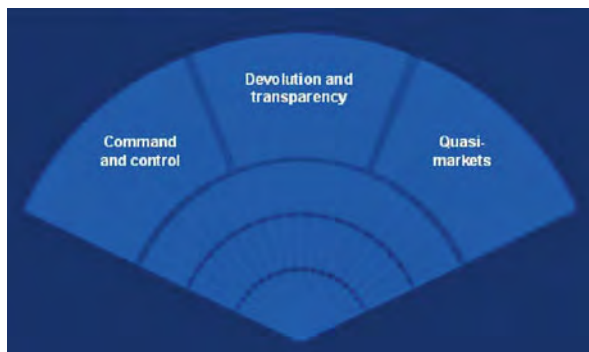


Fig. 1 Three choices for large-scale system reform

A refinement of this paradigm is also top-down, but it is built and designed much more explicitly in consultation and potentially in collaboration with other key stakeholders, such as teachers and local authorities. Perhaps, rather than top-down, it should be described as “government-led.” A good example of this is the education reform in Ontario since 2003, where educators have been successfully led by the government to pursue the moral purpose of higher standards of literacy and numeracy.

The danger of this variation is that it becomes a soft, pragmatic compromise and can therefore be ineffective. In Ontario, the existence of clear targets, strong emphasis on capacity building, and the fact that the strategy was a reaction to a period of bitterness and conflict have all contributed to avoiding such an outcome. The question faced there is whether in the next phase the government can build effectively on the strong foundations already laid, because as performance improves, further improvements may depend on greater specification of teaching approaches – always a sensitive issue in relations between the teaching profession and the government.

Quasi-Markets

The second paradigm is quasi-markets. Given the stunning gains in productivity and customer services brought about in recent decades by the global market economy and the difficulty governments have had in delivering improved public services, the idea of applying market forces to public systems without full-scale privatization has obvious attractions. Quasi-markets make the introduction of elements of the private sector feasible by introducing options such as retaining public control of the commissioning of services but having private or voluntary-sector providers deliver them. Examples include many IT systems in governments around the world and the use of independent-sector providers of routine operations in the UK health-care system, and private providers of public schools in Philadelphia, which, recent evidence suggests, have been modestly successful.

However, applying marketlike pressures within a public service is not always straight forward. One must be able to define a clear customer, offer customer choice, bring in new providers, and ensure that the use of money reflects the choices made by the customer. Charter school programs in New York State and California and voucher programs in Milwaukee, Wisconsin, and Florida are examples of quasi-markets in action. Evidence of impact is so far mixed, however, and success seems to depend on the precise design of the program. For example, Swedish education reform, which has brought in new providers and offered much greater choice, appears to have had modest positive effects, while the radical restructuring of England's National Health Service along quasi-market lines is bringing increasing evidence of positive impact. Meanwhile, evidence from the Organisation for Economic Co-operation and Development (OECD) – Programme for International Student Assessment (PISA) international comparisons of education systems in the developed world are neutral on the benefits or otherwise of quasi-market reforms.

What of situations in which a government wishes to reform a service without resorting to command and control, but where the conditions for the success of quasi-markets are not present? For example, in the provision of prisons, courts, or policing, it is either not possible or not desirable to define a customer and offer choice from a range of providers. In relation to education, a government may seek a means of improvement, but for political, ideological, or indeed pragmatic reasons, it may reject market thinking.

Devolution and Transparency

In the third paradigm, devolution and transparency, the government can devolve responsibility to the frontline units delivering the relevant service and then use transparency – making public the results in a way that allows comparisons to be made – to drive performance. Units that succeed can be rewarded and potentially expanded; failing units can be made subject to interventions and ultimately shut down. To work, this model depends on genuine devolution of operational control along with accountability. The benefits have been limited at best in some US school districts where accountability has been devolved to principals without offering them commensurate operational flexibility. The New Zealand school reforms of the early 1990s, those in Victoria, Australia, under the Kennett government of the late 1990s, and those in England from 1988 onwards are examples of this philosophy being applied to public education systems.

The model can operate in a fully public system – the most famous example being the New York City Police Department, where the Compstat process generated competition between precinct commanders – or within a service in which a mix of public and private providers compete on equal terms. “Compstat” became the term used for generating weekly data on each crime type for each precinct and then using that data to hold precinct commanders to account for their performance. This can also be done by separating payer and provider and encouraging competition for contracts offered by the government or its agencies. This approach has been widely adopted with

significant success in a variety of public services. Examples include the use of private prisons and the contracting out of local education services in the UK. It seems clear that this approach can only work if, in those cases where performance is very poor in specific schools or local systems in education, the government has both the will and means to intervene effectively. This is by no means straightforward, and many American states are struggling with this challenge as the impact of the No Child Left Behind legislation is increasingly felt.

Where fully applied, the devolution and transparency model has proved sufficiently beneficial that some informed commentators have suggested applying it fully to all government services (see Osborne & Hutchinson, 2004). Moreover, it has the advantage that it can be applied in combination with the quasi-market approach. For example, while the quasi-market approach has been put in place in some public school systems, it is important to acknowledge that it has limitations in this sector. In a true market, the customer may change providers regularly. But parents are naturally reluctant, for good reason, to change their child's school often. For this reason, market pressures on schools tend to be weak. If, however, as is the case in England, New Zealand, and Holland, devolution and transparency are also introduced, pressure for school improvement tends to be significantly strengthened. The evidence from OECD–PISA international comparisons, particularly its most recent report published in November 2007 (OECD, 2007), suggests that moves in favour of both devolution and transparency are generally associated with better performance – though of course much depends on the precise detail.

To some degree, these paradigms will be familiar to any government, and there is intense ideological and political debate about the merits of each. The truth is that each model is appropriate in different circumstances, and all may be deployed within a system, with the balance between them changing over time.

Changing Approaches for Changing Performance

In *Good to Great* (2001), Jim Collins explains the characteristics that distinguish great companies from good ones. More recently, in *Good to Great in the Social Sector* (2005), he explains that similar characteristics apply to all good organizations, regardless of whether they are in the business or social sector. Unfortunately, some organizations, including many of those that have historically been insulated from the pressures of the market, cannot yet call themselves “good.” In the UK prime minister's Delivery Unit, we developed an extended, four-point scale designed to encompass the full range of performance for the various public services whose improvement was sought (Fig. 2). The scale also suggests what the consumer reaction is likely to be at each point on the scale.

This categorization is crude but useful. Generally speaking, when services are “awful” and users are exiting the system, command and control solutions are appropriate. This is certainly true in a crisis, but it also applies in circumstances of endemic underperformance. In such cases, the public, and even the workforce

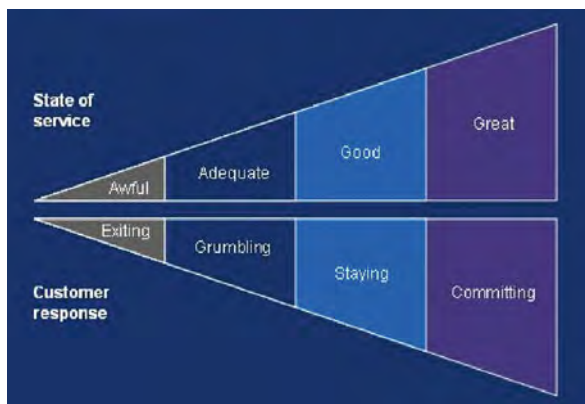


Fig. 2 A four-point scale for public services

within the service, will usually accept (albeit perhaps reluctantly) strong government intervention as long as it is effective. This is, after all, how the market handles bankrupt companies and how CEOs deal with underperforming companies. England’s National Literacy and Numeracy Strategies, for example, were justified by the fact that elementary school literacy had barely improved in the 50 years leading up to the mid-1990s and the country’s math standards lagged behind those in comparable countries.

Once adequate performance is established – which in itself is a huge task – the benefits of command and control are less clear. Governments find it hard to sustain the focus and drive on which command and control depends. Frontline leaders find themselves constrained by government regulation. Moreover, while shifting performance from “awful” to “adequate” is a substantial achievement, it does not satisfy the consumer, who continues to grumble until performance improves substantially. In the end, achieving “great” performance in the public sector requires unlocking the initiative, creativity, and motivation of leaders throughout the system, rather than just those at the top. This cannot be done without substantial devolution and/or providing the freedoms of a quasi-market. In short, as Joel Klein, Chancellor of the New York City School system, says, “You can mandate ‘awful’ to ‘adequate,’ but you cannot mandate ‘greatness’; it must be unleashed” (Barber, 2008a, p. 337).

The Role of Government

Reforming a large public service is a sophisticated challenge. Whichever paradigm is chosen, it will work only if three underlying roles are performed by government (Fig. 3): capability, capacity, and culture; performance management; and strategic direction.



Fig. 3 Three necessary underpinnings for reform

The first requirement relates to the capability, capacity, and culture of the service in question. This means that the people who provide the service must have or must acquire the right skills, sufficient resources must be allocated to get the job done, and an appropriate performance mindset must be established among those providing the service. The precise nature of the required mindset will differ depending on the stage of reform. The final section of this chapter debates this issue in depth.

The second requirement is that the government secures rigorous performance management. None of the three paradigms can work without it. Performance management starts with information: data on performance are essential so that service providers can see how they are doing and can benchmark their performance against others. The public, the ultimate funder of the service, also needs to see the return it is getting on its investment. Neither parents nor patients can exercise choice without good information. And as governments move away from command and control, the capacity to intervene when part of a service is underperforming, remains crucial. Again, this cannot be done without reliable, up-to-date information on performance. This explains why currently the development of refined and high-quality data systems is high on the list of priorities for many education systems.

Third, because public-service reform is complex and only possible over several years, strategic direction is necessary. Developing a good strategy is a sophisticated challenge for a large business. In a political environment, with all its attendant pressures, this challenge is even more daunting. A small, well-qualified, courageous group – a kind of “guiding coalition” (Kotter, 1996) must oversee the sequencing and implementation of reform. The group that oversees the education reform in Ontario is a fine example. Given the controversy such reform often generates, only a sustained, well-thought-out strategy will work. Moreover, those responsible need to learn as they go because not all outcomes can be anticipated. This means designing by learning rapidly what is working, what is not working, and how the environment is changing. In short, what the literature calls adaptive leadership (see Heifetz, 1994) needs to be exercised by this group. The support for the strategy should build over time, both within the public service itself and among the public.

Building on this kind of thinking, the UK prime minister's Strategy Unit in its recent document on the next stage of public service reform (Cabinet Office, 2008) suggests there are four essential roles for government.

1. Leading change
2. Guaranteeing standards and fairness
3. Investing for the long term
4. Capacity building and connecting

Leading change, the document explains, is similar to the description above of setting strategic direction. Guaranteeing standards and fairness describes a role for government in which, even in a largely good or great system, it would be willing to intervene to secure a minimum acceptable standard of performance or to guarantee fairness among different interest groups or sectors of the population.

Investing for the long term is an argument for ensuring the funding is in place not just for the current year but also for the strategic period ahead. There is no doubt that an investment perspective is critical to enabling long-term strategic change and funding systems that depend on sources of income liable to wild fluctuations (e.g., property taxes) are likely to be less successful. Similarly, the process for the allocation of funding is also critical – transparency and steadiness help.

Finally, capability building and connecting builds on the points made above about capacity, capability, and culture and emphasises in addition the important role government can play in connecting across service boundaries or between education and business, for example. In a democracy, government has a legitimacy in making these connections that no other actor has. The more it is able to develop trust-based relationships with key stakeholders, the more likely it is to succeed. Its store of political capital at any given moment will also be a factor influencing its ability to succeed.

Government and the Teaching Profession

The most critical relationship of all for successful educational change is that between government and the teaching professions. For example, there was some frustration among many teachers in England in the 1990s and early 2000s as the education reform unfolded, though it has now diminished. Even now, much more could be achieved if the relationship between the teaching profession and government was one that – in the word of the 2008 Ontario Education White Paper – “energized” all those involved.

The state of affairs in England's education system in the late 1980s and early 1990s was unacceptable; performance fell short of both public expectations and the demands of the economy, so reform was necessary. There is no doubt government made mistakes along the way – governments always will. But despite mistakes, the education service significantly improved in England, not just for pupils but also for teachers and other staff because of, not in spite of, the government's efforts. Test

scores are higher at primary level. Secondary school performance are also much improved. There are also far fewer pupils failing schools. Moreover, teachers are better supported, better trained, and better paid than ever before. No one faced with the facts can dispute this, but it does not solve the problem of the strained relationship between the teaching profession and government over that 20-year period; the question is whether we can learn from that experience – and parallel reform efforts elsewhere – to develop a conceptual framework for thinking about this relationship, which is at the heart of education reform.

Unless the relationship between teachers and government is soundly based, it is a problem for everyone. Such a strained relationship is a problem for government because the credibility with the public of a teacher will always be much higher than that of a minister or a civil servant and, more importantly, because well-motivated teachers will do a better job. It is a problem for the professionals themselves because if they are dissatisfied, their careers will be less rewarding than they might have been, and by suggesting to people that reform is not working, they undermine the long-term prospects of fully tax-funded services. Above all, it is a problem for citizens because even if it does not affect the quality of their services – which in some cases it might – they will often feel a sense of confusion about what is happening and where the services for which they pay their taxes are headed.

Part of the answer to this problem lies with globalisation and technology, which are transforming services of all kinds everywhere. Those who work in media and communications or financial services, for example, have seen their working lives and organizations transformed since the 1980s. This is true for many professions in the private sector – architects, accountants, and lawyers, for example – whose working methods have been changed utterly. Globalisation and technology influence services such as health, policing, and education, which are in the public sector, just as much as they shape those in the private sector. The difference is that in the public services, the changes that result are inevitably – precisely because the services are public – mediated through government. When governments urge educators to be “world class,” they are giving voice to what the global market demands in other services. When doctors struggle with the impact of technology on medicine, they are facing what the market drives in other sectors. When police try to keep pace with organized crime, they are competing directly with an endlessly innovating – albeit in this case illegal and immoral – global business.

Charles Clarke, former education secretary of England, makes this case in his chapter in *Public Matters: The Renewal of the Public Realm* (2007). He argues that technological and scientific innovation, empowered and assertive consumers, and growing concern about professional standards have dramatically changed the rules of the game and contributed to a mutual lack of confidence between government and the professions.

So when public service professionals complain that government has driven too much change, often the drivers (hidden though they might be) are these wider forces. This does not excuse a government from coming up with too many initiatives or making mistakes, but it does help to explain why governments around the world

generally want more change while simultaneously public service professionals complain about overload. Moreover, while it is true that there has been immense change in many education systems since the 1980s, it is not true that it is more than in many other sectors; indeed, it may overall have been less.

For example, one of the most glaring gaps between the public and business sectors is in the attitude to customers. Public service professionals still too often take customers for granted and expect them to be grateful; very few professionals in the business sector can afford to take this attitude. In another example, in relation to the widespread availability of information, many people are now able to be their own lawyer or doctor or teacher up to a point, thanks to the Internet. It is easy for the professional, once revered specifically for his or her expertise, to feel threatened or defensive in these circumstances – but in fact the existence of many better-informed citizens or customers is potentially a major gain. The challenge for teachers is to build unshakeable partnerships for performance with those they serve – that is, pupils and parents.

Consider performance data: Most teachers and head teachers I know hate published performance data, but this is the era of global media and freedom of information. University vice-chancellors do not like published data either, but *The Times* does, student websites do, and so do several outlets on a global basis. In Berlin recently, I saw that the front-page headline on the city's main paper related to a website which enabled schoolchildren to rank their teachers across the city. Comparative data will out. Moreover, citizens and customers demand data and will not give it up. The only question, therefore, for teachers is whether they would prefer government to organize and provide reliable, published comparative performance information – in which case there can be an ongoing dialogue with them about what is included and how it is presented – or a major media organization to do it instead – in which case there will be no such dialogue.

I emphasize this point because I believe that the two main drivers of teachers' frustration in England, as in the US, since the 1980s have been the pressures of accountability and the pace of change, yet both of these are ultimately spurred on not just by government but also by globalisation and technology. When government makes mistakes or suffers "initiative-itis," it compounds the problem. Government hugely influences how these forces play out, so of course it bears huge responsibility. But unless this bigger picture is understood, we will never unravel the complexities of the relationship between government and professions.

The central issue, therefore, beyond the competence of government, is how to construct a more effective relationship between government and teachers – one in which they develop a deeper understanding not just of each other's views of the world but also of the profound forces that are reshaping everyone's world and the implications of these forces for education.

In the first broadly successful phase of Blair's education reform between 1997 and 2000, one of the government's mistakes in relation to the teaching profession was, in the words of John Kotter, "undercommunicating the vision by a factor of 10 (or 100 or even 1,000)" (Kotter, 1996, p. 4) To be sure, the government wrote what was widely recognized to be an ambitious white paper and promoted it. It

consulted widely in its formation, too. It sent out pages of regulations and guidance on everything from the far-flung corners of school governance (unimportant) to the sequence of teaching phonics (vital). In what was widely seen as an innovation (remarkably), ministers and officials visited schools all the time. Alongside these efforts to communicate directly with the school workforce, government also ran a largely successful media strategy aimed, of course, at parents and taxpayers rather than teachers. The message here was that performance in the education system was not good enough, failure would be tackled vigorously, and poor schools would be closed. Parents and taxpayers heard and generally warmed to the message. The error was a simple and obvious one: Teachers read the newspapers like everyone else and heard the government's message to parents loud and clear; understandably they did not pay as much attention to the guidance and white papers so they did not necessarily understand the strategy or its moral purpose.

The government understood this challenge soon enough and began to respond. It reduced the paper going into schools dramatically, but obviously this did not convey the vision in the way Kotter suggests. It realized that in order to do this, it needed intermediaries. Government could not communicate directly with more than 400,000 teachers, so it focused on head teachers. For example, in September 2000, it took a road show around the country: five cities in 5 days, five hundred heads in each venue – like a band on tour. Ministers, leading officials, and successful head teachers explained the vision and the strategy and debated them vigorously with the very engaged participants. These events were a great step forward and valued greatly by those who attended, but what about Kotter's point? This was the boldest direct communication exercise ever attempted by the Department for Education in England up to that time, yet that week just 10% of head teachers in the country participated in the events.

The government needed the following: briefer, clearer, more memorable messages that resonated; to spend even more time than it did on the road; to integrate the media and direct communications approaches; to sustain the same messages for longer period; fewer distractions; constant, genuine interaction; and more intermediaries. The purpose, after all, was a better society – not, as many teachers understandably thought, hitting government targets. Others in addition to head teachers should have been effectively mobilized, such as local authority chief executives, chief education officers (now called Directors of Children's Services), and heads of university schools of education. Not all of these people would have agreed with the government by any means, but it would have greatly helped if they had understood.

I have spent some time discussing these communication efforts to make a more general point about the need to invest in much greater, deeper communication between professions and the government. Moreover, communication needs to be two way, interactive, and sustained. Much of policy in England from 1997 to 2000 was of the "shock therapy" variety. The government had set out to jolt a system from its comfort zone and deliver some results. It was largely successful, but could it have achieved what it did with a different approach, investing more deeply (and inevitably more slowly) in two-way communication early on? Or would it have lost

momentum and found the cutting edges bevelled off its policies? There is no easy answer to these uncomfortable questions.

This takes us back to the idea of a guiding coalition. It is necessary to have a small group at the centre of a change who know what they want to do and how they plan to go about it, but over time this group must widen. This is why Michael Fullan and I talk about “ever-widening circles of leadership;” the guiding coalition can stay at the centre, but it needs consciously and constantly to build leadership capacity throughout the service for which it is responsible. In Ontario’s education reform, this has been done well.

In the second Blair term, Estelle Morris began and then Charles Clarke and David Miliband completed a process of building a social partnership with teacher leaders. In return for active involvement in the policy process, the unions (all but one of them) agreed to greater flexibility in working practices. This inspired the foundation of something that could be much more radical; imagine a joint declaration that, for example, the teaching profession and government would strive to achieve world-class performance – defined and specified – with both accepting their share of responsibility for achieving it. This points the way to the next phase of my argument: What is needed is not just better communication, but a shared understanding of what is required to achieve world-class public services and a shared commitment, given the huge investment over the past decade in England (and still flowing, albeit more slowly, in the next decade), that this is what this country needs to see delivered. Making this happen will require courageous leadership – not just in government but also in the professions. Whether it will emerge remains to be seen, but given that the alternative, over a generation, could be frustration, conflict, disappointing performance, the flight from the public realm of those who can afford the private alternative, and thus a residual set of poor public services for poor people, it must be worth a try.

Moving Towards World-Class Education

In this final section, I want to set out a conceptual framework that might provide an underpinning for this long-term shared understanding between government and the professions. The basis of the framework is that the nature of reform and therefore the nature of the relationship between professions and government needs to change and adapt as services improve.

The starting point is the scale presented in Fig. 2. As discussed previously, this crude scale establishes four states: awful, adequate, good, and great. In terms of reform, it establishes three phases or transitions: (1) awful to adequate, (2) adequate to good, and (3) good to great.

My argument is that as systems pass through these three transitions, the nature of the relationship between government and the professions needs to adapt and the dialogue between them needs to develop accordingly.

To take a large education system through these three transitions is a major task by any standards. To take them all the way from “awful” to “great” is surely at least a decade’s work. Any government, along with its allies in the professions, needs to be committed for the long haul. Indeed, given the vagaries of democracy, it is always possible that governments of differing parties will be involved, as in the 1990s in education reforms in England, Texas, and North Carolina. Given the long timelines, the key is for those leading the reforms to have two timetables in mind: one leading to short-term results, and the other leading ultimately to world-class performance. Both are essential; the former because without short-term results, neither those within the system nor those using it will have any confidence that progress is being made, and the latter because world class is the ultimate goal. Thus, in the awful-to-adequate phase, it is right to emphasize reducing outright failure and achieving a jump in the next year’s test results, just as the management of a failing company must first stop leaking cash and then build some confidence among investors. The key, though, is to take these sometimes drastic actions in a way that does not undermine progress towards the long-term goal. For example, Michael Fullan and I emphasize in our conversations the importance of building the underlying capability and capacity of a workforce and a system through *every* policy (Barber, 2008a, p. 375).

Since 2003, the Government of Ontario has consciously modelled its strategy for improving literacy and numeracy in schools on our experience in England between 1997 and 2001, but it has also consciously varied the strategy, with greater emphasis on partnership, less prescription, fewer “distracters” (as they call them), and a language about capacity building and sustainability. They still have targets, but the government does not publish league tables (it leaves that to the newspapers), which means it can deflect this criticism. Interestingly, the results so far in Ontario are very similar to that in England – really substantial progress beginning to plateau, but so far not enough to hit an ambitious target. The test will be whether in the next phase they can avoid the long plateau seen in England. I believe they have a strong chance, partly because performance in Ontario was already better than in England when they began, so shock therapy was not judged necessary, and partly because leaders there have been careful to bear the long term in mind throughout the first phase. It will depend whether it can sustain partnership as the strategy becomes more precise and specific. Certainly, the dialogue throughout with the teacher unions, principals, and school boards has been focused on building partnership and appears to have developed and sustained a shared sense of moral purpose.

This is just one interesting contrast. On the basis of education reforms such as these in other countries and my own experience in England in health and policing as well as education, it is possible to set out a framework for the changing nature of the dialogue that moves the conversation on as the system goes through the transitions towards world class. The basic premise is that awful-to-adequate phase may involve shock therapy and therefore a top-down approach, but the further you move towards world class, the less a government’s role is prescriptive, and the more it becomes enabling. Meanwhile, the professions need to move in the other direction to, at the world-class end, leading or driving the reform.

Table 1 How the relationship between government and professions could transform public service

Phase of development	Awful to Adequate	Adequate to Good	Good to Great
Chief focus of system	Tackling under-performance	Improvement	World-class performance
Role of Government	Prescribing	Regulating	Enabling
Role of profession	Implementing	Accommodating	Leading
Nature of relationship	Top-down and antagonistic	Negotiated and pragmatic	Principled and strategic
Time horizon	Immediate	Medium-term	Continuous
Chief outcomes	Reduced failure	Uneven improvement	Consistent quality
What citizens think	Reduced anxiety	Growing satisfaction	Active engagement

At the outset, though, we need some understanding of what it takes to be world class. In education, we have this knowledge from a series of international benchmarking studies. What marks out the best systems in the world is that they recruit great people into teaching and invest in their skills effectively both at the start of their careers and throughout them so that they teach lessons of consistently high quality.

This consistency is crucial, and it begins and ends in teachers’ classrooms. In other words, it can only be brought about by frontline professionals who share the mission, benefit from excellent management, and are given the tools and incentives to deliver consistent high quality by an enabling government. With this background, then, the framework described in Table 1 can be developed as the starting point for dialogue.

At the very least, a framework such as this could provide a common language for the dialogue between government and the professions. That alone would be a major improvement on talking past each other, which has seemed so common in many countries. Two factors should enable it. The first is that even when a system is awful, there are plenty of head teachers and teachers who are doing an outstanding job. Right from the outset, government needs to foster a strong relationship with those in any service who are out in front. If these school leaders can express impatience with the slow pace of change, it helps to counterbalance the drag effect of those who want to slow things down. Indeed, this alliance with successful leaders is a key part of that process of building ever-widening circles of leadership, as previously mentioned. The second enabling factor is the vastly improved information



Fig. 4 World class performance

available about the performance of public services. These data – everything from the published performance data to the growing range of international benchmarks – provide (and in the future will provide even better) the evidence base on which to have this conversation. Charles Clarke, former secretary of state for education in England, argues that part of the new relationship would need to be long-term pay settlements, which are both more flexible and more explicit about professionals’ responsibilities to develop their skills continuously, with government accepting responsibility for making this possible. The 3-year pay settlement for teachers in England announced in January 2008 may point the way. In Ontario, similarly, a long-term (4 year) pay deal was agreed upon in 2005 as a conscious step towards removing a “distracter.”

New insights into this set of questions appear in a recent publication (Cabinet Office, 2008) from the prime minister’s Strategy Unit in the UK, which establishes a conceptual framework for the next stage of reform of the public services in the UK, as illustrated in Fig. 4.

The document argues powerfully that whereas in the last decade the relationship between government and professions has been the chief focus of reform, in the next decade the relationship between citizens and professionals will become central.

To quote, *Excellence and Fairness* argues:

“We know that services need clear standards but that, following our first phase of reform, persisting with too many top-down targets can be counterproductive; we know services must value professionals if we are to foster innovation and excellence; we know that while central government must be a key player in driving better public services there are limits to what it can achieve and if it seeks to do too much it will stifle local initiative; and we know that vital though user choice is, it needs to be complemented with other approaches if we are really to empower citizens. So our established strategies now need to be accompanied by a new phase of reform:

- Developing new approaches to *empowering citizens* who use public services: both extending choice and complementing it with more direct forms of individual control, such as personal budgets in areas like care; opportunities for people to do more themselves, such as manage their own health; stronger local accountability, such as directly-elected police representatives; and providing greater transparency of performance.
- Fostering a *new professionalism* across the whole public service workforce, from the dinner lady to the head teacher, from the hospital porter to the consultant. This combines increased responsiveness to users, consistent quality in day-to-day practices and higher levels of autonomy from central government wherever those at the front line show the ambition and capacity to excel and greater investment in workforce skills.
- Providing strong *strategic leadership* from central government to ensure that direct intervention is more sharply concentrated on underperforming organisations, while the conditions are created for the majority to thrive more autonomously.”

Whether this precise mix is appropriate for every country, the direction is likely to be similar across the developed world and will increase the need to establish a principled relationship between government and public service professionals. The demand for public services of real quality that are available to all is overwhelming; those who work in the public services would surely prefer to be more motivated and more successful (rather than less), while governments in the next decade will find they need to sign up to this vision too if they are to succeed in meeting bold aspirations. Without something along these lines, we are likely to see public education systems collectively – government and the school workforce – fail to implement reform successfully or to communicate to the users and to those who pay for the services where they are heading and how they are doing. As a consequence, a spiral of decline would set in. If government and the teaching profession aim their messages only at each other and appear to be at loggerheads, then the public will inevitably be both sceptical and confused.

If instead they combine in implementation and communication, they could be unstoppable. Easy to say, but very hard to do in practice, since this will require major culture change all round. It will require professions that embrace transparency, recognize the value of consistently high-quality and reliable processes, as well as personalization, and instead of saying “slow down,” they would promote greater urgency. It will require governments to engage in constant, informed dialogue, stick to priorities, avoid gimmicks, and admit mistakes. Delivering sustained system improvement and consistent world-class performance will be an exacting challenge for whole systems. System leaders around the world are just beginning to understand what it will take.

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Educational Change and Demographic Change: Immigration and the Role of Educational Leadership

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Although the United States is a nation of immigrants, having been populated largely through waves of migration by people from nations and territories throughout the world (people of African and indigenous descent being the most notable exceptions to this pattern), immigration has historically been a source of controversy and conflict. Throughout American history, each wave of immigration has been greeted by hostility, discrimination, and, in some cases, fierce opposition from groups who arrived not long before. In each case, the right of new migrants to settle and reside in the United States has been challenged both on the basis of the perceived threat they posed to the economic security and well-being of those who came before and on the basis of their presumed cultural incompatibility with American social norms (Roediger, 1991). Ironically, even groups that today seem to be completely accepted and integrated within the social fabric of American society – Germans, Italians, Irish, and Jews – were once subjected to attacks and concerted opposition to their entry and settlement by others that charged they were unwanted and “unassimilable” (Brodtkin, 1992; Takaki, 1989).

This chapter examines the factors influencing how schools are responding to the demographic changes that are being brought about as a result of immigration. It focuses upon what educational leaders can do to address some of the educational controversies that often accompany demographic change. It will show that while many of the controversies that schools find themselves confronting are framed around questions related to language acquisition (English immersion vs. bilingual education) and to a lesser degree tracking (due to the tendency to place English-language learners (ELLs) in non-college prep classes) and student achievement, concerns and unease related to the changing nature of the American population are often at the root of these conflicts. Current trends suggest that as immigrants settle in communities throughout the United States and begin to transform the social landscape of American society, controversies over what role schools should play

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in integrating the children of immigrants and shaping the future of American society will become increasingly intense. Educational leaders who understand how to address the educational needs of immigrant students will be in a better position to respond to these controversies, and their leadership may prove to be extremely important to communities that are grappling with the changes that result from the arrival of new immigrants.

Many of the approaches described in this chapter for addressing the needs of immigrant students are entirely unaddressed by the predominant theories of educational change that are promulgated by mainstream educational researchers. In a departure from these technical approaches to leadership, the ideas presented here are part of a growing body of the theories-in-action literature which advocate an approach to narrowing of achievement gaps, examining achievement data, structuring literacy strategies, and employing various combinations of pressure and support to immigrant students in a manner that takes account of the dynamic nature of change in the social context that impacts schools and student learning (Bryk & Schnieder, 2003; Lipman, 2002; Noguera, 2004). Unlike educational theories that ignore ethnic, socio-economic, and linguistic differences among students, this chapter was written with the explicit purpose of providing concrete recommendations to educational leaders regarding what they can do to play a positive and supportive role in helping their schools and the larger society adjust to and capitalize on inevitable demographic change.

Understanding the New Immigration

Most demographers and economists predict that no matter how many guards are deployed at the southern border or how high the fences are erected, immigrants, both legal and undocumented, will continue to find ways to enter the United States.¹ As my colleague Marcelo Suarez-Orozco has put it, “[I]mmigration is not only our past, it is our destiny”.² Since 1990, the United States has experienced the greatest influx of immigrants in its history (Suarez-Orozco & Suarez-Orozco, 2001), and once again, it finds itself embroiled in a bitter conflict over whether or not the new arrivals, particularly the undocumented, have a right to remain. Public schools find themselves at the center of the nation’s controversy over the rights of immigrant children because unlike other institutions that can deny undocumented immigrants access to services, the Supreme Court has repeatedly ruled that public schools cannot (Fass, 2007; Rothstein, 1994). Historically, public schools in the United States have served as the primary institution responsible for integrating and assimilating waves of immigrant children (Fass, 1989; Olsen, 2000). Once again, they have been

¹For an example of such a prediction, see Clark (1998).

²Marcelo and Carola Suarez-Orozco (2001) are some of the leading scholars on the education of immigrant children. For a discussion of how immigrant children are faring in the nation’s public schools, see Kao and Tienda (1998) and Olsen (2000).

called upon to carry out this important task, particularly with respect to ensuring that immigrant children learn the English language. During the current period, schools must figure out how best to serve the needs of immigrant children within an increasingly hostile political climate. In such a context, educating a new generation of immigrant children has become a highly politicized project in many communities, and not surprisingly, many schools find themselves at a loss for how best to meet the educational needs of the immigrant children they serve.

Economic forces are largely responsible for driving the current influx of immigrants, and these forces work in two different directions. South of the border there is the ongoing reality of widespread poverty, gross inequity, unemployment, and underdevelopment in the Caribbean and Latin America, most especially Mexico, that serves as the primary *push* factor prompting migration. Liberalized trade policies such as NAFTA have in some cases contributed to economic hardships in the region and prompted large numbers of displaced farmers to migrate north.³ Others have been prompted to leave their home countries by war, natural disasters, and political unrest. Even in nations like Mexico, Columbia, Peru, and Trinidad where economic growth has occurred, the inequitable distribution of resources and wealth has driven the poor to find ways to migrate to the United States in pursuit of economic opportunity. Undoubtedly, for as long as imbalances in wealth and living standards between rich and poor regions of the world remain unaddressed, it appears unlikely that current trends will reverse.⁴

On the other side of the immigration equation lie the *pull* factors that draw immigrants to the United States, and for that matter other wealthy nations. First and foremost are the insatiable demands of the US economy for cheap labor. Several sectors of the US economy including agriculture, construction, food processing, hotels and restaurants, and healthcare are highly dependent upon legal and undocumented immigrant labor. The unwillingness of the US Congress to adopt laws that would legalize the movement of labor across borders has not prevented foreign workers from finding ways to secure jobs in industries desperate for their services. It is for this reason that some of the strongest proponents of a more liberal immigration policy have come from business organizations in the private sector. In addition to the search for jobs, once immigrants settle in an area their presence creates its own dynamic. Family unification is another major factor prompting immigration, as is news of opportunity in a new land in communities of origin (Valdez, 1999). The settlement of immigrants is never a random process. When immigrants move into a community, it is almost always because they have followed a path, a network, or

³For a discussion of how liberal trade policies such as NAFTA have contributed to migration from Latin America to the United States, see "Immigrants Come Here Because Globalization Took Their Jobs Back There" by Jim Hightower in *Lowdown*, February 7, 2008.

⁴Imbalance in wealth and the lack of economic opportunity in other parts of the Third World are also responsible for migration to Europe as well as internal migration in nations such as China and Russia. See *Many Globalizations* by Peter Berger and Samuel Huntington (London: Oxford University Press, 2002).

a channel created by those who arrive first or the employers who have drawn them there.

The current backlash against immigrants ignores the push–pull factors that drive demographic change. Instead, it appears that much of the opposition to immigration is due to two other significant considerations: (1) the greatest number of immigrants coming to the United States today are non-white and do not speak English as their first language. Their presence is transforming the racial and ethnic makeup of several communities (Suarez-Orozco & Suarez-Orozco, 2008); and (2) in some sectors, immigrant labor is being used to displace US-born workers because they can be paid substantially less (Valenzuela, 1999). Television commentator Lou Dobbs has emerged as one of the leading spokespersons of the backlash against immigration, and though he and other opponents of immigration often claim that their hostility is directed at illegal immigration and not immigrants generally, they typically refuse to acknowledge that the hostility is increasingly directed at foreigners generally. In fact, many of the punitive laws adopted by local governments and much of the harassment and even overt violence carried out by vigilantes have been directed at Latinos.⁵ In an act of remarkable hypocrisy, several prominent figures in both major political parties have attempted to curry favor among anti-immigration groups and have used rhetoric that has contributed to the attacks upon immigrants, even as they have also courted Latino voters. Similarly, no one within the federal government has publicly acknowledged the duplicity of the preoccupation with border security as it proceeds with the construction of a fence on the Mexican border while the longer Canadian border remains largely open and unobstructed.

Lurking in the background of the political debate over immigration is the growing awareness that by the year 2050 individuals regarded as “white” will no longer constitute the majority of US population.⁶ While a small number of racist organizations openly express alarm over this impending transformation, most mainstream politicians and civic groups generally do not. Instead, leaders like US Congressman Tom Tancredo, former Massachusetts Governor Mitt Romney, and Lou Dobbs frame their opposition to illegal immigration as a matter of national security, as a concern that immigrants are taking jobs from American citizens, and as an alarm that American identity and the English language are threatened by immigrants who refuse to assimilate.

While some of those expressing such concerns may legitimately fear the changes brought about by immigration, it is also true that the new immigration has evoked a backlash because it differs from previous patterns in two important respects. First, prior to the Immigration Act of 1965, the majority of immigrants settling in the United States came from Europe, and while many European immigrants experienced

⁵For a discussion of some of the attacks against new immigrants, legal and undocumented, by local governments and vigilante groups such as the Minute Men, see Chavez (2008)

⁶For a discussion of demographic trends and the emerging non-white majority, see the *California Cauldron* by Clark (1998). I use the term “regarded as white” because these racial classifications are not universally accepted and are subject to change over time. For a discussion of race as a social and political category, see *Racial Formation in the United States* by Omi and Winant (1986).

hostility and discrimination, today, few question their claims to citizenship in the United States. Since 1965, the overwhelming majority of new immigrants have been from Latin America and Asia, and though many Asians and Latinos have resided in the United States for generations, it is not uncommon for their citizenship to be questioned. As historian Ron Takaki has said with reference to Asian Americans, many are treated as though they are “forever foreign” (Takaki, 1989) because of a pervasive assumption that a person of Asian origin cannot be an “American”. A similar argument could be made regarding dark-skinned Latinos, who often experience a greater degree of discrimination and racial bias in schools and the workplace due to their phenotype (Fergus, 2004).

Additionally, whereas the settlement of new immigrants was once largely confined to the major cities on the east and west coasts, today immigrants are settling throughout the nation, in small towns, suburbs, and rural areas, wherever the demand for their labor is greatest. As they arrive in large numbers, immigrants invariably change the character of the communities, schools, churches, and workplaces where they reside. Even when they settle in communities where their labor is needed, in many cases their presence still generates conflict and tension with those who feel threatened or displaced by their presence. In many communities, older residents resent the changes that occur as immigrants who speak different languages and practice different customs transform the environment and local institutions. Even though there is considerable evidence that immigrants generally contribute more to local economies than they take and have been responsible for revitalizing a number of depressed cities and towns, many Americans still express opposition to allowing them to settle in this country.⁷

Though it is rarely discussed publicly, much of this backlash appears to be related to race, or more precisely to racism. Though there is ample evidence that a number of undocumented immigrants from Ireland and Canada reside in the United States, there have been no reports of immigration raids targeting these groups. Instead, in communities throughout the United States, Latinos have been the primary targets of political attacks against illegal immigration (Lovato, 2008). Documenting recent attacks against Mexican immigrants in Georgia and the complicity in these attacks by elected public officials, journalist Roberto Lovato writes,

... the surge in Latino migration (the Southeast is home to the fastest-growing Latino population in the United States) is moving many of the institutions and actors responsible for enforcing Jim Crow to resurrect and reconfigure themselves in line with new demographics. Along with the almost daily arrests, raids and home invasions by federal, state and other authorities, newly resurgent civilian groups like the Ku Klux Klan, in addition to more than 144 new “nativist extremist” groups and 300 anti-immigrant organizations born in the past three years, mostly based in the south, are harassing immigrants as a way to grow their ranks. (2008, p. 33)

While much of the hostility toward immigrants has been manifest in white communities, there have also been sporadic acts of violence directed at immigrants in

⁷For a discussion of how immigrants contribute to local economies, see Portes and Rumbaut (2002) and Riech (1992).

several historically African American communities. Particularly in Los Angeles and other communities throughout southern California, there has been a significant increase in violence and tension between recent Latino immigrants and older Black residents.⁸ Though both groups share a history of experiencing discrimination and racial injustice, in many communities they find themselves competing for jobs, services, political office, and control over the public schools.

Today, US immigration policy, or more precisely the question of how to control the borders and what to do about the estimated 12 million undocumented immigrants who now reside in the United States, has emerged as one of the most potent political issues of the 2008 electoral season. Against this backdrop, how public schools will be affected and respond to the changes brought about by immigration and the backlash to it will increasingly be a subject that educational leaders will not be able to avoid.

What Schools Can Do

Just as they have in the past with other immigrant groups, public schools will continue to serve as the primary institutions of socialization and support for immigrant children today (Katznelson & Weir, 1994). Given the growing hostility toward immigrants and their families (particularly the undocumented) and given the vast array of needs the poor immigrant children bring with them (i.e., they are more likely than other children to lack health insurance),⁹ providing immigrant students with a quality education that prepares them adequately for life in this country will require an expansive vision and commitment to enacting policies and programs that support the education and well-being of immigrant youth. The following is a brief listing of some of the strategies schools can adopt to meet the needs of the immigrant students they serve:

(1) Provide Support as Students Acculturate

Unlike their parents who arrived in the United States with their identities intact, immigrant youth often find themselves caught between two worlds, neither fully American nor fully part of the country of their parents (Jiobu, 1988). Many also arrive without having received formal education in their countries of origin. Such children are often not literate in their native language and, consequently, experience greater difficulty learning academic English (August & Shanahan, 2006; García, Wilkenson, & Ortiz, 1995). As they go through this

⁸For a discussion of the factors influencing racial conflict between African Americans and Latino immigrants in southern California, see "Beyond the Racial Divide: Perceptions of Minority Residents on Coalition Building in South Los Angeles" in TRPI Policy Brief, June 2007.

⁹For a discussion of the health challenges confronting immigrant children and their families, see Guendelman, Schauffler and Pearl (2001) and Capps, Fix, Ost, Reardon-Anderson and Passel (2004).

difficult acculturation process, immigrant youth are often susceptible to a variety of hardships and pressures that many adults, including their parents, do not fully understand. Some of these pressures include the following: a tendency to become alienated from adults and to be drawn toward gangs or groups involved with criminal activity, teen pregnancy, or dropping out of school altogether (Garcia, 2001; Zentella, 2002). Certainly, there are many immigrant youth that manage to avoid these pressures. In fact, in some schools, immigrant students are among the highest achievers, especially if they come to the United States as literates, with several years of education in the previous country, or from highly educated parents (August & Hakuta, 1997; Cummins, 1981; Kao & Tienda, 1998). However, for those whose parents are struggling financially and particularly for children of undocumented parents, the challenges they encounter both within and outside of school can be quite formidable.

Educators can respond to these challenges and mitigate the effects of hostility in the external environment in a variety of ways. For example, research has shown that one of the most effective means to counter the influence of gangs is to provide young people who may be susceptible to recruitment with a variety of extracurricular activities (that appeal to their interests to join) (Coltin, 1999). Additionally, scholars such as Ricardo Stanton Salazar (2001) and Angela Valenzuela (1999) have shown that when schools hire caring adults as teachers, counselors, and administrators – at least some of whom are from backgrounds that are similar to those of their students – they can have a positive effect on achievement, graduation, and college attendance. Such individuals can help in generating the kinds of social capital that middle-class students typically have access to by opening doors to internships, jobs, and various social services and by writing recommendations for admission to college (Bryk & Schneider, 2003).

(2) Address the Needs of Transnational Families

Immigration often compels families to make tough choices about who will leave and who will remain, and these choices often take a toll on families. When the decision to leave is made, some families are forced to separate and leave children or even a parent behind, often with the hope that with time, reunification will be possible. The development of transnational families, separated by borders and thousands of miles, often results in children experiencing disruptions in school attendance (Ada, 1988). To ensure that relationships are maintained, usually immigrant parents send a child to their country of origin for 6 weeks during the middle of the school year. For educators who are concerned with academic progress, such a choice might seem nonsensical and even negligent, but to a family that is coping with the hardships caused by separation, such choices may be the only way to maintain the bonds of family.

Migrant workers often return to Mexico for several weeks during the winter because there is no work available during the non-growing season. Although they generally return to their jobs, it is often the case that their children lose instruction and may even lose their seats in classrooms because of adjustments that are made during their absence. Those interested in supporting immigrant

youth and their families must at the minimum demonstrate a capacity to understand the difficult choices transnational families face (Olsen, 2000). Finding ways to help reduce the strains caused by separation, while minimizing the losses in learning associated with extended absences, is an important pedagogical consideration for schools that serve large populations of Latino immigrant youth.

A growing number of schools have adopted strategies to support Latino youth who miss extended amounts of time because they are part of transnational families. For example, one elementary school in Los Angeles modified the academic year so that students could take off for 4 weeks at the end of December and beginning of January. An additional 2 weeks of school was added to the end of the year to make sure that students do not miss out on instruction (Gullatt & Lofton, 1996). A school in Texas located near the Mexican border established a cooperative relationship with a Mexican school across the border to ensure that its students received similar instruction in school while they are in Mexico. Finally, several schools in Miami and New York that serve immigrant youth, whose parents reside in the Caribbean, have hired social workers who are familiar with students' living arrangements and who can provide additional social and emotional support to youth in need (Ada, 1988). Such measures do not eliminate the difficulties experienced by immigrant youth who are separated from their families, but they do help to lessen the hardships they endure and demonstrate that the school is not interested in punishing students for a situation they cannot control. Employing staff with language and cultural skills to work effectively with immigrant youth and their families is also of vital importance, if trust and respect between home and school are to be established (Fix & Zimmermann, 2001; Valdez, 1999).

(3) Develop Full-Service Community Schools

Several schools that serve low-income immigrant students have adopted a community school approach to meeting student needs. The community school approach is an idea that can be traced back to the early writings of John Dewey. It is premised on the notion that the conditions for academic learning must include attention to the cognitive, emotional, social, physical, and moral development of children (Bronfenbrenner, 1979, 1988). The current movement of community schools began in the late 1980s when various organizations (e.g., Children's Aid Society, Communities In Schools, Beacon Schools) embarked on a reform strategy aimed at forming concrete relationships between schools and non-profit service organizations in school districts throughout the country. The initial rationale for these community school partnerships was based upon the recognition that the nutritional, mental health, and physical needs of low-income children are primary developmental issues that impact learning. In most cases, schools cannot respond to this broad array of needs without additional support (Dryfoos, Quinn, & Barkin, 2005). During the late 1980s and throughout the 1990s, the unmet social needs of poor children were exacerbated by changes in state and federal policies (e.g., Welfare to Work) that had the effect of compounding many of the difficulties facing poor children and their

families and overwhelmed community and school-based resources (Hayes-Bautista, 2002). The combination of these trends has made it increasingly clear that high-poverty schools are in need of assistance.

A number of schools serving low-income immigrant children have adopted the community school approach, sometimes called the full-service school. Schools such as Edison Elementary in Portchester, New York, and Henshaw Middle School in Modesto, California, have shown that when immigrant children are provided with access social services schools can do a better job at meeting their academic needs (Hall, Yohalem, Tolman, & Wilson, 2003). Many community schools maintain a full-time licensed social worker, and for some community schools like the ones operated by the Children's Aid Society, mental health services or wellness centers are staffed by two to four social workers and a part-time psychologist. Community schools also enlist health professionals, such as dentists, optometrists, and nurse practitioners, which allows students to receive their annual physicals and prescriptions on the school site. Additionally, community schools provide an extensive after-school programs that include academic enrichment and recreation. Many community schools also attempt to extend their services to parents and families by providing adult education classes in the evening and weekends. All of these services occur in schools that typically operate 10–12 h per day and 6 or 7 days a week. While the overall number of community schools remains quite low, recognition of the need to address the developmental domains of children (i.e., cognitive, social, emotional, moral, and physical) in the social institution in which they are most influenced and spend majority of their developing years continues (Epstein et al., 2002). There is also evidence that addressing the social, emotional, and health needs of children can also have a positive impact on their academic performance (Coltin, 1999).

Creating a community school generally requires resourcefulness and creativity on the part of the staff and administration. Principals who are entrepreneurial generally take the lead in establishing partnerships with non-profits, local government agencies and community groups to meet the needs of the students and families they serve. Additionally, community schools focus on building a sense of community by engaging parents as partners and providing workshops to them on topics that meet their needs.

(4) Make Sure that English-Language Learners Are Not Prevented from Enrolling in College Preparatory Courses

In many schools that serve recent immigrant students, a student's inability to speak fluent English, or more precisely to display a command over academic literacy, is used as a justification for locating the student in courses designated for ELLs. While such placements are generally warranted to ensure that recent immigrant students learn English, in too many schools, ESL (English as a Second Language) and other language support courses serve as a means of tracking ELLs into courses that fail to prepare them for college. To make matters worse, in many cases such courses also fail to provide students with the ability to acquire proficiency in English even after several years of placement.

Tracking on the basis of language difference is one of the factors that has been cited by researchers as contributing to the high drop-out rates that are common among recent immigrant students (Orfield et al., 2005).

Educational leaders can ensure that students learning English are not denied the opportunity to enroll in rigorous college prep courses by providing the teachers in such courses with training on how to work with ELLs. Professional development in sheltered English is one strategy that schools have used to effectively address the needs of ELLs in mainstream courses (Ruiz deValasco, Fix, & Clewell, 2001). More importantly, the schools that have demonstrated the greatest success in meeting the needs of ELLs make a deliberate effort to hire staff who can speak the language spoken by their students. Obviously, many schools are unable to make major changes in personnel in the short term and even those that are able to hire new faculty may have trouble recruiting bi-lingual teachers. Still, to the degree that educational leaders recognize the importance of providing all of their students with an education that prepares them for life beyond high school, they will find ways to ensure that their staff develops the capacity to meet the educational needs of the students they serve and will not allow their inability to speak English to be a permanent obstacle.

Immigration and America's Future

Like many immigrants today, earlier generations of European immigrants encountered hardships and discrimination. Despite the hostility they encountered, these groups gradually improved their social conditions and experienced the social mobility promised by the American Dream.

Schools played a major role in facilitating their social mobility by imparting the academic skills and the cultural competence needed to climb the economic ladder. Of course, social mobility often came with a price and some sacrifice. Many European immigrants found it necessary to abandon their native languages, to give up their cultures, and in many cases to "Anglocize" their names (Fass, 1989; Jiobu, 1988). For these groups, assimilation made social mobility possible, and over time, the early stigmas and hardships were gradually overcome (Glazer & Moynihan, 1963). Unlike many European countries where immigrants have never been fully accepted, in the United States groups that were once perceived as ethnically inferior were gradually accepted as full-fledged white Americans (Brodin, 1999; Roediger, 1991).

The situation is very different for Latino immigrants and their children. Although Latinos represent the fastest growing segment of the US population and are now the largest minority group, it is not clear that the future will be as bright and promising for them as it was for European immigrants of the past. Globalization and de-industrialization have contributed to a worsening of circumstances for low-skilled Latino immigrants. Ironically, Latinos now constitute the ethnic group least likely to be unemployed, but most likely to be impoverished (Smith, 2002). This is

occurring because Latinos are generally concentrated in the lowest paying jobs and many lack the skills and education needed to seek better paying alternatives (Smith, 2002). Unlike European immigrants whose offspring reaped the rewards from the sacrifices of earlier generations, Latino immigrants are not experiencing a similar degree of success (Portes & Rumbaut, 2002).

Despite having been present in the United States for centuries, Latinos are over-represented among the ranks of the poor and low-income groups, and at least part of the reason for this is the pervasiveness of racialized inequalities, particularly within education. Today, Latino youth are more likely than any other ethnic group to be enrolled in schools that are not only segregated by race, but by class as well (Orfield & Eaton, 1996). In cities such as New York, Los Angeles, and Chicago, where Latino youth comprise the majority of the school-age population, they are disproportionately assigned to schools that are over-crowded, under-funded, and woefully inadequate on matters related to educational quality (Garcia, 2001; Noguera, 2003, 2004; Oakes, 2002). Latino youth also have the highest high school dropout rates and lowest rates for college attendance (Garcia, 2001). In general, they are over-represented in most categories of crisis and failure (i.e., suspensions and expulsions, special education placements), while underrepresented in those of success (i.e., honors and gifted and talented classes) (Meier & Stewart, 1991).

Yet, in my work with schools, I often hear from administrators who speak favorably of the conduct of Latino immigrant students.¹⁰ Though not all are described as studious, most are characterized as well behaved, courteous and deferential toward adults. Beyond focusing on their behavior, educators must make sure that Latino immigrant students are not over-represented in remedial classes and Special Education, nor trapped in ESL classes that bar them from courses that prepare students for college.

Like their parents, many immigrant youth have the drive, the work ethic and the persistence to take advantage of opportunities that come their way (Kao & Tienda, 1998). Of course, it is risky to generalize or to overstate the importance of will and work ethic. For immigrant youth who live in communities where economic and social opportunities are limited and who have no ability to control basic circumstances that shape the opportunities available to them – namely, the schools they attend, the neighborhoods where they live, or the hostility of others to their presence – will and determination may not suffice. In fact, research on the socialization of immigrant youth shows that in a reversal of past patterns, assimilation no longer serves as the pathway into mainstream American culture and middle-class status as it once did for European immigrants (Portes & Rumbaut, 2002). Instead, the evidence suggests that the socialization associated with acculturation and assimilation

¹⁰As a researcher and the Director of the Metro Center at NYU, I work with many schools throughout the United States. For a description of my research, see *City Schools and the American Dream* (NY: Teachers College Press, 2003).

often results in a lowering of the academic achievement and performance of Latino students (Suarez-Orozco & Suarez-Orozco, 2001).¹¹

Theoretically at least, education should serve as means for immigrant children to escape poverty. For this to happen, education must serve as a source of opportunity and a pathway to a better life just as it has for other groups in the past. For this to happen, schools must not treat immigrant children as though their inability to speak fluent English is a sign of cognitive or cultural deficit. They must reach out to their parents and work with them, and they must find partners who can provide the resources and support their children need.

As was true in the past, the children of the new immigrants will eventually end up in America's public schools. How educators, parents and policy makers respond to their growing presence and the controversies that result will ultimately determine whether or not immigration will be a source of strength or lead to greater polarization and conflict in the years ahead.

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¹¹In much of the sociological literature on immigration, it has been held that assimilation would lead to social mobility for immigrants. Second- and third-generation immigrants have generally fared better than new arrivals. For Latinos, available research suggests the opposite may be true.

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Probing the Limits of Systemic Reform: The English Case

John Gray

In his remarkably prescient study, *The New Meaning of Educational Change*, Fullan and Stiegelbauer (1991) challenged policy-makers to pay more attention to the accumulated wisdom of research. “Armed with knowledge of the change process and a commitment to action,” they argued, “we should accept nothing less than positive results on a massive scale – at both the individual and organisational levels” (p. 354). It was a call to arms which the New Labour government, under Prime Minister Tony Blair, was to take very seriously.

In this chapter I review some of the major developments which happened over the 10 years of the Blair administration from 1997 to 2007 and attempt to draw some broad conclusions. What were the key levers of educational change and what did they produce? Crucially, was the fabric and infrastructure of contemporary English schooling transformed in ways that have subsequently proved self-sustaining?

In calling for change, however, Fullan also counselled realism. There is a “huge negative legacy of failed reforms” littering the educational change literature. To rise above this legacy policy-makers would need more than “good intentions” and “powerful rhetoric.” They would need not only to initiate reforms but to develop the capacity to learn from them.

The Commitment to a Third Way

Blair had made his election mantra “education, education, education.” Consequently, many in the education professions assumed that when New Labour took office there would be a return to the values that had informed “old” Labour; although after some 17 years out of office, what precisely these values were beyond platitudes about equal opportunities and meeting the needs of the educationally disadvantaged had largely faded from memory.

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New Labour's strategic thinking has been described as the "Third Way". Anthony Giddens, widely credited as its intellectual architect, has argued that "investing in human capital" is a central "tenet" of Third Way thinking and that the "key force in human capital development obviously has to be education. It is the main public investment that can foster both economic efficiency and civil cohesion" (2000, p. 73). In short, he suggested, there were sound economic and social reasons for prioritising expenditure on education.

Giddens was dismissive of suggestions that Third Way thinking was less preoccupied with inequality than earlier Labour ideologies. It is concerned, he argued, "both with equality and pluralism, placing an emphasis on a dynamic model of egalitarianism . . . focusing primarily upon equality of opportunity but stressing that this also presumes economic redistribution" (2000, pp. 120–121). Inequality can be particularly addressed through strategies for tackling the needs of the long-term poor. "Enduring poverty," he concludes, "is usually coupled to exclusionary mechanisms and hence affects most aspects of life." Children from poor backgrounds get a raw deal in the womb and suffer "abuse and neglect" at home. These "disadvantages," he suggests, "carry on through their education or lack of it." "Schools in poor neighbourhoods are often under-funded (and) staffed by demoralised teachers, who have to concern themselves with keeping control in the classroom rather than with instruction" (op cit., p. 114).

The policies can almost be read off from the diagnosis – more funding for disadvantaged schools, greater attention to the sources of teacher morale, more focus on the sources of pupil disengagement which underpin unruly behaviour and, perhaps, more support for good teaching; in short, more investment in education. Interestingly, Giddens didn't have much to say about mechanisms for holding schools to account.

Whether there is anything distinctive here in Third Way thinking as regards the education of the socially and educationally disadvantaged is a moot point. There are strong echoes of the Plowden Committee's recommendations some 30 years earlier which lamented the fate of poor children caught up in "a seamless web of circumstances" in which one disadvantage was compounded by another (Plowden, 1967, para. 131). Although our understanding of what school improvement involves has moved on over the ensuing period, the underlying diagnosis is strikingly similar.

Where the Third Way has differed substantially from its predecessors has been in its thinking about *how* school improvement might best be pursued. In seeking to mobilise the forces for change New Labour has shown itself to be very flexible in interpreting the inheritance. More autonomy has been given to schools (where they have been prepared to take it) and public–private and public–voluntary partnerships have been fostered as a means of hastening reform. At the same time there has been some recasting of the lines of communication. In the process, central government has assumed more of the roles that, under earlier divisions of labour, had been reserved for local authorities.

Five Strategic Challenges

When New Labour assumed power it faced at least five strategic challenges in developing its reform programme.

First, *what organisational structures of schooling to maintain and promote*. The Conservatives had never completed the comprehensive reforms Labour had initiated. With a view to offering parents greater “choice and diversity”, they had encouraged a range of different types of school to develop with a particularly prominent role for the grant-maintained sector. Should New Labour revisit its earlier agenda, accept the Conservative inheritance or take off in new directions? In the event, the commitments to “parental choice” and a diversity of school types were retained with the establishment of new Academies, eventually, extending the range.

Second, *how to improve individual schools, especially those serving socially and educationally disadvantaged populations*. There were considerable differences between schools in performance and some were getting left behind. How could stronger and more robust processes of school improvement be developed that were capable of creating “continuous improvement”? And what might they cost? Through an extensive system of target-setting individual schools were put under pressure to improve their performance. At the same time they received enhanced resources and other forms of support with a view to encouraging innovation and further development.

Third, *how far to intervene in the ways in which schools taught the National Curriculum through national initiatives*. The Conservatives had already started to pilot a National Literacy Strategy in primary schools. Should this kind of approach be extended to other core skills such as numeracy as well as to the secondary school? The decision to proceed was taken quickly; the Literacy Strategy went national, the National Numeracy Strategy started in 1999 and was followed by the Key Stage 3 (11–14) strategy in 2001. A major programme of additional funding for schools serving areas of social disadvantage was also launched under the Excellence in Cities initiative.

Fourth, *how to secure teachers’ commitment to the reform agenda*. Teachers’ pay had fallen behind that of other professions, some schools were experiencing severe recruitment and retention problems, and relationships between at least one of the unions (the largest – the National Union of Teachers) and the government had been fraught. In response a series of workforce reforms began to be implemented with the intention of raising teachers’ pay and status and generally “modernising” the teaching profession.

And fifth, *how to use strategies for accountability to support the improvement process*. The Conservatives had claimed that league tables of schools’ results and Ofsted inspections informed parental choice, held schools to account and encouraged them to improve their standards. Should these be maintained or modified? Again the decision was quickly reached to retain all of them, albeit with some modifications. Meanwhile a heavy programme of traditional school inspections

was implemented until, in 2005, a so-called “self-evaluation” component was incorporated into a potentially lighter but conversely more frequent inspection regime.

Building on the Inheritance

In the event, New Labour’s strategy for policy development was to build on much of the Conservative legacy that had emerged during the first half of the 1990s whilst selectively introducing new thinking. There was no radical break with the past. To the charge that such an approach simply represented a “middle way”, Giddens has argued forcibly that “a concern for the centre should not be naively interpreted . . . as a forgoing of radicalism or the values of the left.” “Many policies,” he writes, “that can quite rightly be called radical transcend the left/right divide. They demand, and can be expected to get, cross-class support – policies in areas, for example, such as education, welfare reform, the economy, ecology and the control of crime” (2000, p. 44).

There were several respects however in which New Labour *sounded* distinctly different from its predecessors. First, and perhaps most importantly, it initially “talked tough”. Borrowing from the language of crime reduction there was to be “zero tolerance for failure” and the pursuit of higher standards was to be “relentless”. In an early move, shortly after assuming office, the secretary of state for education “named and shamed” ten of the worst-performing schools in the country, seemingly oblivious to the fact that a substantial part of the explanation for their apparent “failure” might lie in the socially blighted circumstances of the communities they served. Second, there was to be a much greater emphasis on results; the way to value and develop the outputs of education was to measure them. Third, there were arguments for more “joined up” thinking. And fourth, it began to talk up the case for the so-called “evidence-based” practice. In future educational policies would be researched and evaluated. In the course of these developments the rudiments of systemic thinking began to emerge.

The Court of Measurable Results

Evaluating educational reforms is a potentially complex business but, under New Labour, policy-makers have usually been quick to draw attention to improvements in measurable results. Over the course of the decade the percentages of primary school pupils achieving Level 4 in English (the “expected” national level of performance for an 11-year-old) climbed from 63% in 1997 to some 80% in 2007, an overall increase of 17% (see Table 1). Similarly with respect to maths the percentage rose from 62% to 77% over a decade.

These figures look impressive. However, when one tries to discern patterns and trends and offer explanations, the picture becomes more problematic. First, some

Table 1 Percentages of primary school pupils age 11 in England securing “expected level of performance” (Level 4) on headline measures at key stage 2 (1997–2007)

Description of the cohort of pupils passing through the system related government in office and to introduction of major policies	Key stage 1	Key stage 2	Level 4 English (%)	Level 4 Maths (%)	Level 4 Science (%)
Cohort affected mid-way by publication of primary schools’ results	1993	1997	63	62	69
Cohort still experiences predominantly Conservative policies	1994	1998	65	59	69
Cohort affected mid-stream by New Labour’s policies	1995	1999	71	69	78
Predominantly New Labour policies	1996	2000	75	72	85
First full New Labour cohort (the national literacy strategy cohort)	1997	2001	75	71	87
Second New Labour cohort (the first national numeracy strategy cohort)	1998	2002	75	73	86
Third New Labour cohort	1999	2003	75	73	87
Fourth New Labour cohort	2000	2004	77	74	86
Fifth New Labour cohort	2001	2005	79	75	86
Sixth New Labour cohort	2002	2006	79	76	87
Seventh New Labour cohort	2003	2007	80	77	88

comment about the timing of the changes is necessary. It takes a while for new policies to be rolled out and take effect. A new government’s inheritance in its early years is inevitably dependent on the activities of its predecessors. New Labour was powerless to do anything about the 1997 results and it was not until 2001 that the national test results were picking up the full effects of any new policy developments.

Looked at from a statistical point of view, the trends in results seem to fall into three distinct phases. In the first phase, there was a 12% point increase in English over the period 1997–2000. In the second phase (2000–2003) the results plateaued with zero growth followed by a more modest phase in which over the next 4 years (2003–2007) results increased by a further 5%.

Looked at another way, however, more than half the growth over the decade occurred amongst just two cohorts (1994–1998 and 1995–1999). The fact that these improvements were sustained over subsequent years suggests that they were neither illusory nor ephemeral – if they had been one might have anticipated some backward steps or a rougher ride. But drawing conclusions about the effects of policy development is more problematic. What is most notable about this period is that it was one of transition – politically from Conservative to New Labour but, perhaps more importantly, from a situation in which the nature and rules of the game were rapidly changing as schools became more and more caught up in the newly emerging “performance culture” New Labour was developing.

Further support for this emphasis on the impact of the “transitional stages” of the reforms comes from the evidence on pupil performance in maths. Here no less than half the growth over the course of the decade came from a single cohort; the performance of the 1994–1998 cohort had dipped to 59% but the 1995–1999 cohort bounced back with an impressive increase to 69%. Over subsequent years, however, progress slowed down considerably; whilst the results continued to creep up, year on year, the overall gains were less impressive.

Rising Achievement in Secondary Schools

Much of the international attention has been focused on reforms at the primary level. Table 2 reports the results of pupil performance in the national GCSE examinations taken at age 16. These are nationally examined and taken in a wide range of different subjects; pupils are entered for them according to their aptitudes and interests. The results are subsequently captured in a headline figure which reports the proportions of pupils who secured grades A* to C in five or more subjects.

There has been a fairly inexorable trend in the percentages climbing over the 5+ A*–C hurdle since the previously separate examinations for more and less able

Table 2 Percentages of secondary school pupils achieving the traditional headline measure of “5 or more A*–C grades” in GCSE examinations at age 16

Description of the cohort of pupils passing through system related to government in office and to introduction of major policy initiatives	Year entered secondary school	Year took GCSE exams	Percentage of pupils achieving 5+A*–C grades	Percentage achieving 5+A*–C grades including English and Maths
Last cohort fully educated in secondary school under Conservative policies	1993	1997	45.1	35.6
Cohort experiences predominantly Conservative policies	1994	1998	46.3	37.0
Cohort affected mid-stream by New Labour’s policies	1995	1999	47.9	38.6
Predominantly New Labour policies	1996	2000	49.2	40.0
First (full) New Labour cohort	1997	2001	50.0	40.7
Second New Labour cohort	1998	2002	51.6	42.1
Third New Labour cohort	1999	2003	52.9	41.9
Fourth New Labour cohort	2000	2004	53.7	42.6
Fifth New Labour cohort (experienced both secondary and primary strategies)	2001	2005	57.1	44.9
Sixth New Labour cohort	2002	2006	59.2	45.8
Seventh New Labour cohort	2003	2007	62.0	46.7

pupils were amalgamated into the national GCSE exam in 1988. The reasons for this increase are annually disputed when the results are published being variously attributed to declining standards on the part of the examiners, improved teaching methods, greater student commitment and so on. There has also been extensive use of what Gray et al. (1999) have described as “tactical” approaches.

The results for the decade under review are reported in Table 2. In 1997 some 45% got over the hurdle, by 2007 62% did so – in all a considerable increase. Nonetheless, the table again reinforces the view that educational policies are typically slow to unfold and take effect.

For most of New Labour’s first term in office the table simply records the results of its predecessor’s efforts. It is not until the turn of the millennium that the effects of the new regime can begin to be discerned. Over the period 1997–2000 the headline statistic improved at a rate of about 1% a year; this continued the seemingly inexorable trend launched in 1988. From 2000 onwards it improved a little faster; the figures unfortunately do not satisfactorily take account of numerous minor (but in combination important) changes in the arrangements for counting up what could contribute to the indicator these gave a particular boost to the results in 2005. The changes included such things as counting in some vocational subjects which had previously been excluded and allowing some qualifications to count as more than one grade.

Concerns that schools were focusing on “easier” subjects in order to boost perceptions of their pupils’ performance led to debates in the early 2000s about the need to include passes in maths and English in the basket of subjects to be counted in the headline measure (see last column of Table 2 above). Progress with respect to this indicator seems to have been steadier over the period. In 1997 performance lagged behind by some 10% points. Unfortunately, over the course of the decade, whilst the numbers reaching this hurdle rose by some 11% points, performance on this indicator fell still further behind. By 2007 the gap between the two had widened to some 15% points. Furthermore, the rate of improvement during the second half of the decade was only a little more rapid than that pertaining in the first half. On neither indicator did the step change in performance trends that had been anticipated actually emerge.

The Arena of International Comparisons

For most of the late twentieth century England was a sporadic and reluctant participant in studies based on international comparisons. It was largely content to evaluate itself in terms of its own national assessments. At the turn of the century, however, these predominantly isolationist attitudes began to change. They were reinforced, no doubt, by the impressive performance of its 9-year-olds in the Progress in International Reading Literacy Study (PIRLS, 2001) which seemed to offer welcome confirmation of the success of New Labour’s reforms. England came third out of 35 countries, just behind the Netherlands and Sweden. But trumpeting success was possibly premature; in the 2006 survey the country slumped to 19th position

(Baer, Baldi, Ayotte, Green, & McGrath, 2007: Table 2). And whereas in 2001 the performance of English pupils stood out, by 2006, regardless of which measure was employed, they appeared merely average. It was possibly some consolation that performance in the Netherlands and Sweden also appeared to have declined, although not to the same extent.

There was some limited support for more optimistic interpretations of the performance of English pupils from the Trends in International Mathematics and Science Study (TIMSS) which studied 10-year-olds. The period 1995–1999 had seen little or no change in performance levels in primary schools but between 1999 and 2003 they leapt up (Ruddock et al., 2005).

The vagaries of such comparisons, however, are underlined by some of the results from the OECD's Programme for International Student Assessment (PISA). In science the United Kingdom's students (not just England) performed significantly above the OECD average (OECD, 2007: Table 2). In reading the United Kingdom appeared in the upper half of the table but its performance was not significantly different from the OECD average (OECD, 2007: Table 4). Performance, meanwhile, in maths in 2006 was also not significantly different from the OECD average (Table 5). Comparisons over time were restricted to just 3 years (the changes between 2003 and 2006) but the position was broadly unchanged. This could be seen as disappointing since the 2006 cohort will have been more exposed to both the primary and secondary strategies for raising performance.

The court of international comparisons provides fertile territory for those who are prepared to pick selectively over the evidence in support of their cases. The safest conclusion to be drawn, however, is that the international surveys do not as yet provide convincing evidence that England is performing at anything other than the sorts of levels one would expect a relatively well-developed and resourced educational system to produce – a good performance but not yet, perhaps, an outstanding one.

Systemic Thinking and the Search for Powerful Levers

In their study of systemic reform Goertz, Floden, and O'Day (1996) refer to the growth of so-called systemic approaches in the USA during the 1990s. Systemic reforms, they suggested, “embodied three integral components”:

- “the promotion of ambitious student outcomes for all students;
- the alignment of policy approaches and the actions of various policy institutions to promote such outcomes; and
- the restructuring of the public education governance system to support improved achievement.”

The terminology was a little slower to emerge in England than the USA but New Labour's intentions were clearly similar. At least two distinct phases of systemic thinking can be identified. During the first there was a determined edge to New Labour's policy-making. The vision came from outside schools themselves.

Accountability in the form of inspection loomed large as did national testing, targets and league tables. Neither was school “failure” to be tolerated. The drive for higher standards in literacy and numeracy, exemplified in the National Strategies, was to the fore.

Michael Fullan has always been clear that both “pressure” and “support” are needed if change programmes are to deliver. But he has also stressed that they are needed in *equal* measure. Broadly speaking, if the driving characteristic of the first phase had been pressure, by the early 2000s some of the rhetoric had mutated into what, retrospectively at least, can be characterised as a greater commitment to support. There was to be a New Relationship With Schools; accountability was to be more “intelligent”; there was to be a greater emphasis on supporting teaching and learning through more “personalised” approaches; and the quest for excellence was to be combined with the pursuit of enjoyment, if only at the primary stages. Importantly, some of the vision for change was to come from schools themselves. The role of school leadership was increasingly cast as one of building capacity. An arguably highly prescriptive and hard-edged vision had given way to a somewhat softer one.

To deliver systemic reform government needs access to a variety of levers on the processes of change. It is beyond the scope of a short review to enumerate the wide range of reforms New Labour initiated, let alone to evaluate them all. I have therefore deliberately confined myself to considering just four developments: the use of external inspection of schools, the National Strategies, the Specialist Schools programme and the Excellence in Cities (EiC) initiative.

These areas have been chosen for three main reasons: First, because they exemplify different facets of New Labour’s reform agenda to improve standards – the development of accountability, the restructuring of the teaching of basic skills, the moulding of new forms of school organisation and the creation of enhanced support for disadvantaged schools; second, because their supporters have consistently maintained that they “worked”; and third, because each, in its different way, when scaled up to the national level, represents a very substantial investment whether it is judged in terms of the consumption of educational energy or of educational finance.

The Effects of Inspection

When New Labour came to power in 1997 Ofsted was still completing its first cycle of inspections. Its motto of “improvement through inspection” fitted the reform agenda and, to the dismay of many teachers and schools, its remit was expanded. In inspection government had discovered a powerful instrument for achieving compliance to its wishes. It could use inspection to shape institutions in its desired image and it was fairly ruthless in doing so. The key question for this analysis, however, is whether inspection pushes up *measured* results and, somewhat surprisingly, this has turned out to be a matter for debate. Most of the evidence on the effects of inspection

was essentially anecdotal; it certainly seemed to confirm inspection “worked” but systematic research was in short supply.

Three independent studies have studied the effects of inspection. They differed in their samples, time scales and the sophistication of methods. The first study, by Cullingford and Daniels (1999), claimed that “Ofsted inspections have the opposite effect to that intended.” They reported that inspected schools fell behind others. However, there were some doubts about the representativeness of their sample. A second, more sophisticated study by Shaw, Newton, Aitkin, and Darnell (2003) had similar difficulty in isolating an “inspection effect”. They found that in comprehensive schools, which made up 90% of the schools in the study, “inspection did not improve exam achievement” although, in the small minority of schools where there was formal selection, there was “a slight improvement”. A third study by Rosenthal (2004) reached similar conclusions. She found “adverse effects on the standards of exam performance achieved by schools in the year of inspection” and noted that “no offsetting later effects for inspection were discernible.”

Eventually, some 12 years after its foundation, Ofsted replied to its critics (Matthews & Sammons, 2004). The results were finely balanced. The analysis spanned the period from 1993 to 2002. It found that in some years (5 out of the 9 years covered) “a higher proportion of inspected schools improved over a 2-year span than all schools” whilst in other years (4 out of the 9) the proportion was lower. A second analysis compared the results of schools that were inspected and not inspected 4 years later. Matthews and Sammons report that “the results indicated that, in general, there was little difference between those schools that were inspected and all schools.” They concluded that their analyses “failed to show any consistent evidence that results spanning the inspection event over the last 8 years are either enhanced or depressed relative to other schools” (2004, p. 37).

These findings did not receive much publicity neither, for that matter, do they appear to have had much influence on Ofsted’s hegemony. But the fact that the agency felt obliged to justify its contribution to schools’ performance in such terms and that it reached such an ambivalent conclusion is of considerable relevance. Given the wide variety of states and circumstances of schools being inspected, it is probably unrealistic to expect some all-embracing “inspection effect”. In many schools an inspection is unlikely to add much to what is already known although it may help to catalyse matters or even, in some instances, galvanise action. But whether it will actually do so depends on many factors beyond the inspectors’ control.

The Impact of the National Strategies

The decision to go nationwide with the National Literacy Strategy (NLS) was made soon after New Labour took over and whilst the pilot was still underway. They had

committed themselves to ambitious targets – in due course 80% of primary pupils would be expected to reach Level 4 compared with the 63% that were achieving this when they took over.

In the event the gamble paid off. The pilot showed significant improvements in children's test scores (Sainsbury, 1998). Nonetheless going to scale was expensive and brought problems. Many primary teachers felt they already understood how to teach reading and that they did not require further assistance; consequently there was some resistance. The National Numeracy Strategy (NNS), on the other hand, did not encounter the same problems. Teachers were generally less confident about their ability to handle maths and some of the "mistakes" made during the implementation of the NLS were avoided.

The team commissioned to evaluate the programmes were enthusiastic about what had been achieved in the early stages. "The Strategies," they reported, "have had an impressive degree of success, especially given the magnitude of the change envisaged; in many ways they have succeeded in transforming the nature of the country's primary schools" (Earl et al., 2003, pp. 127–128). Their observations, however, were mainly based on the ways in which classroom practice had been influenced. "It was more difficult," they felt, "to draw conclusions about the effects of the Strategies on pupil learning than on teaching practice."

Understanding the contribution of the National Strategies to enhancing pupil performance is problematic. Research on the implementation of educational reforms might lead one to expect that the reform dividends would emerge slowly over time – the major rewards would begin to flow when the changes were fully bedded down. The English experience, however, belies this expectation. The most remarkable thing about the NLS is, perhaps, that most of the changes took place during the *early* stages of its development; between 1997 and 2000 performance rose from 63 to 75% (see Table 1). Somewhat surprisingly, the first cohort to experience the strategy in its entirety did not improve on this position neither did the second. In fact, across four successive cohorts standards of performance stood still.

The NNS produced equally conflicting results. After initially promising developments, the pace of improvement slowed dramatically; again standards essentially plateaued across four cohorts (2000–2003) before resuming a slower upward trend. In science, meanwhile, results rose from 69% in 1997 to 88% in 2007. Yet this was an area in which there had been no National Strategy at all; teachers had been largely left to their own devices.

As with the GCSE results discussed earlier, possible changes in the performance metrics have made interpretations of trends over time more difficult. A detailed but little-publicised report for the Qualifications and Curriculum Authority, for example, concluded that, "around half of the apparent improvement in national results (between 1996 and 2000) may have arisen from more lenient test standards" (Massey, Green, Dexter, & Hamnett, 2002, p. 224).

Other researchers have also questioned the extent of improvement. Tymms (2004) sought support from the independent Statistics Commission (2005) for validation of his claims that the gains had been overstated. Their conclusion provided some support for both sides. "It has been established," they concluded, "that the

improvement in Key Stage 2 test scores between 1995 and 2000 substantially overstates the improvement in standards in English primary schools over that period” but added that “there was nevertheless some rise in standards.”

Renewing the Comprehensive School

The idea that there should be “diversity and choice” in the educational market place was already firmly established by the mid-1990s. New Labour launched the Specialist Schools programme as an important strategy for revamping the somewhat jaded ideals of the comprehensive school. By 2005 some two-thirds had been given this status. Applicants were expected to raise some external sponsorship and to present a convincing case for being given specialist status in one (or possibly two) areas of the school curriculum. In exchange they were offered additional funding (up to 5% per pupil).

In their *5 Year Strategy* the DfES maintained that “specialist schools have improved faster than the average and add(ed) more value for pupils, regardless of their prior attainment” (DfES, 2005, 4: 15). A report by the Specialist School Trust claimed, furthermore, that “the longer that schools are specialist, the greater the specialist school dividend” (Jesson, Crossley, Taylor, & Ware, 2005).

Other researchers have been more skeptical about the extent of this premium. An early analysis by Schagen, Davies, Rudd, and Schagen (2002), for example, found very little edge in favour of specialist schools once differences in intakes were tightly controlled for. This general picture was confirmed in a later analysis by Levacic and Jenkins (2006). They reported, at best, a very small edge for the specialist sector.

Did this performance edge for the sector result from the schools’ new status as *specialist* institutions, as the government claimed, or from other related factors? Schagen and colleagues have pointed out that early recruits to the programme had to demonstrate that they were already performing at “acceptable levels” in value-added terms. The Select Committee on Education and Skills (2005, para. 11) also drew attention to fact that the schools needed “school management and leadership competencies” in place before they sought specialist status and that they got extra funding as a result. Might not better funding and superior management be responsible for the differences?

The suggestion that the specialist dividend flowed from schools’ established characteristics rather than added to them was underlined, albeit indirectly, by Ofsted (2004, p. 3). They identified a range of pre-existing factors contributing to these schools’ success including “working to declared targets, dynamic leadership by key players, a renewed sense of purpose, the willingness to be a pathfinder, targeted use of funding and being part of an optimistic network of like-minded schools.” Doubts were also expressed about whether the requirement for private sponsorship biased take-up in the direction of schools which had historically commanded parental support. And, related to this was the finding that schools with such strong ‘parental support’ tended to be located in more middle-class areas.

Spending More on the Educationally Disadvantaged

The EiC initiative, in various ways, embodied five key tenets of New Labour's policy discourse (Power, Whitty, Dickson, Gerwitz, & Halpin, 2003): First, that improved educational provision could combat social disadvantage; second, that good leaders could improve schools in any kind of context; third, that "joined-up problems require joined up solutions" through the development of multi-agency partnerships; fourth, that improvement is best secured by tying resources to outcomes; and fifth, that private sector involvement can help in securing change.

In seeking to tackle the causes of educational disadvantage New Labour faced one of its stiffest challenges. Furthermore, some of its early forays into this field had proved problematic. When Ofsted had looked at Education Action Zones it had provided a fairly cautious endorsement. "Some zones," they reported, "have made more consistent progress and had a greater impact than others" (Ofsted, 2001, para. 10). And, they added, "they have not often been test-beds for genuinely innovative action. More often, they have offered programmes which enhance or intensify existing action."

When the EiC programme was launched it represented the largest single investment ever made in tackling educational disadvantage. There were seven major strands. These included programmes to support "gifted and talented" children, the provision of learning mentors; the establishment of Learning Support Units for children with special needs and City Learning Centres to provide ICT resources for groups of schools and their communities; Action Zones which sought to link primary and secondary schools to address local priorities; and an expansion of the existing Specialist and Beacon school programmes.

Opinions varied about whether this menu of activities amounted to a coherent, "joined-up" strategy. When the programme came to be evaluated there were lots of outcomes, mostly worthwhile and predictable but none in themselves very dramatic. The evaluators commented that "most of the teachers and senior managers taking part . . . were very positive about the policy." They added tellingly that "although only a minority directly linked EiC with raised attainment, many noted the ways in which EiC was creating a better environment for learning, improving pupils' motivation and raising their aspirations and contributing to improved teaching and learning, all of which would lead in the longer term to improved levels of attainment" (Kendall et al., 2005, p. 16).

Regrettably, the desired improvements in measured results proved more elusive. Pupil attendance had improved amongst EiC schools, but only by "slightly more than 1 day per pupil." Some modest gains in pupil performance amongst 14-year-olds in maths received some publicity as did improvements in the proportions of pupils achieving the GCSE hurdles in some of the lowest-achieving schools. But the more the evaluators were able to compare like with like, the more modest the outcomes appeared to be. "Taken together," they concluded, "these findings do not support the hypothesis that pupils in EiC areas were, overall, making greater progress than those in non-EiC areas" (op. cit., 2005, p. 16). Given the social and educational importance of the EiC agenda, this conclusion was disappointing.

Changing Tack

In the early years of the Blair administration every problem seemed to generate a new solution. Policies of one kind or another flowed from the centre with impressive regularity. Some schools rose to the new challenges and exploited the opportunities but others, lacking a clear sense of their own identities, became embattled. On the surface there was a great deal of change but not all of it took root. The majority of schools committed themselves fairly wholeheartedly to the central agenda of raising measured attainment but even here the more successful found it difficult to keep going for long. Improvement was often rapid but soon tailed off. It was unusual for a school to boost pupils' attainment for more than 3 years at a time; only a minority managed it a second time over the course of a decade (Mangan, Gray, & Pugh, 2005). Not surprisingly, "sustainability" became the watchword and, to its credit, New Labour learnt from some of the bruises it had received in the battle for educational change.

As it entered its third term of office there were perceptible signs that some of the tougher messages had been absorbed. Crucially, there was a shift away from some of the grander schemes, driven from the centre, towards more localised and contextualised approaches in which, ostensibly, schools were to be given a greater say in how they would direct their energies. As Hopkins (2007, p. 171) has put it, schools need incentives rather than legislation and a greater sense of their own agency if they are to see themselves as test-beds for their own improvement. Central to this revised vision was the realisation that the strongest educational reform is built, both in practice and in theory, institution by institution. How this change of strategy will play out remains, at the time of writing, to be seen.

Fostering educational change is, by its nature, a highly risky enterprise. Governments that commit themselves to ambitious targets must expect, at times, to stumble. Some of New Labour's policies were successful, others less so; nearly all of them were ambitious but regrettably the returns were rarely as high as the expectations. The readers of this volume will not need much reminding that where changing schools is concerned there are few "easy wins".

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How to Change 5,000 Schools

Ben Levin

This chapter describes the large-scale education improvement strategy implemented in the province of Ontario, Canada, from 2004 until the present, as a case of capacity building in education. While many education reforms around the world have focused on issues of structure and governance, the Ontario strategy aimed to make a difference for students by changing school and classroom practices across the province while also generating public support and engaging teachers and other education staff in a positive way. Capacity building does not happen in a vacuum, so the chapter places the case in the larger framework of vision, political leadership, and respectful dialogue that have also been central to Ontario's ability to improve student outcomes substantially while maintaining public confidence and stability in the education sector.

The Ontario strategy has focused on changing the experience of students. As Levin and Fullan (2008) put it:

The central lesson of large scale educational change that is now evident is the following: Large-scale, sustained improvement in student outcomes requires a sustained effort to change school and classroom practices, not just structures such as governance and accountability. The heart of improvement lies in changing teaching and learning practices in thousands and thousands of classrooms, and this requires focused and sustained effort by all parts of the education system and its partners.

As Elmore (2004), Fullan (2007), and others have pointed out, there is no way to change classroom practices across an entire system without significant investment and work to improve the skills of teachers and principals as well as the support they receive from the wider system. This is what is meant by capacity building, and it takes a sustained effort well beyond what occurs in most education reforms.

Ontario's change process focused on a small number of key goals while still paying attention to a broad range of student outcomes. The overall approach has been respectful of professional knowledge and practice. Change strategies are

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comprehensive with an emphasis not only on professional capacity building and strong leadership, but also on targeted resources and effective engagement of parents and the broader community. A substantial effort has been made to make main elements of change coherent and aligned at the provincial, district, and school level. Key partners – the provincial Ministry of Education; school boards; schools; and provincial and local organizations of teachers, principals, and other partners – work together even though they do not agree on every aspect of the changes. Of course the process has had its struggles and imperfections, described later. Readers should be aware that the author was a principal actor in these events, as deputy minister (chief civil servant) responsible for education and therefore for these policies from late in 2004 until early in 2007.

Context: The Ontario Education System

Ontario has about 2 million children in its publicly funded education system, which is organized into four sets of locally elected school boards with overlapping boundaries, reflecting Canada's constitutional requirement for public support of minority language and Catholic schools. Thirty-one English public school boards serve about 1.3 million students; 29 English Catholic boards serve about 560,000 students; 8 French Catholic boards have some 60,000 students; and 4 French public boards have 13,000 students. School boards range in size from a few hundred students to about 250,000 students in the Toronto District School Board – one of the largest in North America. In total there are nearly 5,000 schools extending across a huge geographic area – Ontario is 415,000 square miles, or about the size of the combined states of North and South Carolina, Tennessee, Mississippi, Alabama, Florida, Georgia, and Louisiana, or somewhat larger than France, Germany, Denmark, Belgium, and the Netherlands put together.

The population is about 80% urban with most people living in the very south of the province. The six largest school districts have about a third of all the students in the province. However many Ontario schools are small, with the average elementary school enrolling about 350 students and the average secondary school having fewer than 1,000. Ontario also has a very diverse enrolment, with 27% of the population born outside of Canada (1/3 of whom have arrived in the last 10 years), and 20% visible minorities. The Greater Toronto Area, which has nearly 40% of the province's population, is one of the most diverse urban areas in the world and receives more than 125,000 new immigrants each year.

The provincial government provides 100% of the funding to school boards using a formula that is always controversial but attempts to allocate money on a combination of per pupil or school amounts and elements that recognize differing needs across the province (Levin & Naylor, in press).

Ontario's 120,000 teachers are organized in four unions that roughly correspond to the four school systems. Most of the 70,000 support staff – caretakers, secretaries,

maintenance staff, education assistants, and professional support workers such as social workers – are also unionized. School principals and superintendents must have specific Ontario qualifications. These, as well as teacher qualifications, are controlled under law by the Ontario College of Teachers, which is governed by its own council elected primarily by teachers.

Education in Ontario has all the challenges one might anticipate – large urban areas and very remote rural areas; significant urban and rural poverty levels; high levels of population diversity and many English as a Second Language (ESL) students; areas with sharply dropping enrolment and others with rapid growth.

Prior to 2004, Ontario education had experienced a decade of problems (Gidney, 1999). Two successive governments introduced measures that deeply offended teachers, including reductions in staffing levels and increased workloads. These led to substantial labor disruption including many strikes and sustained “work to rule” campaigns as well as lower morale and higher teacher turnover. In 1997 the governance system was changed dramatically, including a reduction in the number of local school districts from about 140 to 70, removal of all taxation powers from local districts coupled with 100% provincial financing, and removal of school principals from the teacher unions. Funding was cut significantly in the mid-1990s, leading to the reduction or elimination of many programs and services, often with the worst consequences for the most vulnerable students, such as recent immigrants. An entirely new and supposedly more rigorous curriculum was introduced in every grade and subject. A provincial testing agency was created and provincial testing of all students began.

Many other changes were also introduced including compulsory pencil-and-paper tests for new teachers, compulsory professional development requirements for all teachers, and a more intensive program of teacher evaluation. Perhaps most importantly, the government was vigorously critical of schools and teachers in public, including at one point broadcasting television ads that portrayed teachers as overpaid and underworked. Years of this environment led to significant public dissatisfaction, increasing private school enrolment, and poor morale among teachers. In short, nobody was happy with the state of public education (Hargreaves, 2003; Leithwood, Fullan, & Watson, 2003).

In October 2003, the Liberal opposition won the provincial election with the renewal of public education as one of its highest priorities and an ambitious set of policy commitments around improving education. Their platform was developed through intensive discussion with many stakeholder groups and through analysis of efforts in other jurisdictions. Michael Fullan also played an important role in advising the Liberals as they developed their plans.

A premier and ministers (Ontario follows the British parliamentary system in which ministers responsible for a portfolio are appointed by the premier from among those elected to the Legislature) with a deep commitment to public education brought strong political leadership. The importance of strong and effective political leadership is underestimated in the literature on education reform.

The Strategy

The new Ontario government understood clearly that public education can only thrive if citizens have confidence in the public school system so that they are willing to send their children and provide their tax support. The crafting of the platform reflected the political reality that to generate public attention, policy goals have to be few in number and relatively simple in expression (Levin, 2005).

One major commitment was to reduce class sizes in primary grades to a maximum of 20 students. Two other key promises were made around student achievement: to improve elementary school literacy and numeracy outcomes and to reduce high school dropout rates. These priorities reflected public concern about student performance in the province (Livingstone & Hart, 2005). Elementary literacy and numeracy skills as measured by curriculum-linked provincial tests had been roughly static over the previous several years (EQAO, 2006), while high school graduation rates had actually decreased following major changes to the high school program and curriculum in the late 1990s (King, Warren, Boyer, & Chin, 2005).

The three core priorities were complemented by a range of other commitments. Some of these, such as strengthening school leadership or changing curricula, were necessary to achieve the two key goals. Other initiatives, including unprecedented provincial involvement in 2005 in the negotiation of 4-year collective agreements with all Ontario's teachers, were essential so that all parties could focus on improving student outcomes instead of being consumed by labor issues. Still other initiatives, such as strategies to support safe and healthy schools, were necessary to sustain public support for improved outcomes by letting people know that the basic needs of students were also being attended to. Even where there is a strong focus on a small number of key goals, ancillary and potentially distracting issues still require attention. Indeed, the literature on school change gives insufficient attention to the challenge of focusing on teaching and learning while still managing a complex and diverse set of other issues in a volatile and highly political environment (Levin, 2005; Levin & Fullan, 2008).

Elementary School Literacy and Numeracy

Ontario's Literacy and Numeracy Strategy is aimed at improving literacy and numeracy skills for elementary school students. The government set a goal, as part of their election platform, of having at least 75% of grade 6 students able to read, write, and do mathematics at the expected level for grade 6 by the spring of 2008 – a 4-year time frame.

The Strategy assumes that improving student learning requires significant and sustainable change in teaching and learning practices in all of Ontario's 4,000 elementary schools (Literacy and Numeracy Secretariat, 2007). To achieve this, a multielement strategy was put in place. Main elements of the strategy include:

- creating the position of chief student achievement officer, filled by an outstanding Ontario educator, to bring constant attention to student achievement issues;
- creating a dedicated Literacy and Numeracy Secretariat to implement active and extensive capacity building around literacy and numeracy through a variety of means described below;
- adding some 5,000 new teaching positions over 4 years to reduce class sizes from junior kindergarten (age 4) to grade 3 to a maximum of 20 students in at least 90% of classrooms while also providing support to teachers to adopt instructional practices to take advantage of these smaller classes;
- adding about 2,000 specialist teachers to enrich teaching in areas such as art, music, and physical education while also providing more preparation and professional learning time for classroom teachers;
- implementing a voluntary “turnaround” program that provides additional support and expert advice for schools facing the most significant challenges in improving achievement; and
- supporting ancillary practices such as an expansion of tutoring (often by students in faculties of education) and a fuller engagement of parents and communities.

As a further measure, the provincial tests in grades 3 and 6 language and mathematics, which are closely linked to the Ontario curriculum, were changed in 2005 to take less time and give quicker results to schools. Although many teachers continue to have concerns about provincial testing, this is now a rather minor issue in Ontario education because of the increased support for improved teaching and learning including for using a range of student achievement data to support school improvement.

The test results are the main indicator of the success of the government’s plan, but they have not been treated as the only significant measure of progress. Ontario has adopted a broader strategy for public accountability, in which the province and school districts report publicly on a variety of indicators of student progress. For example, the Ministry issues an annual report that provides information about all 72 school districts on 8 key indicators (<http://www.edu.gov.on.ca/eng/bpr/>). All of this is intended to foster and support public confidence in the quality of public education.

Increasing High School Graduation Rates

As of 2003–2004 only about 60% of Ontario students were graduating from high school in the normal 4 years, and only about 70% were graduating even after taking an extra year (King et al., 2005). These are clearly unacceptable levels in a knowledge society and are well below those of other Canadian provinces and many other comparable countries (OECD, 2005, p. 39). Within a year of being elected, the government set a target of having at least 85% of entering grade 9 students graduate from high school in a timely way by 2010. Although originally framed as

a commitment to reduce dropout rates, Ontario's strategy was reframed to have a positive emphasis on improving high school graduation rates.

Many of the elements of this strategy are the same as those in the Literacy and Numeracy Strategy and are discussed below under the heading of "capacity building". However the high school strategy also had elements that take account of the specific challenges facing high school education, which has historically been harder to change than have elementary schools (World Bank, 2005).

Specific components of the high school graduation strategy beyond those just noted (Zegarac, 2007) include:

- building stronger transition models between elementary and secondary schools and paying attention to good transitions into high school for grade 9 students;
- developing a focus on and resources for literacy and numeracy in all areas of the high school curriculum;
- revising curricula in some key areas such as mathematics and career education;
- expanding program options through more cooperative education, credits for appropriate external learning, and dual credit programs with colleges and universities;
- creating a "high skills major" that allows school boards to work with employers and community groups to create packages of courses leading to real employment and further learning; and
- passing legislation to require students to be in a learning situation (school, college, apprenticeship, work with training, and so forth) until high school graduation or age 18.

Another noteworthy feature of the high school success strategy is the creation of a Student Success Commission, which brought together teacher unions, principals, and superintendents to support effective implementation of the strategy in schools so as to prevent disputes at the local level.

Capacity Building as a Central Focus

The most important element of each strategy involved measures to build the capacity of schools and educators to support improved student outcomes. The strategies assumed that outcomes would only improve if people in the schools were helped and supported in changing their practices to create and sustain student success. In both strategies, the focus was on raising the bar and closing the gap – on improving overall levels of achievement and on reducing gaps in achievement for key target groups who were underperforming.

In each case the Ministry of Education created structures to lead the capacity building. A new Literacy and Numeracy Secretariat was created headed by the chief student achievement officer (a new position for Ontario) and staffed by outstanding educators seconded from around the province to lead and guide the overall initiative. For high schools, the Ministry had begun funding, in 2003, a student success

leader in each school district. An expanded secondary schools branch of the Ministry provided leadership and coordination at a provincial level.

The capacity-building strategy in Ontario was extensive. It focused on six interrelated elements:

- supporting effective planning for improvement in every school and board;
- supporting effective leadership for improvement in every school and board;
- developing specific approaches to reduce achievement gaps for target groups including boys in elementary schools, recent immigrants, visible minorities, Aboriginals, and students in special education;
- extensive, carefully designed professional development for educators, focused on key areas related to improvement;
- providing high quality, relevant materials to teachers and schools; and
- supporting use of data and research to inform school, district, and provincial policy and practice.

While the descriptions below may give the sense of a long list of separate initiatives, in fact all aspects of capacity building were connected through district leadership teams, through the provincial management structures, and through ongoing communication that kept front and center the overall goal around improving student learning.

These efforts were led and coordinated by the Ministry, but at all times had high levels of input and participation from all parts of the education system. The programs were designed to recognize and build on existing good practice in Ontario schools. Schools and districts were also invited to find their own ways to move forward on the agenda; while every school and district had to pay attention to issues of improvement, the Ministry did not impose mandatory strategies as to how this should be done. The provincial plan assumed that lasting results could only be obtained by building the commitment of local educators, and this cannot happen through mandating professional practices.

Planning for improvement. Every school district and school in Ontario was asked to develop a plan for improvement. However, the point of this work was not to produce a document but to create a real framework for the ongoing work of improvement. Planning was not mandated through a template or form but was led collaboratively by school district and Ministry staff. Plans could look different in each school, as long as they addressed real ways of improving teaching and learning and student outcomes. The staff of the Literacy and Numeracy Secretariat and the student success leaders worked closely with boards, reviewed many plans, and gave feedback around how these could be sharper and better grounded in evidence. People also came together across districts to share their ideas and learn from each other.

Closing gaps. The Ontario strategies were based on improvement occurring in every school, but they also recognized that some groups required additional particular attention. Special strategies were put into place to improve supports for Aboriginal students, English-language learners, French-language students, and

students in special education by recognizing their particular needs and situations, including specific training, materials, policies, and stakeholder engagement.

Leadership for improvement. There can be no sustained improvement without effective leadership. The capacity-building work around leadership included extended training and learning opportunities for school principals (done in conjunction with the three provincial associations of principals), building of leadership networks within and across districts, the development of a provincial infrastructure for shared and coordinated leadership development, inclusion of principals in much of the training for teachers around literacy and numeracy, and, as noted below, efforts to address some of the workload pressures on principals in Ontario to allow them to focus on instructional leadership.

Professional development. The Ontario strategies recognized that one-shot workshop approaches to professional development would be insufficient. Instead, a whole range of approaches to learning and development have been implemented in various boards and schools across the province. These include use of literacy and numeracy coaches or lead teachers, a whole range of different forms of “learning communities” focused on literacy and numeracy, staff meetings keyed to provincial Webcasts, inter-school visits to study alternative practices, and many others. At all times the intent has been to embed professional learning in the ongoing work of teachers and schools. Professional development emphasized key areas such as differentiated instruction, use of data, and use of shared and guided reading. As well, the Ministry provided funds to the provincial teacher organizations to allow them to increase their professional development work.

Materials. The Ministry commissioned and produced a variety of documents and materials to support effective teaching and learning in priority areas, as well as making some revisions to key curriculum documents. Expert panels on literacy and numeracy produced detailed guidance for teachers, principals, and school boards around research implications for effective practice. All schools received copies of or online access to a whole range of materials for teachers, including teaching guides, videos, Webcasts for download, and others, all of which were tied to professional development priority areas.

Use of data and research. The Ontario plan emphasized policies and practices that are supported by research evidence while encouraging schools and districts to use their own data and action research as well as the broader research literature to inform their work. A provincial education research strategy was developed, universities were contracted to write short “what works” papers for schools, external evaluations of the main provincial strategies were commissioned, and schools and districts were supported in improving their use of data to guide their own improvement plans. Data use has actually had its own capacity-building strategy within the larger effort.

Sustaining Elements

Capacity building can only be successful in a stable education system, which means one that is respectful of all participants, comprehensive, coherent, and aligned.

Respect for Staff and for Professional Knowledge

The Ontario change strategy has consistently recognized and supported professional knowledge and skill. In addition to those elements already mentioned:

- The public statements of the government and ministry are supportive of public education and the work of educators and support staff.
- The government abolished some policy elements (such as paper-and-pencil testing of new teachers) which were seen by teachers as punitive and replaced them with policies (such as induction for new teachers and changes to teacher performance appraisal) that are seen as supportive of professionalism. Staffing levels have increased despite declining enrolment, while teacher workload has been reduced and preparation time increased.
- As noted already, the strategies build on successful practices in Ontario schools and involve extensive sharing of good practice. Almost everything that is happening at the provincial level draws on good practices that were already underway in schools somewhere in the province. Every effort is made to acknowledge publicly the good work of schools and districts.

Comprehensiveness

The Ontario strategy, while centered on these key student outcomes, is not limited to those. The focus on literacy and numeracy in elementary schools is complemented by strong support for other curricular areas such as physical activity and the arts, both of which have been expanded in the last 3 years. The strategy explicitly rejects narrow views of teaching and curriculum.

The Ontario theory of improvement recognizes schools as ecologies (Fullan, 2006, 2007), so gives attention to building capacity among teachers, to improving leadership, to involving parents, to changing policies, and to adding resources – all at the same time. It is also important to pay attention to the issues that could turn into huge distractions – such as having collective agreements in place with teachers and support staff, dealing with safety issues such as bullying, and ensuring that school buildings are in good repair. There has been action in each of these areas. The effort to be comprehensive, however, creates the challenge of overload, discussed a little later.

Coherence and Alignment Through Partnership

The nature of politics is that government directions can change quickly. Sustainable improvement in schools therefore requires real commitment and participation by all the partners – teachers, administrators, boards, and the broader community. Changing the negative and combative public discourse around education in order to build public confidence was itself an important policy goal of the government. However the efforts to build and sustain strong partnerships all take place within the common emphasis on improving student outcomes.

The Ontario approach built on Fullan's (2006) "trilevel solution," in which governments, school districts, and schools work together on common approaches and strategies. An explicit part of the strategy involves building strong relationships and close connections with boards, schools, and other organizations. Careful and explicit attention was given to building strong positive connections with every part of the education system.

The Ministry of Education implemented new mechanisms for consultation with partners on virtually all programs and policies. A Partnership Table brings the Minister of Education together with all the major stakeholders on a regular basis. The Minister and senior ministry staff meet regularly with the main provincial organizations, including teachers, principals, and superintendents. There is extensive consultation and ongoing communication with school boards.

The government took particular steps to involve teachers and their organizations in the development of policies and programs. In 2005, then-Minister Gerard Kennedy played a vital role personally in ensuring that 4-year collective agreements were put in place for all teachers across the province, giving teachers, students, and the public a multiyear assurance of stability. Steps have also been taken to work more closely with support staff groups and to recognize their need for involvement and for professional development.

Principals are widely recognized as playing key roles in school improvement. In 2005, the Ministry issued a paper on "role of the principal" that outlined a number of steps to support principals in focusing on leading improvement in student outcomes. Professional development for principals has been expanded, and efforts are being made to improve some of their key working conditions, though the job of principal remains a challenging one.

Targeted Additional Resources

The government has recognized that significant education renewal does require resources. From 2003 to 2007 funding for public education increased by 24%, or 28% on a per pupil basis. These funds have been allocated carefully to support the student achievement agenda. The largest single portion has gone to salary increases so that schools can attract and retain good staff. Another very significant amount has been used to expand staffing in key areas, such as smaller classes, student success teachers, specialist teachers in elementary schools, more support staff in key areas, repairs to aging buildings, antibullying programs, and the various other elements of the strategies. Additional funding has also gone to small and isolated schools to expand the services they can offer. The point has never been simply to provide more funds, but always to support better outcomes for students.

Political Leadership

It is important to mention again the vital role of strong political leadership across the education system. Change in Ontario has been driven by the premier and three

successive ministers of education, each of whom has helped advance the same agenda. Many of the elements of this agenda are not particularly politically attractive but have still been supported. Schools and districts have been able to focus on the same priorities for 4 years. Sustainable change has also been supported by many other political actors, including elected school boards and the leadership of provincial organizations including trustees, parents, teachers, students, and administrators. This consensus has not been forced by the provincial government but has been carefully built through the kinds of measures just discussed. This political work of building consensus and trust must be an essential element in any program of education reform (Hubbard, Stein, & Mehan, 2006).

The success of these efforts can be seen in the much more positive public positions being taken by stakeholder groups in Ontario, including school boards and teacher unions. Differences and issues remain, and can be heated, but the overall tone of discussion has changed dramatically for the better, which also helps sustain public support for education.

In an atmosphere of increasing trust it is more common for all parties to attempt to work out differences through discussion and compromise rather than through public battles.

Results So Far

The two main strategies are relatively new. The Literacy and Numeracy Secretariat only began operation early in 2005, and the most important elements of the Student Success Strategy only came into place later in 2005, although both built on work already underway in a number of school boards and have been able in less than 2 school years to have a substantial impact on teaching practices and on students' results.

Results on Ontario's grade 3 and 6 provincial assessment have improved substantially and broadly over the last 3 years. Overall about 10% more students, or 15,000 per grade, are now achieving the provincial standard (Literacy and Numeracy Secretariat, 2007; full results are available at www.eqao.com). The number of schools with very low performance has fallen by three-fourths (Literacy and Numeracy Secretariat, 2007). The system as a whole is half way toward the target of 75%, though that target itself is not an end point. Nor are these results just a matter of test-taking. Gains on tests only matter if they represent real improvements in students' skills, and teachers across the province confirm that they are seeing real skill improvements for students, not just increases in test results.¹

The indicators for high school improvement are also positive. Graduation rates have begun to rise – from 68 to 73% in 2007–2008. Results on the provincial

¹This claim is based on the author's visits to more than 100 schools across Ontario as well as conversations with leaders in all districts and all major stakeholder organizations. All Ontario education leaders will acknowledge the very significant improvement in teacher morale since 2003.

grade 10 literacy test – itself not a particular focus of the changes – improved substantially in 2005 and 2006 (full results at www.eqao.com). Credit accumulation in grades 9 and 10, which so strongly predicts graduation, is also improving, so there should be further significant improvements in graduation rates in the next few years.

Just as importantly, there is a level of energy and enthusiasm in Ontario schools that has not been seen for quite some time. Fewer young teachers are leaving the profession and fewer teachers are choosing early retirement – tangible indicators of improved teacher morale.² Thousands of teachers are participating voluntarily in professional development programs. More teachers are giving positive responses to surveys of their level of satisfaction with their work (Ontario College of Teachers, 2006).

Challenges

No change of this magnitude occurs without challenges. Four are particularly important to note. First, 2 or 3 years of improvement are only a start. Much remains to be done. For example, although achievement levels are increasing, some groups, such as students in special education or recent immigrants or Aboriginal students, remain far behind (Literacy and Numeracy Secretariat, 2007). In other areas such as improving the physical condition of buildings and improving services to high-need students there has been progress but nobody would claim that these challenges have yet been fully met.

Despite improved morale, Ontario educators are feeling that they are being asked to address many initiatives all at the same time (Ontario College of Teachers, 2006). Even though most people are positive about the elements of change, putting them all together has brought stress – though of a more positive variety than was experienced a few years ago during all the labor disruption. Many teachers, and especially principals, feel overloaded, yet sustainability depends on people seeing the long-term task as feasible as well as challenging. Although this situation is slowly improving, at all levels of the system there is still a need for more alignment and coherence, and fewer distracting issues.

The next challenge has to do with resources. As noted, the government has increased funding for public education significantly, but schools and boards still face financial pressures in matching resources to demands. All partners will need to continue to work hard to ensure that resources are used as productively as possible. In addition to new resources, this means re-examining current allocations of

²The Ministry of Education spent an additional \$30 million on salaries for teachers in each of 2005–2006 and 2006–2007 because the number of teachers actually retiring fell significantly below the projections based on teacher age profiles and previous years' retirement patterns. That is, many fewer teachers retired in each year than had been anticipated.

staff and funds to assess whether these actually are the most effective ways to use resources in support of students. The allocation of resources is an important area for more research and more effective application of existing research knowledge. For example, practices such as retaining students in grade or keeping students for a 5th year of high school effectively reduce the resources available for more effective strategies such as early intervention for success (Levin & Naylor, in press).

Finally, the Ontario approach poses challenges around the balance between support for and criticism of change. Even the strongest supporters of the Ontario strategy would admit that not everything is perfect; there have been bumps on the road and there remain areas of tension and insufficient progress. Governments do tend to try to focus on success and play down problems. Criticism based on evidence plays an important role in helping to identify areas for further improvement. That is why the Ministry of Education has funded credible third parties to undertake public evaluations of its major strategies, with initial results very positive (Audet et al., 2007; Ungerleider, 2007).

In his postwar novel, *Billiards at Half Past Nine*, Heinrich Boll (1959) makes the point that it is much quicker and easier to destroy something than it is to build it. This is certainly true of large-scale change in education, which is always fragile. If government policy were to change significantly, or if other issues were to occur that refocused attention on areas of conflict, the gains could be threatened. There are always groups, including political opposition groups and elements within each of the stakeholder organizations, that are looking for increased conflict; that is simply a reality of politics. In that sense, sustainable improvement, like many other human goods, requires constant and relentless attention and reinforcement. It can never be taken for granted but has to be recreated continually.

Conclusion

The strategy in Ontario is intended to create an atmosphere of “positive pressure” (Fullan, 2007) that creates the conditions for people at all levels to invest the energy and commitment necessary for the hard and rewarding work of continuous reform. Positive pressure provides resources, increases expectations, furnishes data on an ongoing basis connected to further reform, avoids unfair comparisons among schools, and interprets results based on multiyear trends. Success is celebrated, blame avoided, and lack of improvement is addressed in a transparent and supportive manner.

As this chapter testifies, there is a body of knowledge that can support effective and satisfying improvement in public education. The Ontario case is an example of large-scale change in education that is respectful of educators, fair to students and communities, and based on the best available knowledge. It is not perfect, and remains vulnerable, but it does show that when the right elements are brought together, both better results for students and higher satisfaction for educators can ensue.

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Educational Change in Finland

Pasi Sahlberg

God mend us! The fact is that we don't even know the first letter of the alphabet, and that knowing how to read is the first duty of every Christian citizen. The power of law, of church law, may force us to it. And you know what kind of contraption the State has watching, eager to snap us up in its jaws if we don't obediently learn to read. The stocks are waiting for us, my brothers, the black stocks; their cruel jaws gaping wide like those of a black bear. The provost has threatened us with those hell his pincers, and he is bound to carry out his threat unless he sees us eagerly studying every day.

– Aleksis Kivi: *Seven brothers* (1870)

In the early 1970s – a century after the first Finnish novel *Seven Brothers* was published – Finland was known for its long-distance runners, introverted people, saunas on lakes, and successful political coexistence with the Soviet Union. In those days, the Finnish economy was characterized by traditional agriculture and it relied on forestry and heavy-metal industries. Being a rather poor member within a much wealthier family of industrial market economies, Finland was ranked in the lower half of the OECD nations. The Finnish education system had only a few features that attracted any praise among international observers and many education policy ideas were adopted from its wealthier Western neighbor, Sweden. Indeed, Finland's education system was recognized internationally exceptional only on one account: Finnish 10-year-olds were among the best readers in the world (Allerup & Mejding, 2003; Elley, 1992). Other than that, international education indicators – as they then existed – left Finland in the shadows of traditional education superpowers, such as Sweden, England, USA, and Germany. This chapter shows how Finland has been able to upgrade its human capital by transforming its education system from less-than-average to one of the best international performers since the 1970s. It then argues that although Finland has been claimed to be a “model pupil” in listening to advice from supranational organizations, success has been achieved

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by implementing education reforms that differ from those in many other nations. Finally, it suggests that much of the Finland's journey from the educational periphery to international limelight is explained by the contextual factors – especially sociocultural aspects and other public-sector policies. This article offers essential ideas for nations that aspire sustainable knowledge societies through educational and economic development. The main conclusion is that education and educational reform need to be incorporated into a common social mission that foster interdependency between education, other social sectors, and national economic development. Finnish experience suggests that education systems will continue to find it difficult to achieve good student learning if children live in a world outside school that does not provide enough of the caring in terms of health, safety, and moral support that are needed to be able to learn well in classrooms. This experience also raises some concerns for Finns themselves. As the family and state social capital decrease, conditions for universal good learning will also get more difficult. Reaching the top of the educational world has made politicians and policy-makers modest in their educational reform demands. As a consequence, the systemic evolution of education system has slowed down in Finland. However, changing social values, increasing immigration, aging population, emphasizing productivity, and demand for more creativity and innovation require continuous and sustainable improvement of education system.

Educational Progress in Finland since 1970

As Finland attracts global attention due to its high-performing education system, it is worth asking whether there was any progress in this performance since the 1970s. If progress can be reliably identified, then, consequently, the question becomes: What factors might be behind successful education reform? In my recent analysis of educational reform policies in Finland (Sahlberg, 2007), I describe how Finland changed its traditional education system, with little to celebrate in terms of international comparisons, into a model of a modern, publicly financed education system with widespread equity, good quality, and large participation – all of this at reasonable cost (OECD, 2007c; Sahlberg, 2007; Schleicher, 2006). What is significant from this analysis is the steady progress during the past three decades within four main domains: (1) increased level of educational attainment of the adult population, (2) widespread equity, (3) a good level of student learning, and (4) moderate overall spending, almost solely from public sources. Before describing the educational change since the 1970s, I will briefly summarize the main elements determining the level of Finnish educational system performance.

First, there has been a steady growth in participation in all levels of education in Finland since 1970. The growth has been especially rapid in the upper secondary education sector in the 1980s and, then, within the tertiary and adult education sectors in the 1990s, up to the present. Education policies that have driven Finnish reform since 1970 have prioritized creating equal opportunities, raising quality, and increasing participation within all educational levels across Finnish society. More

than 99% of the age cohort successfully complete compulsory basic education, about 95% continue their education in upper secondary schools or in the 10th grade of basic school (some 3%) immediately after graduation, and 90% of those starting upper secondary school eventually receive their school leaving certification, providing access to tertiary education (Statistics Finland, 2007). Two-thirds of those enroll in either academic universities or professionally oriented polytechnics. Finally, over 50% of the Finnish adult population participates in adult education programs. What is significant in this expansion of participation in education is that it has taken place without shifting the burden of costs to students or their parents. According to recent global education indicators, only 2% of Finnish expenditure on educational institutions is from private sources compared to an OECD average of 13% (OECD, 2007a). Overall progress since 1970 in educational attainment by the Finnish adult population (15 years and older) is shown in Fig. 1. The current situation is congruent with a typical profile of the human capital pyramid in advanced knowledge economies (OECD, 2007a).

Second, education opportunities and, therefore, good learning outcomes have spread rather evenly across Finland. There was a visible achievement gap among young adults at the start of upper secondary school in the early 1970s due to very different educational orientations associated with the old parallel system (Aho, Pitkänen, & Sahlberg, 2006; Lampinen, 1998). This knowledge gap strongly corresponded with the socioeconomic divide within Finnish society at that time. Although students' learning outcomes began to even out by the mid-1980s, streaming through ability grouping in mathematics and foreign languages kept the achievement gap relatively wide. After abolishing streaming in comprehensive school in the mid-1980s and, therefore, making learning expectations similar

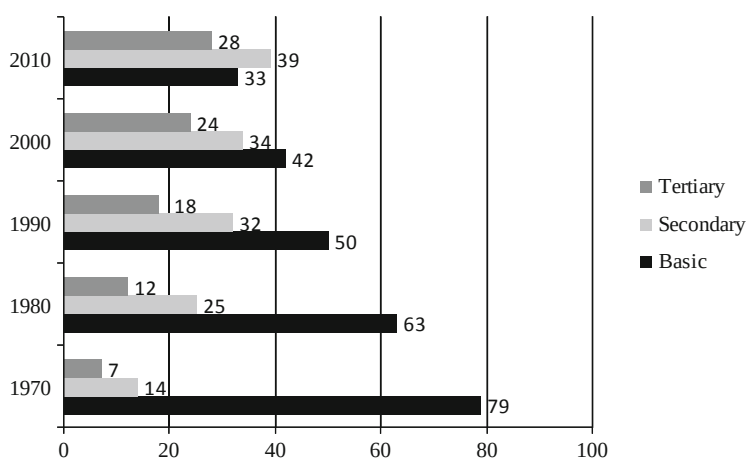


Fig. 1 Level of educational attainment among the Finnish adult population (15 years and older) since 1970 (Sahlberg, 2006b)

Note: Levels in 2010 are estimates.

for all students, the achievement gap between low and high achievers began to decrease. First evidence of this came from the OECD's Programme for International Student Achievement (PISA) survey in 2000. Finland had one of the smallest performance variations between schools, less than one-tenth of that variation for example in Japan, in reading literacy between schools of all OECD nations. A similar trend continued in the 2003 PISA cycle in mathematics and was strengthened in the PISA survey in 2006 (OECD, 2001, 2004, 2007b). Figure 2 illustrates performance variance within and between schools in different OECD nations as assessed by science scale in 2006 PISA survey.

According to Fig. 2, Finland has less than 5% between-school variance on the PISA science scale, whereas the average between-school variance in other OECD nations is about 33%. The fact that almost all Finnish inequality is within schools, as shown in Fig. 2, means that the remaining differences are probably mostly due to variation in students' natural talent. Accordingly, variation between schools mostly relates to social inequality. Since this is a small source of variation in Finland, it suggests that schools successfully deal with social inequality. This also suggests, as Grubb (2007) observed, that Finnish educational reform has succeeded in building an equitable education system in a relatively short time, a main objective of Finland's education reform agenda set in the early 1970s.

Third, Finnish students' learning is at a high international level as determined by recent comparative student achievement studies. Although it is difficult to compare students' learning outcomes today with those in 1980, some evidence can be offered using International Educational Assessment (IEA) and OECD PISA surveys since the 1980s (Kupari & Välijärvi, 2005; Martin et al., 2000; OECD, 2001;

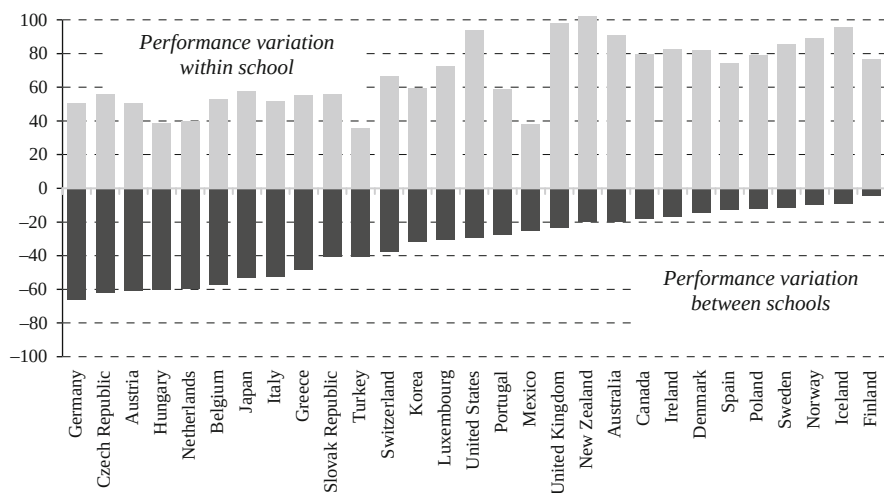


Fig. 2 National variance within and between schools in student science performance in the 2006 PISA cycle (OECD, 2007b)

Robitaille & Garden, 1989). Based on these data, I reported elsewhere a summary of Finnish students' mathematics performance since 1981 compared to their peers in other countries (Sahlberg, 2007). The studies used include the Second International Mathematics Study (SIMS) in 1981 (8th grade, 20 nations), Trends in Mathematics and Science Study (TIMSS-R) in 1999 (8th grade, 38 nations), and the OECD PISA survey in 2000 (15-year-olds, all 30 OECD member countries). These are the international student assessment surveys in which Finland participated since 1980. Since the nations participating in each international survey are not the same and the methodology of IEA and OECD surveys is different, the international average as a benchmarking value does not always provide a fully comparable or coherent picture.

Figure 3 shows another divergence of Finnish students' learning performance trend, as measured in the OECD PISA mathematics scale in comparison to some OECD countries over time. It is remarkable that student achievement in mathematics shows progress in Finland also according to the PISA data contrary to many other education superpowers. This indicates a continuing progress of student achievement in mathematics. There is an increasing debate of what these international tests really measure and it is beyond the scope of this chapter to discuss those issues or the validity of these studies. Criticism and proponents' arguments are available, for example, in Adams (2003), Bautier and Rayon (2007), Goldstein (2004), Nagy (1996), Prais (2003, 2004), Riley and Torrance (2003), Sahlberg (2007), and Schleicher (2007).

OECD PISA is increasingly being adopted as a global measure to benchmark nations' student achievement at the end of compulsory education. In 2006, the third cycle of this global survey was conducted within all 30 OECD member nations and in 27 other countries. It focused on "young people's ability to use their knowledge and skills to meet real-life challenges. This orientation reflects a change in the goals and objectives of curricula themselves, which are increasingly concerned with what students can do with what they learn at school and not merely with whether they have mastered specific curricular content" (OECD, 2007b, p. 16). In the 2006 PISA survey, Finland maintained its high performance in all assessed areas of student achievement. In science, the main focus of the 2006 PISA survey, Finnish students outperformed their peers in all 56 countries, as shown in Fig. 4.

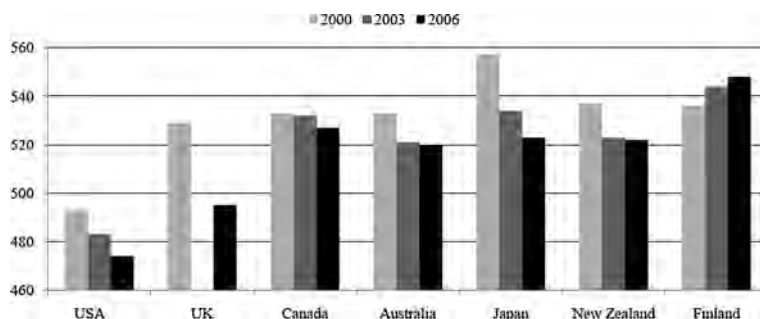


Fig. 3 Finnish 15-year-old students' performance in mathematics in three OECD PISA surveys between 2000 and 2006 in selected OECD countries

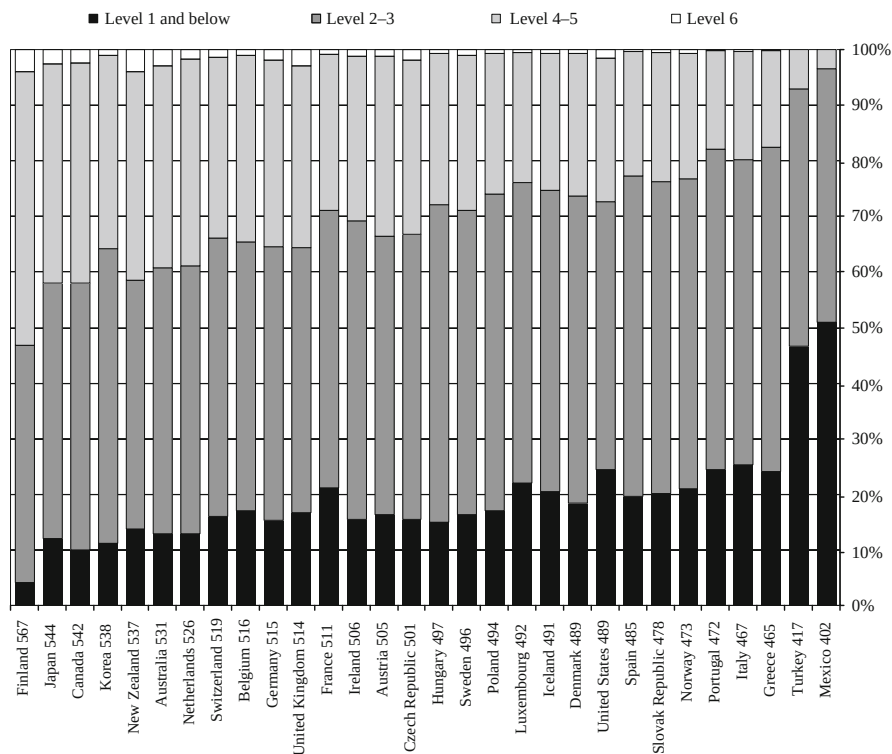


Fig. 4 Percent of students at each proficiency level on the science scale (OECD, 2007b, Table 2.1a), where level 2 refers to minimum and level 6 to excellent proficiency

Figure 4 suggests that Finnish students' learning achievement in science has advanced from the earlier international comparisons over the last 25 years. All three PISA survey cycles since 2000 also indicate that Finnish educational performance is consistent over all assessed educational domains and that Finnish students, on average, score high in every survey across all subjects – in mathematics, science, and reading literacy.

It seems that Finland has been able to reform its education system by increasing participation at all levels, making good education achievable to a large proportion of its population, and attaining comparatively high learning outcomes in most schools throughout the nation. All of this has been accomplished by financing education, including tertiary and adult education, almost exclusively from public sources. One more question regarding good educational performance remains to be addressed: How much does it cost the Finnish taxpayers? In OECD nations for which data on comparable trends are available for all educational levels combined, public and private investment in Finnish education increased 34% from 1995 to 2004 in real terms, while the OECD average for the same period was 42%. Expenditure on educational institutions as a percentage of GDP in Finland is at the OECD average,

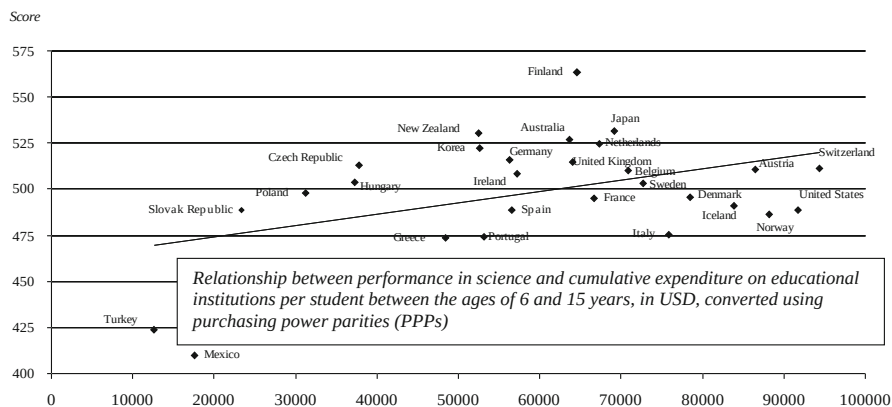


Fig. 5 Student performance on the PISA science scale and spending per student in USD converted to purchasing power parities (OECD, 2007b, Tables 2.1c and 2.6)

6.1% in 2004 (OECD, 2007a). Less than 2% of total Finnish expenditure on education institutions comes from private sources. At present, tertiary education remains fully financed from public funds, and therefore free, for everyone living in Finland. Figure 5 summarizes students' mean performance on the PISA science scale in relation to educational spending per student in 2006. These data indicate that good educational performance in Finland has been attained at reasonable cost.

Finnish educational success has encouraged people to search for causes of such favourable international performance. Most visitors to Finland discover elegant school buildings filled with calm children and highly educated teachers. They also recognize the large autonomy that schools enjoy; little interference by the central education administration in schools' everyday lives; systematic methods to address problems in the lives of students and targeted professional help for those in need. Much of this may be helpful to visitors in benchmarking their own country's practice in relation to a leading education nation such as Finland. However, much of the secret of Finland's educational success remains undiscovered: What has the educational change process been like? What was done behind the scenes when key decisions were made to make that success possible? How much did Finnish educators take note of global education reform movements in creating their own approaches? What is the role of other public-sector policies in making education system work so well?

Global Educational-Change Controversies

In our recent analysis of Finnish education policies and reform principles since 1968, my colleagues and I concluded that rather than introducing sequential educational revolutions, Finnish education policy has been built upon periodic change

and systemic leadership led by commonly accepted values and common, compelling social vision that resonate closely with contemporary ideas of sustainable educational change (Aho et al., 2006; Fullan, 2005; Hargreaves, 2008; Hargreaves & Fink, 2006; Hargreaves & Goodson, 2006). Importantly, the main features for developing a competitive, well-performing education system are similar to those underlying the social and economic transformation of Finland into a welfare state and a knowledge society (Castells & Himanen, 2002; Saari, 2006; Sahlberg, 2006a). It is, therefore, difficult to identify particular reforms or innovations per se that served as driving forces in raising the level and quality of Finnish education. Thus, it becomes necessary to identify broader policies – and especially how different public-sector policies were interconnected with the education system. It is, furthermore, essential to emphasize that although Finland has been called “a model pupil” in listening to the policy advice from the supranational organizations, especially OECD and the European Union (Niukko, 2006; Rinne, 2006), the Finnish education system has remained quite unreceptive to influences from what is often called the *global education reform movement* or GERM (Sahlberg, 2004, 2007). GERM has emerged since the 1980s and has become increasingly adopted as an official agenda or accepted as educational orthodoxy within many education reforms throughout the world, including the USA, the UK, Germany, and some transition countries. Tellingly, GERM is often promoted through education strategies and interests of international development agencies, as well as by some bilateral donors through their interventions in national education and political settings.

Since the 1980s, at least five globally common features of education policies and reform principles have been employed to try to improve the quality of education, especially in terms of raising student achievement. First is *standardization* in education. Outcomes-based education reform became popular in the 1980s, followed by standards-based education policies in the 1990s, initially within Anglo-Saxon countries. These reforms, quite correctly, shifted the focus of attention to educational outcomes, that is, student learning and school performance. Consequently, a widely accepted – and generally unquestioned – belief among policy-makers and education reformers is that setting clear and sufficiently high performance standards for schools, teachers, and students will necessarily improve the quality of desired outcomes. Enforcement of external testing and evaluation systems to assess how well these standards have been attained emerged originally from standards-oriented education policies. Since the late 1980s, as Hargreaves (2003) also observed, centrally prescribed curricula, with detailed and often ambitious performance targets, frequent testing of students and teachers, and high-stakes accountability have characterized a homogenization of education policies worldwide, promising standardized solutions at increasingly lower cost for those desiring to improve school quality and effectiveness.

A second common feature of global education reform strategies is *increased focus on core subjects* in curriculum, in other words, on literacy and numeracy. Basic student knowledge and skills in reading, writing, mathematics, and natural sciences are elevated as prime targets and indices of education reforms. As a consequence of accepting international student assessment surveys, such as PISA and

IEA, as criteria of good educational performance, reading, mathematical, and scientific literacy have now become the main determinants of perceived success or failure of pupils, teachers, schools, and entire education systems.

The third characteristic that is easily identifiable in global education reforms is *the search for safe and low-risk ways to reach learning goals*. This minimizes experimentation, reduces use of alternative pedagogical approaches, and limits school risk-taking. Research on education systems that have adopted policies emphasizing achievement of predetermined standards and prioritized core subjects suggests that teaching and learning are narrower and teachers focus on “guaranteed content” to best prepare their students for tests (Au, 2007; Valli & Buese, 2007). The higher the test-result stakes, the lower the degree of freedom in experimentation and risk-taking in classroom learning.

The fourth globally observable trend in educational reform is *transfer of educational innovation from one context to another* as a main source of change (Levin, 1998; Phillips, 2005). This process where educational policies and ideas are lent and borrowed is often facilitated by international development organizations and motivated by national hegemony and economic profit, rather than by moral goals of human development. Faith in educational change through innovations brought and sold from outside the system undermines two important elements of successful change: First, it often limits the role of national policy development and enhancement of an education system’s own capabilities to maintain renewal, and perhaps more important, it paralyzes teachers’ and schools’ attempts to learn from the past and also to learn from each other, or it prevents lateral capacity building in the system (Fullan, 2005).

The fifth global trend is adoption of *high-stakes accountability policies* for schools. School performance – especially raising student achievement – is closely tied to the processes of accrediting, promoting, inspecting, and, ultimately, rewarding or punishing schools and teachers. Success or failure of schools and teachers is often determined by standardized tests and external evaluations that devote attention to limited aspects of schooling, such as student achievement in mathematical and reading literacy, exit examination results, or intended teacher classroom behavior.

None of these elements of GERM have been adopted in Finland in the ways that they have within education policies of many other nations, for instance, in the United States, England, Japan, or some Canadian provinces. This, of course, does not imply that education standards focus on basic knowledge and skills or emphasis on accountability should be avoided in seeking better learning or educational performance. Nor does it suggest that these ideas were completely absent in education development in Finland. But, perhaps, it does imply that a good education system can be created using alternative approaches and policies orthogonal to those commonly found and promoted in global education policy markets.

By contrast, typical features of teaching and learning in Finland are, first, high confidence in teachers and principals as professionals. Second feature is to encourage teachers and students to try new ideas and approaches, in other words, to learn about and through innovations. Finally, teaching and learning aims to cultivate creativity in schools while respecting schools’ pedagogic legacies. This does

not mean that traditional instruction and school organization are nonexistent in Finland—quite the opposite. What is important is that today's Finnish education policies are a result of four decades of systematic, mostly intentional, development that has created a culture of diversity, trust, and respect within Finnish society, in general, and within its education system, in particular. This may be a reason for the commonly noted Finnish pedagogical conservatism that, for example, Simola (2005) has identified as a paradoxical feature of the Finnish teaching profession.

What education policy principles and related strategies were implemented in Finland to bring its education system to a high international level of overall performance? Schleicher (2006) suggests that one element of Finland's success has been “the capacity of policy makers to pursue reform in ways that went beyond optimizing existing structures, policies and practices, and moved towards fundamentally transforming the paradigms and beliefs that underlay educational policy and practice until the 1960s” (p. 9). Although Finnish education-policy discourse changed during the 1990s as a consequence of new public sector management and other neoliberal policies, Finland has been slow to implement dominant market-oriented education reforms. Instead, education sector development has been grounded on equal opportunities for all, equitable distribution of resources rather than competition, intensive early interventions for prevention, and building gradual trust among education practitioners, especially teachers. Moreover, Finland has been characterized as a consensus society, where major political decisions have been agreed upon by all key players in society (Aho et al., 2006; Routti & Ylä-Anttila, 2006; Saari, 2006). Importantly, the Finnish Teachers' Trade Union, a main negotiating partner in education, has consistently resisted adopting market-oriented management models. Table 1 highlights alternative approaches that were adopted by Finnish education policies since the early 1980, intending to enhance student school learning.

There is a lot of speculation regarding the reasons that could explain Finnish educational success in earlier mentioned international comparisons (Aho et al., 2006; Grubb, 2007; Hargreaves, Halasz, & Pont, 2007; Laukkanen, 2008; Linnakylä, 2004; Sahlberg, 2007; Schleicher, 2006; Simola, 2005; Välijärvi, Linnakylä, Kupari, Reinikainen, & Arffman, 2002; Valijarvi et al., 2007). These efforts to explain good educational performance often focus on factors within the education system, such as well-educated teachers or intelligent accountability policies (as shown in Table 1). Some argue, quite correctly, that cultural aspects of Finland such as the high social status of literacy or ethnic uniformity within Finnish society affect school performance. At the same time, educational, or technical, peculiarities of the Finnish model of educational change provide necessary, but insufficient conditions for understanding how an education system can be transformed to suit a modern knowledge society. What has been much less analyzed and researched among educators or social scientists, in general, is how since the 1970s the education system has operated as a part of larger, complex political and social system within Finnish welfare society (Saari, 2006) that covers economy, employment, social issues, and education.

Table 1 Some features of education policy development and reform principles globally and in Finland since the early 1980s

Education policies and reform principles	
Global education reform movement	Education development in Finland
<i>Standardization</i>	<i>Loose standards</i>
Setting clear, high, centrally prescribed performance standards for schools, teachers, and students to improve the quality of outcomes.	Setting clear but flexible national framework for school-based curriculum planning. Encouraging local solutions to national goals in order to find best ways to create optimal learning opportunities for all.
<i>Focus on literacy and numeracy</i>	<i>Focus on broad and creative learning</i>
Basic knowledge and skills in reading, writing, mathematics, and natural sciences serve as prime targets of education reform.	Teaching and learning focus on deep, broad learning, giving equal value to all aspects of the growth of an individual's personality, moral character, creativity, knowledge, and skills.
<i>Teaching for predetermined results</i>	<i>Encouraging risk-taking and uncertainty</i>
Reaching higher standards as criteria for success and good performance; minimizes educational risk-taking and narrowing teaching to content and methods beneficial to attaining preset results.	School-based and teacher-owned curriculum facilitates finding novel approaches to teaching and learning; hence, encourages risk-taking and uncertainty in leadership, teaching, and learning.
<i>Transferring external innovations for educational revolutions</i>	<i>Learning from the past and respecting pedagogical conservatism</i>
Sources of educational change are external innovations brought to schools and teachers through legislation or national programs. These often replace existing improvement strategies.	Teaching honors traditional pedagogical values, such as teachers' role and relationship with students. Main sources of school improvement are proven good practices from the past.
<i>High-stakes accountability and control of schools</i>	<i>Professional responsibility and trust</i>
School performance and raising student achievement are closely tied to the processes of promotion, inspection, and ultimately rewarding schools and teachers. Winners normally gain fiscal rewards, whereas struggling schools and individuals are punished.	Gradual building of a culture of responsibility and trust within the education system that values teachers' and principals' professionalism in judging what is best for students and in reporting their learning progress. Targeting resources and support to schools and students who are at risk to fail or to be left behind.

Three Perspectives on Educational Change

Finland offers an interesting case study to policy experts and researchers in explaining what might affect positive and rather rapid educational progress. In most cases, factors influencing good performance have been sought from within the education sector (Aho et al., 2006; Niukko, 2006; Rinne, 2006; Simola, Rinne, &

Kivirauma, 2002). Critical observers have particularly tried to identify technical, sociocultural, or political peculiarities that question the adequacy of international comparison efforts or would place Finland in a special position to succeed well in international comparisons (Bracey, 2005; Dohn, 2007; Messner, 2003). Quite rare, however, are attempts to analyze systemic characteristics that include the role of other key public-sector policies on Finnish education sector progress. Educational change in Finland can be viewed from three different perspectives that together form a complex framework for understanding the evolution and current state of the Finnish education system – technical (educational), sociocultural, and political (Fig. 6).

Much research on educational change over previous decades includes these three perspectives highlighted in Fig. 6. In the first edition of the *International Handbook of Educational Change*, House and McQuillan (1998) wrote that “an adequate understanding of school reform necessarily involves all three perspectives, though many reformers emphasize only one, a partial knowledge which often results in reform failure because of neglect of the other powerful factors” (p. 198). The *technical perspective* includes those educational aspects of reform that have been identified as factors in good performance. In the case of Finland, these include the same comprehensive school for all, a respected teaching profession, research-based teacher preparation, early prevention of failure and a system for special education, school autonomy, and professional leadership (Itkonen & Jahnukainen, 2007;



Fig. 6 Three perspectives enabling an understanding of educational change in Finland since 1970

Laukkanen, 2008; Linnakylä, 2004; Sahlberg, 2007; Salo & Johnson, 2008; Simola, 2005; Valijarvi et al., 2007).

The *sociocultural perspective* explains, in part, performance, or in some cases lack of proficiency, in terms of social, cultural, and historical features of the nation or its education system (Sahlberg, 2010; Simola, 2005). It includes both family and national social capital, ethnic and religious uniformity, mutual trust among people, traditional appreciation of literacy and reading, and also valuing integrity and the low level of corruption that this brings.

The *political perspective* explains how a small, rather poor nation that has been able to create, in a relatively short time, one of the world's most competitive and advanced modern economies with many characteristics of a welfare state (Alasuutari, 2004; Castells & Himanen, 2002; Routti & Ylä-Anttila, 2006; Saari, 2006). Studies of the Finnish model explain how strategies in other public-policy sectors are linked to educational change and to key processes that concern the entire society, such as globalization of the Finnish economy since the 1980s and integration into the European Union in the early 1990s. For example, rekindling Finnish competitiveness after the economic recession in the early 1990s required strategic investments in human capital in order to convert the education and training system to offer flexible learning paths to all including those who had already left education system. Accession to the European Union, in turn, challenged Finns to align their national identity and public institutions with those elsewhere in Europe. History and the personal mind-set of Finns suggest that they are at their best when faced with these kinds of global challenges – experiences such as the twentieth-century Olympics, war against the Soviet Union, and the deep economic recession of the early 1990s provide good evidence of the competitive and resilient Finnish spirit (called *sisu*). These educational and cultural attitudes were complemented by key economic, employment, and social policies since the 1970s and the establishing of welfare state, its institutions and policies were completed by the end of the 1980s.

Analysis of educational change often includes speculation about the basic nature of change, that is, whether it is *evolutionary* or *revolutionary*. These terms refer to change as smooth and continuous change or as radical transition points where new institutions and rules are introduced. Educational change in Finland has displayed periodic evolution, meaning that the nature of educational change has been different during these periods of change. What is important to realize is that the year 1990 marks an important watershed in Finnish history that also distinguishes two evolutionary periods in educational change (see Table 2). The time prior to 1990 was characterized by creating institutions and frameworks for a welfare-based education system. The post-1990 is more concerned with interests, ideas, and innovations that have formed the education system as an integral part of the complex social, economic, and political system. Part of the success of the Finnish model, in general, is claimed to emerge from an ability to create punctuated equilibrium between periods of changes (Gersick, 1991; Saari, 2006).

Two simultaneous processes have played an important role in developing the education sector in Finland since 1970. On the one hand, increased interaction among various public-sector policies has strengthened the coherence of economic

Table 2 Increased interdependency among public-sector policies in Finland since 1970

		Economic policies	Employment policies	Social policies	Education reform principles
⇕ Interdependency between public sector- policies strengthen⇐	Establishing institutions	1970s: <i>Institutionalization</i> Consolidation of the pillars of welfare state and strengthened state-driven social capital. Fostering conventional industrial production structures	Small, open economy that depended on exports and was state-regulated. Investments mainly in physical capital.	Establishing active employment policies and unemployment benefit system. Strengthening direct training for labor markets.	Emphasis on equity and equal access to good primary and secondary education for all. Securing public provision of education.
		1980s: <i>Restructuring</i> Welfare state completed. Restructuring economic regulations, information technology infrastructure, and public administration.	Rapid public-sector growth. Industrial production concentrates on metal and wood sectors.	Restructuring unemployment benefit system. Using early retirement as part of new employment policies.	Restructuring upper secondary education to increase access for all students. Transferring upper secondary schools to municipal authority.
	Interests, ideas, and innovations	1990s: <i>Ideas and innovation</i> Public-sector liberalization. Diversification of exports through innovation-driven markets and dissemination of ideas through a network society.	Public-sector growth halts and starts to decline. Private service sectors start to grow and new ICT industries emerge. Investments in R&D increased. Restructuring of banking sector.	Recession cuts employment benefits. New labor market benefit system to encourage employment. Employment policy system reform.	Empowering teachers and schools through school-based curricula, coordinated innovations and networking schools and municipalities for sharing ideas and change. Expansion of higher education sector.
		2000s: <i>Renewal</i> Strengthening well-performing parts of economy and renewing social policies (further privatization) to match financial realities.	Focus on services increases. Central administration loses its role and productivity of public sector is emphasized.	Aging population casts a shadow on employment. Accent on rights and obligations of unemployed. Cross-sectoral approach emphasized.	Renewing education legislation, strengthening evaluation policies and tightening state control over schools and productivity in education sector. Sizes of schools increases.

and social reforms and, therefore, created conditions for what Hargreaves & Fink (2006) term *sustainable leadership* in education. This enables systematic commitment to longer-term vision and inter-sector cooperation among different policies and strategies. On the other hand, internationalization and especially Finland's integration into the European Community have harmonized and intensified consolidation and development of public institutions and their basic functions (Saari, 2006). In this light, three conclusions can be drawn regarding how Finnish educational success can be understood from a political perspective:

- (1) The success of Finnish education reform from an international perspective is mainly based on institutions and institutional structures established in the 1970s and 1980s, rather than on changes and improvements implemented from the 1990s. This state-driven social capital that has been created through government regulations and the responsibility to provide basic conditions of well-being for all have provided a favorable social context for educational achievement.
- (2) Changes in Finnish education after 1990 are more about interests, ideas, and innovations than about new institutional structures. Institutional changes in the 1990s have been smaller, except in tertiary education where a new polytechnic system was introduced in the 1990s. However, directions remain clear and are based on the earlier policies.
- (3) The emphasis on national competitiveness that has been a key driving force in most public-sector policies in the European Union has not been converted to clear targets or operations in Finnish public-policy sectors during the 1990s and 2000s. At the same time, equity principles promulgated in the early 1970s have gradually lost influence in these policies.

Since 1970, there have been two interconnected change periods, but differing in terms of the logic of change and sources of ideas and innovations. On the one hand, education reform principles have increasingly been created in coherence and inter-dependently with other public-policy sectors following a *complementarity* principle. On the other hand, ideas for educational change – particularly improving teaching and learning in schools – have been transferred from past good practices and traditions in Finland. This has sometimes been labeled as *pedagogical conservatism* (Sahlberg, 2007; Simola, 2005) and has created a pedagogical equilibrium between progressivism and conservatism through learning from the past and teaching for the future. Further analysis of social and economic policies in Finland since the 1970s show how context makes a difference in educational achievement, in other words, how social capital can explain student learning in international comparisons.

Educational Change for a Welfare State

Finland has traveled a long way from being a rather poor agrarian state in the early twentieth century to a modern knowledge economy at the start of the third millennium. Postwar decades were marked by significant migration in Finland, as many

left their homes to seek a better life abroad or in urban parts of Finland. In 1950, the structure of the Finnish economy corresponded closely to that of Sweden's in 1910 (Kokkinen, Jalava, Hjerpe, & Hannikainen, 2007; Routti & Ylä-Anttila, 2006). Social policy decisions in the 1950s and 1960s underscored the economic importance of family farms. However, the general perceived image of Finland remained agrarian despite rapid industrialization and agriculture's declining contribution to the GDP over the second half of the twentieth century. Regardless of drastic changes in the way of life and emerging cosmopolitanism among Finnish people, traditional values endured. According to Lewis (2005), these included such cultural hallmarks as a law-abiding citizenry, trust in authority including schools, commitment to one's social group, awareness of one's social status and position, and a patriotic spirit. Policies that guided education reforms since the 1970s relied on these cultural values and principles of consensus-building that have all been distinguishing characteristics of Finnish society.

The structure of the Finnish education system until the early 1970s was based on two parallel streams that had maintained social division and created unequal opportunities for good education (Aho et al., 2006). This parallel education system caused a wide gap in learning achievement among Finnish youth by the end of compulsory school, typically at age 16. Only a minority of that age cohort enrolled in upper secondary school programs that provided them with access to higher education.

The 1970s marked a turning point in Finnish education (Hirvi, 1996; Lampinen, 1998). A new publicly financed 9-year comprehensive school (*peruskoulu*) harmonized the curriculum and offered identical educational opportunities to all young Finns, regardless of their socioeconomic background, domicile, gender, or mother tongue. Key drivers of educational change at that time were the ideals of equal access to education and a steady increase in the level of educational attainment by all Finnish citizens. Together with more equal opportunities to learn, new *peruskoulu* also offered other social services, such as health and dental care, special education support, free meals, and transportation. Education reform in the 1970s sparked bitter political debate and divided opinions among politicians and the public-at-large regarding the future of knowledge and skills of the nation (Aho et al., 2006). Interestingly, teachers who entered this new *peruskoulu* from the two parallel streams had the fewest doubts about the value of this reform. Teacher education was upgraded in universities by the end of the 1970s; it was converted into research-based masters-level programs (Jakku-Sihvonen & Niemi, 2006; Jussila & Saari, 2000; Westbury, Hansen, Kansanen, & Björkvist, 2005). This also led to a slow but steady rise of quality of Finnish primary school teachers as college-trained teachers began to be replaced by university-trained teachers. This also guaranteed that the teaching profession in primary schools remained the favorite career choice for Finnish upper secondary school graduates (Laukkanen, 2008; Sahlberg, 2006b).

Finland followed the main postwar social policies of other Nordic countries. This led to the creation of a type of welfare state, where basic social services, including education, became public services for all citizens, particularly for those most in need of support and help. This increased the level of social capital, so did national government policies that affected children's broader social environment

and improved their opportunities and willingness to learn. Carnoy (2007) calls this *state-generated social capital*. State-generated social capital is expressed as social context for educational achievement that is created by government social policies. The influence of social restructuring and education reform in Finland was profound and immediate. Eager to improve their children's economic and social opportunities, Finnish families turned to the education system. In 1955–1956, the nation's grammar schools enrolled approximately 34,000 pupils. Five years later, enrollment had swelled to 215,000 and it continued to soar, rising to 270,000 in 1965 and 324,000 in 1970 (Aho et al., 2006). Finland's old system could barely hold together as parents demanded an improved and more comprehensive basic education for their children in the hope of securing better lives for them. Such social pressure introduced a new theme in the education policy debate: the individual's potential for growth. Researchers then argued that an individual's abilities and intelligence always rose to the level required by society and that education systems merely reflected these limits or needs. An agricultural country has different educational needs than a high-tech industrial powerhouse. By the mid-1980s, the idea of comprehensive basic education was fully realized and enrollment in upper secondary schools began to increase.

Political and Economic Context of Educational Change

Educational progress in Finland should be viewed in the broader context of economic and social development and renewal, both nationally and globally. Interestingly, the growth of the Finnish education sector coincided with an impressive economic transformation from an agrarian, production-driven economy to a modern information society and knowledge-driven economy. Indeed, Finland has transformed itself into a knowledge economy in a relatively short time. The Finnish experience of the 1990s represents one of the few documented examples of how education and therefore knowledge can become driving forces of economic growth and transformation. During that decade, according to Routti and Ylä-Anttila (2006), Finland became the most specialized economy in the world in information and communication technologies and thus completed its transition from resource-driven to knowledge- and innovation-driven development. In the 2000s, Finland has consistently scored high in international comparisons in terms of economic competitiveness, levels of good governance, network readiness, and implementation of sustainable development policies (Castells & Himanen, 2002; Saari, 2006; Sahlberg, 2006a; Routti & Ylä-Anttila, 2006). Figure 7 highlights how rapidly economic transformation affected changes in employment in terms of the emergence of knowledge- and skills-intensive labour market needs and thereby declining needs of low know-how labour during the last two decades of the twentieth century. In a small economy that is almost fully dependent on its own labor, this had an immediate impact on educational policies.

The major economic transformation and need for sophisticated knowledge and skills in new high-tech industries provided the education system with unique

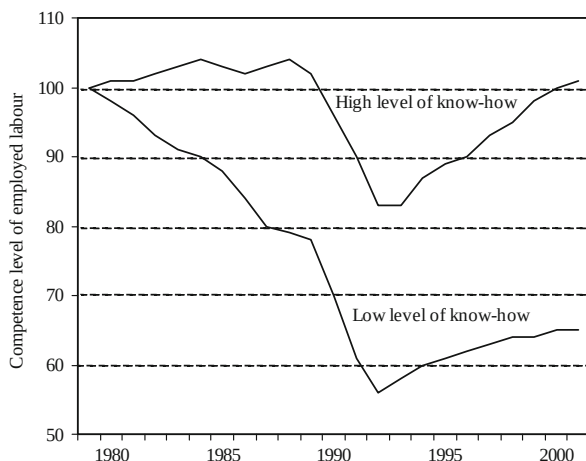


Fig. 7 Structural changes in Finnish industry in terms of changes in employment of high and low level know-how labor between 1980 and 2000 (Pajarinen & Ylä-Anttila, 2001)

opportunities for radical renewal in the 1990s. This happened at the same time as three significant economic and political processes unfolded: the collapse of the Soviet Union; a deep and severe economic recession triggered by a Finnish banking crisis, accelerated by vanishing Soviet trade; and integration with the European Union. Each of these changes influenced the Finnish education sector either directly or indirectly. By the middle of the 1990s, a clear Finnish consensus emerged that information and communication technologies would eventually foster the transformation to a knowledge economy and that this was perhaps the best way out of the economic crisis and into the heart of European power. It was also realized that the knowledge economy is not only about preparing human capital for higher know-how. It is also about having highly educated consumers able to benefit from technological products in markets requiring better technological literacy.

The information society and knowledge economy have been important contextual factors for educational change in Finland. The economic sector in Finland has expected that the education system should provide not only the needed quantities of skilled professionals but also those with appropriate knowledge and skills to deal with rapidly changing environments. In their call for raising standards of knowledge and skills, Finnish employers, for example, were reluctant to advocate narrow specialization and early selection to schools. Although Finnish industry has actively promoted better learning of mathematics, sciences, and technology, it simultaneously supported rather innovative forms of school-industry partnerships as part of the formal curriculum. Rapid emergence of innovation-driven businesses in the mid-1990s introduced creative problem-solving and innovative cross-curricular projects and teaching methods to schools. Some leading Finnish companies, such as Nokia, reminded education policy-makers of the importance of keeping teaching and

learning creative and open to new ideas, rather than fixing them to predetermined standards and accountability through national testing.

Membership in the European Union in 1995 marked a mental change within Finland. The Soviet Union had disappeared only half-decade earlier—an event that boosted consolidation of Finland’s identity as a full member of Western Europe. The accession process of becoming an EU member was equally important as attaining actual membership in 1995. As a new Finnish identity emerged during the years of EU accession, Finnish people were motivated to ensure that they and their institutions were at least up to the level of other European nations. In fact, the poor reputation of mathematics and sciences in Finnish schools, compared to European peers in the 1970s and 1980s, became a reason to try harder to move Finnish educational performance up to a good European level. Although education is not included in formal EU membership requirements, the accession process had a tangible positive impact on strengthening public institutions, including schools in Finland, especially in the midst of the worst economic recession since the years of World War II. Moreover, Finnish educators became increasingly aware of various European education systems. This gave a positive impetus to innovation and new ideas within Finland’s education sector as more information became readily available about practices within other systems.

Transfer of Educational Know-How

International tests comparing how well young people in different countries perform in reading, mathematics, and science have provided a worldwide pretext for education reforms and has increased focus on educational “quality.” When the first PISA results were published in late 2001, they induced a shock in many countries and also in Finland. They created an educational pilgrimage from all over the world to see the “miracle of PISA” that took all Finns by surprise: Finnish education experts were not sure what made them educationally so successful. Later on, other nations like Korea, and most recently Estonia and Canada have experienced similar international attention. Interestingly, Cuba has also joined the league of educational powerhouses due to its good performance in UNESCO’s *Latin American Laboratory of Educational Evaluation* in the late 1990s. In their search for reasons why Cuban children outperform their peers from all other Latin American countries, Carnoy’s research team concluded that “state-driven social capital is an important construct for understanding why children in some countries do better in school” (Carnoy, 2007 p. 155). There are certain contextual similarities between Nordic welfare states and Cuban society as far as sociocultural conditions for educational achievement are concerned. These contextual factors of high social capital and the role of education in generating national well-being provide valuable insights for those who are concerned with raising student achievement.

Due to recent educational success documented by all three PISA surveys, many want to learn from Finns how to build a good education system (Barber &

Mourshed, 2007; Grubb, 2007; Hargreaves et al., 2007; Schleicher, 2006). Yet understanding Finnish educational success needs to include the sociocultural, political, and economic perspectives discussed in this chapter. Indeed, there is more to the picture than meets the eye. An external OECD expert review team that visited Finland observed that “it is hard to imagine how Finland’s educational success could be achieved or maintained without reference to the nation’s broader and commonly accepted system of distinctive social values that more individualistic and inequitable societies may find it difficult to accept” (Hargreaves et al., 2007). Another visiting OECD team confirmed that the Finnish experience advice that approaches to equitable schooling should rely on multiple and reinforcing forms of intervention with support that teachers can get from others, including special education teachers and classroom assistants (Grubb, 2007). Furthermore, educational change should be systematic and coherent, in contrast to current haphazard intervention efforts in many other countries. The conclusion was that “developing the capacities of schools is much more important than testing the hell out of students, and that some non-school policies associated with the welfare state are also necessary” (Grubb, 2007, p. 112).

These observations about transferability of educational change ideas contradict with the thinking of those who claim that context, culture, politics, or governance are not the most important things to the school system and its leaders for achieving real improvement in educational outcomes. The McKinsey Report that analyzed education policies and practices in 25 countries concluded that the following three educational reform principles go before anything else: (1) the quality of teachers; (2) education outcomes will only improve by improving instruction; and (3) system-wide excellence is only possible by “putting in place mechanisms to ensure that schools deliver high-quality instruction to every child” (Barber & Mourshed, 2007, p. 40). Another example is the US education reform known as *No Child Left Behind*. This legislation, according to many teachers and scholars, has led to fragmentation in instruction, further interventions uncoordinated with the basic classroom teaching, and more poorly trained tutors working with students and teachers. As a consequence, schools have experienced too many instructional directions for any student with an increase of unethical behaviors and a loss of continuity in instruction and systematic school improvement (Grubb, 2007; Nichols & Berliner, 2007; Valli & Buese, 2007). Difference between this and the Finnish approach is notable: The Finns have worked systematically over 35 years to make sure that competent professionals who can craft the best learning conditions for all students are in all schools, rather than thinking that standardized instruction and related testing can be brought in at the last minute to improve student learning and turn around failing schools. Both of these examples resonate with the key ideas of GERM and can be found in education policies of numerous nations and jurisdictions.

Indeed, only importing specific ideas from Finland about curricula, teacher training, accountability, or educational leadership is of little value to those aiming to improve their own education systems within their own context. The Finnish welfare state has guaranteed all children with a sociopolitical context inside and outside of school that provide the safety, health, and moral support needed to function well in a classroom environment performing well in school. As the passage from the

novel *Seven Brothers* in the beginning of this chapter illustrates, literacy and education in general have historically played a central role in becoming a full member of the Finnish society. In this respect, one of the transferable principles of educational change for other nations may be that successful educational reform comes with interdependent social and economic reforms.

What then can be transferred from good educational practice in Finland to other systems? One common mistake carried by GERM is underestimating the complex nature of education as a subsystem of the economic and political national system. As described by Kauffman (1995), for example, separate elements of a complex system rarely function adequately in isolation from their original system in a new environment. Therefore, rather than “borrowing” only specific ideas and innovations from a well-performing education system, more readily transferrable aspects may be the features and properties of a larger, complex system, in this case, the Finnish model. In the complex system, interactions among elements of the system determine the behavior of that system as much as its individual elements. Therefore, some concerns that should be included in contemplating the transfer of ideas from the Finnish education system are:

1. *Technical drivers of good educational performance.* These include common comprehensive basic schooling for all, research-based teacher education, intelligent accountability policies, relatively small schools, and good educational leadership especially within schools.
2. *Sociocultural factors.* These include long reliance on the social value of literacy and education, high work morality, trust in public institutions including schools, and state-driven social capital created by the welfare state.
3. *Links to other public-policy sectors.* Success of one sector depends on the success of all others. Therefore, good educational performance may only be explained through larger policy principles, including those of other public policies.

Conclusion: Waking Up for the Change

In the first decade of the third millennium, Finland has established a global reputation as a model educational nation. There is, indeed, evidence that Finland's education performance has progressed steadily in terms of international comparisons since the early 1980s. Mobile phone makers, symphony-orchestra conductors, and Formula 1 drivers are marks of what the Finnish culture and society that values ingenuity, creativity, and risk-taking over selfish competition for irrelevant standards is able to nurture. The question is, “Will the Finnish education system continue to be a model in the future?”

On the one hand, Finland's systemic educational leadership since the 1970s, its stable political structure, and its established *complementarity* among public-policy sectors would suggest that its educational performance will remain strong. On the

other hand, PISA survey results, in particular, have created a feeling of complacency among education policy-makers, politicians, and the public-at-large regarding the status of Finnish education. This may lead to a condition favoring the *status quo*, where education policies and leadership of a high-performing system are motivated by a desire to maintain the current situation, rather than seeing what possible futures might require from a reformed Finnish education system.

Educational change in Finland since the 1970s has been driven by culture and emotion in the context of social, political, and economic survival. A lesson from Finland is that technical knowledge or political interests are not enough to renew society without emotional engagement. Indeed, global education reforms show that too rational approach on change does not work because renewal requires energy, and energy is driven by emotion. In the era of Big Changes, emotional passion often emerges from crisis – or a sense of survival – as it did in Finland. But it can also come from viewing new economical, technological, or cultural opportunities.

In the beginning of the twenty-first century, Finland has become a model nation for other reasons also: It has been able to build a competitive knowledge economy while maintaining much of social justice of Nordic welfare state model. A high-level think tank named the New Club of Paris that considered possible futures for Finland stated that survival is not the impetus for renewal anymore to keep all the good that Finland has been able to build (Stähle, 2006). In their recommendations to the Finnish government, they suggested that

other drivers with emotional effect need to be identified. The question is how to broaden the scale of emotional recognition and exploitation. Instead of survival the driver for change could be a powerful vision, or the Big Dream of Finland. If people do not love the idea, it is futile to publish new strategies. The new strategy with cultural and emotional dimensions should be simple; a couple of words that people can immediately and emotionally relate to. This is currently missing. (Stähle, 2006, p. 2)

The spirit of that general recommendation should also be considered in education. The chief instrument that guides Finnish education policies and educational renewal is the Development Plan for Education and Research for 2007–2012 (Ministry of Education, 2007). This, as its former document for 2003–2008, continues earlier policies and principles. These documents emphasize equal opportunities, quality education, skilled workers, and developing tertiary education and teachers as main resources of education. Furthermore, these documents place strong emphasis on the *complementarity* principle and developing the education system as a whole. All this assumes that the Finnish education system will continue to perform well in the coming years also. However, there are some trends within the governance of education system that provide cause for concern.

First, national education authorities have tightened the grip of control over schools and signaled that there is not a high level of confidence in schools' ability to judge what is best for pupils and parents. For example, the new national curriculum of 2004 reduces schools' role in curriculum planning. Second, the governmental Education Sector Productivity Program for 2006–2010 (Ministry of Education, 2005) calls for schools to do more with less and proposes school mergers and increasing class sizes. In some cases, productivity gains are sought by reducing

schools' special education and counseling services. This may turn out to be harmful for the high social capital of Finnish schools. Finally, there is no clear idea within the Finnish education system of what the direction of education should be in the future. For example, the Development Plan for Education and Research for 2007–2012 is silent about how education should react to needs expressed in the economic sector to intensify innovation and create new products.

Increasing productivity and improved efficiency lead to financial savings and perhaps temporarily better services but, as Finnish futurologists Ståhle and Wilenius (2006) point out, in the economic context, the plan's strategy of shrinking budgets will never create sustainable improvements unless there are simultaneous investments in something new. There are enough signals through forecasts of the Finnish economy and society in general to suggest that more investments are needed to create new ideas and innovations both in education and in economic development and to maintain the high level of social capital that has traditionally been the driver of strong educational performance (Castells & Himanen, 2002; Routti & Ylä-Anttila, 2006; Ståhle, 2006). Finland was able to benefit from one of the most competitive national economies when competition within its education system was minimized in the 1990s. A component of educational change that creates new ideas and innovation should be providing enough encouragement and support for risk-taking that will enable creativity to flourish in classrooms and schools. This is possible only with continuous renewal of Finnish education, guided by wise educational leadership in close relation to other public-sector policies. The political and strategic challenge that is both ironic and paradoxical remains: "Which measures need to be taken to wake up the Finns for the change."

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China as a Case Study of Systemic Educational Reform

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Introduction

Over the last 30 years or so, China has engaged in a series of systemic educational reforms. These reforms aimed to “improve the quality of the citizenry, produce more talents, and produce high quality talents” (MOE, 1985) through actions in all domains of education: governance and management, financing, teacher preparation, curriculum, and assessment. As a highly centralized political society, these reforms were always initiated by the central government and naturally their intended impacts were system-wide. However, not all reforms met with the same level of success. Some of them were much more fruitful than others.

In this chapter, we review the major systemic educational reforms that China has undertaken over the past three decades and analyze the reasons behind their different degrees of success. Among the ups and downs of the reform, we focus on two major themes in China’s system-wide education reform: decentralization and marketization. Both themes appear to be prominent in the worldwide education reform discourse. Meanwhile, both themes have strong “Chinese flavor,” reflecting the specific contexts facing the Chinese reformers and the driving forces underlying the reform. While each theme may have different driving forces, both witness the achievements and setbacks in China’s system-wide reforms. In our discussion, we first introduce the key laws and policies related to the two themes and then analyze the Chinese way of decentralization and marketization. Then we identify the driving forces of the reforms and assess the reforms. Finally, we highlight the lessons to take away from China’s journey of systemic reform in the past three decades.

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Major Themes of the Reforms

China's systemic reforms over the last 30 years have been intended to achieve two interconnected goals: expand access to and improve the quality of education. In terms of access, China has set the ambitious goal of universalizing 9 years of compulsory education, increasing high school enrollments, and expanding college enrollments. Regarding the quality of education, China wants its education system to prepare a citizenry that can participate and compete in the increasingly global economy and thus aims to transform its curriculum and pedagogy that support the education of the whole child; lead to the well-rounded development of the body, the mind, and the heart; and foster creativity, problem-solving skills, and practical knowledge.

While the overall goals remained the same in the last 30 years, the specific reform actions and strategies changed in accordance with the perceived obstacles at the time. For example, in 1977, when China emerged from a chaotic period of communist radicalism and the whole formal education system was in ruins, it quickly resurrected the college entrance exams with a milestone initiative entitled *1977 Suggestions for the Admissions to Higher Education Institutions*¹ issued by the State Council (referred to hereafter as "1977 Suggestion"). But today, as the country gradually emerges as a world economic power and wishes to transform itself from a manufacture economy into a knowledge economy, the college entrance exams are viewed as the largest obstacle that must be reformed.

The specific systemic reform initiatives come in different formats and may be approved by different agencies. However, system-wide reform initiatives in China always take a top-down approach, coming from the central government represented by different branches and agencies. The initiatives are launched in a limited number of forms: speeches of top political leaders; documents of the Central Committee of the Chinese Communist Party (CCCCP); documents and regulations of the State Council; laws passed by the People's Congress; and announcements, regulations, and documents of the Ministry of Education. Because of the nature of government in China, although the agencies announcing the initiatives may differ, it can be assumed that all bear the same power and have been sanctioned by the highest body of decision making.

Looking across the 30 years, the reform initiatives may vary in their titles launching agencies, formats, foci of reform, and other details, in one way or another. However, two persistent themes run through the reforms: decentralization and marketization.

¹The 1977 Suggestion was launched in August 1977, immediately after Deng Xiaoping was reinstated after being purged twice during the Cultural Revolution (1966–1977). The College Entrance Exam (CEE) was cancelled for more than ten years during the Cultural Revolution, and its restoration was attributed to Deng. After Deng came to power, one of the first things he worked on was to reform China's higher education system, starting with the way to select students. In August, the State Council approved the proposal to restore college entrance exams as the way to select students by the Ministry of Education, based on Deng's suggestion.

Decentralization

Initiatives of Decentralization

Decentralization features as a prominent strategy in China's systemic education reforms. Since 1985, three key initiatives constitute a movement of decentralization in China's system-wide educational reform. The movement started with the *Decision to Reform the Education System* (MOE, 1985) released by CCCCP in 1985 (referred to hereafter as "1985 Decision"). It was advanced by the *Framework for China's Education Reform and Development* (MOE, 1993) launched jointly by CCCCP and the State Council in 1993 (referred to hereafter as "1993 Framework"). The journey was furthered by the *Decision to Further Educational Systemic Reform and Promote Quality-oriented Education* (MOE, 1999) another policy jointly released by CCCCP and the State Council in 1999 (referred to hereafter as "1999 Decision").

The 1985 Decision was the first comprehensive systemic reform policy document after China started the reform and opening policy. The foci of reform included decentralization, implementation of the 9-year compulsory education, development of vocational and technical education, and reform of teacher education. *The 1985 Decision* pointed out that "the government control of schools was too rigid and inefficient," and it suggested that "authority be 'devolved' to lower level" and "multiple methods of financing be sought" (MOE, 1985). *The Decision* specified that the administration of elementary schools and secondary schools belong to provincial- and county-level authorities, instead of the central government (MOE, 1985, p. 9). According to *the 1985 Decision*, the State Education Commission (SEC), the education branch of the central government, would continue to monitor the process and provide basic guidelines, but local governments would have more power and bear financial costs (MOE, 1985, p. 20). Meanwhile, the *1985 Decision* cautioned that the decentralization be implemented gradually from relatively developed coastal cities to less developed interior regions.

The 1993 Framework furthered the decentralization movement. There were four points worth highlighting. First, it decentralized the fiscal duties from central government to local government and schools. While state-run institutions should remain the majority, the new education system welcomed the establishment of private institutions. Moreover, the *Framework* encouraged a variety of sources to invest in both state-run and private schools. Second, it stressed that principals should be given the authority to manage their schools including employment and fiscal planning. Third, the decentralization expanded from elementary and secondary schools to higher education. Specifically, it stated that the central government and provincial government should both be responsible for higher education. While the central government would continue to manage a number of higher education institutions in addition to providing guidelines, provincial governments were responsible for the operation of the majority of them. Fourth, college graduates should no longer be assigned positions upon graduation, meaning that the employment of college graduates were no longer planned by the state but to be managed by individual students.

The 1999 Decision advanced the decentralization movement. It focused on two areas: college entrance examination (CEE) and curriculum. It endeavored to break up the governmental monopoly of exam, curriculum, and textbooks. Specifically, it abolished entrance examination to middle school, and encouraged secondary schools to implement their own graduation examinations. It claimed to reform college entrance exams and admission procedures. Qualified provincial governments were encouraged to carry out a variety of experiments with the college admissions and exam system. Colleges would enjoy more autonomy in admission. Furthermore, it determined to reform school curriculum and diversify textbooks.

Chinese Way of Decentralization

The decentralization has taken place in all aspects of the system, including administration, finance, curriculum, examination, and enrollment. The first was to decentralize the fiscal responsibility and management of basic education to local governments. The 1985 *Decision* and a number of subsequent policies made it clear that the local governments at county level and *village* level were responsible for raising the funds for the 9-year compulsory education and high school education. As far as post-secondary education was concerned, except for 72 universities that were directly managed by the central government, the rest of China's 1,500-plus post-secondary institutions were funded and managed by provincial governments or private groups.

The 1999 *Decision* marked the beginning of a movement to break state monopoly of curriculum and textbooks. Prior to 1999, the central government had control over what was taught in schools through one national syllabus, one set of national textbooks, and one national college entrance exam. Since 1999, the curriculum for basic education has moved from a centralized system toward a three-layered system in which curriculum is codeveloped by the state, the provinces, and the schools. Textbook development and selection have adopted a similar system: The central government approves textbooks published by any Chinese publisher, provincial governments select textbooks to be allowed in each province, and county-level governments decide what to use in local schools.

Correspondingly, the college entrance examination has undergone substantial changes in terms of the scheme and content. By 2004, 11 provinces have been granted the autonomy to implement their own college entrance exams instead of using the national one (XinhuaNews, 2004). Fifty nine of China's nearly 1,700 colleges have been granted the right to select 5% of freshmen using their own criteria in addition to their test scores in the national entrance exam (XinhuaNews, 2007). In addition, a new scheme of national college entrance exam has been implemented. In the new scheme, commonly known as 3 + X, the central government requires only three subjects (math, Chinese language, and English), provinces and colleges can decide what else to test, hence the X, which can be one comprehensive test encompassing many subjects or several separate tests (Luo, 2001).

But decentralization in China is not complete devolution of power and authority. Bray (1999) differentiates three types of decentralization: deconcentration, delegation, and devolution. Deconcentration is to transfer task and work, but not authority, to lower levels, while delegation is to transfer decision-making authority, but the authority can be withdrawn. Devolution is to transfer authority to an autonomous unit that can act independently without permission from the higher-level body (Bray, 1999). In China, decentralization takes more of the forms of deconcentration and delegation, but not devolution (Hawkins, 2000; Mok, 1997b).

Whether it is decentralization of fiscal responsibilities, management authority, curriculum content, or examination and admissions, the central government never gives up real authority, and the central government can withdraw what is delegated to lower-level units at anytime (Hawkins, 2000; Mok, 1997b). For example, in 2001, when *the State Council's Decision on Compulsory Education Reform and Development* (MOE, 2001) was issued, the government determines to reclaim the village level responsibility back to the county level. The reason was due to the damages occurred in school finances and teacher recruitment when power was devolved too low to the village government (Yang, 2006). The MOE's decision to provide free education to freshmen in teacher education major with government funding was another example of recentralization (Kwan, 2007).

Marketization

Initiatives of Marketization

Marketization is another major theme of China's educational systemic reform. It emphasizes personal choice, competition between schools, quasi-market educational services, and multichannel financing. Prior to 1980, all education institutions were state owned and education was free at all levels. Since 1980, a number of significant policies introduced, emphasized, and pushed forward the movement of marketizing education.

The first significant initiative was the *Decision to Universalize Primary Education* released by CCCCCP in 1980 (referred to hereafter as "1980 Decision"). *The 1980 Decision* was significant in two ways. It was the first document after China reopened its door to the world in 1977 that aimed to universalize primary education. Meanwhile, it was the first document that singles out "marketization" as a crucial means to realize the goal of 9-year compulsory education. Not only did the law stress the importance of marketization rhetorically, it pointed out two specific policies of marketization. First, education reform should "walk on two legs." As stated in the *Decision*, "in a populous and economically underdeveloped country like ours, the task of universalizing primary education cannot be completed by just relying on the State. While the state remains the primary sponsor, we should at the same time mobilize communities, enterprises, and factories to sponsor schools. It is also important to encourage the people to operate schools with their own funding" (CCCCP, 1980, p. 1). This policy was emphasized and expanded in the above-mentioned

1993 *Decision*, which not only encouraged Chinese citizens to invest in education, but also welcomed international organization and individuals to donate. Second, the reform encouraged alternative schooling opportunities. “In addition to full-day school, half-day schools and programs became legitimate alternative schoolings that fulfill the needs of students and parents from different backgrounds. However, alternative schooling should carefully tailor the curriculum and pedagogy to their students” (CCCCP, 1980, p. 1).

Marketization of education received more intensive attention in 1998, when the State Council approved the policy entitled *Action Plan to Reinvigorate Education for the Twenty-First Century* (MOE, 1998) (referred to hereafter as “the 1998 Action Plan”). This document aimed at applying the strategy of marketization to post-secondary education and outlined a package of policies in order to realize this aim. The policies included several large-scale projects that linked universities and research institutes to market economy. For example, the *Action Plan* introduced “High Level Creative Workforce Project” to strengthen scientific research, and the “University-Based New and High-Tech Industrialization Project” to drive the development of high-tech industries in China.

The marketization movement became more refined when the State Council released the *Decision on the Reform and Development of Basic Education* in 2001 (referred to hereafter as “2001 Decision”). The 2001 Decision claimed to further reform school operation system and support alternative schoolings, especially in less developed regions. It called upon non-governmental organizations and individuals to support the basic education reform. The purpose of the 2001 *Decision*’s call on marketization was not only to produce more talents but also to improve the quality of talents.

Chinese Way of Marketization

China’s education has introduced the market mechanism, just like the country’s economy, in a number of ways. First, private education institutions have been flourishing in China. Although China prefers to use the term *minban* (or people-operated) instead of “private” when referring to these schools, these institutions are in essence funded and operated by non-governmental organizations. Since the first *minban* higher education was founded in 1982 (Mok, 1997a), *minban* educational institutions have grown significantly. Table 1 is a summary of regular *minban* educational institutions in China in 2006. As the data show, both in terms of the number of institutions and the number of students they serve, *minban* education has become a significant part of China’s education system. To further promote and regulate *minban* education, China enacted the *Law to Promote Minban Education* in 2002, which recognizes the legal status of *minban* education as an essential component of “socialist education system (MOE, 2002).”

However, it should be noted that there is a reason for these schools to be called *minban* instead of private. Unlike private schools in many western countries, Chinese *minban* education institutions are highly regulated. They must follow the same curriculum as state-owned schools. Higher education institutions must obtain

Table 1 Number and enrollment of non-state/private education institutions in 2006

	No.	Graduates	New entrants	Total enrollment
Regular HEIs	278	222,991	498,562	1,337,942
Independent colleges ^a	318	142,139	527,284	1,467,040
Other HEIs	994			
Senior secondary	5,805	1,102,202	1,852,010	4,503,451
Junior secondary education	4,561	1,102,088	1,323,872	3,943,973
Regular primary schools	6,161	643,121	712,489	4,120,907
Pre-school education	75,426	2,628,256	4,104,503	7,756,871

Data Source: Ministry of Education (MOE, 2002)

^aIndependent colleges are joint ventures of state universities and private companies. These are operated independent from the state universities as private higher education institutions.

permission and quota each year to enroll full-time degree-earning students. While they can charge higher tuitions, than state-schools the government reviews their prices and sets a cap on what they can charge. Consequently, these schools do not operate in a free market. A more accurate term for China's education marketization in this sector is quasi-marketization (Mok, 1997a).

Second, in addition to private education institutions, government education institutions also participated in marketization. Since the mid-1980s, government higher education institutions began to enroll "self-sponsored" students (Bray & Borevskaia, 2001), who were essentially students whose scores in the college entrance exams were not high enough to be admitted to universities. However, they could pay a fee to be admitted. But their scores must be good enough because the slots were still controlled by the government. These students in essence were buying education opportunities in higher education. Self-sponsored students would then find their own employment upon graduation, unlike the students who were enrolled as regular "within-plan" students, who were assigned a post upon graduation. Gradually, this dual-track system was abolished when all college students began to pay for their college education and the government stopped the practice of job assignment around 1989.

Education opportunities were marketed as commodities not only in higher education, but also in basic education. Well-known, high-quality state primary and secondary schools also marketed opportunities in a similar fashion. Although as state schools, they were supposed to provide education for free to eligible students, they collected "school choice fees" from those who did not perform well enough to be admitted or came from outside the communities they were supposed to serve. On top of the annual school choice fee, a large amount of one-time "donation" was collected upon entrance.

Third, public educational resources were put into the education market in a very interesting and controversial form in China. Since the mid-1990s, some government universities in China began to jointly establish private education entities with funds from non-government sources. These entities often took the form of colleges within

a university, but they could be located on the existing campus or in a different location, some even in different cities. They were operated as *minban* institutions and charged much higher fees and tuitions than the parent university. The parent university provided the reputation, some faculty, and other educational resources as the investment, while the other partners invested in cash, hardware, and land. This form of private education started more as an experiment in the beginning. It was then legalized by the 2002 *Law to Promote Minban Education in China* (MOE, 2002), which encouraged public universities to work with private entities to establish “independent colleges” (Wang, 2006). As shown in Table 1, there were 318 independent colleges in China as of 2006. Similarly, well-known primary and secondary public schools began to establish *minban* schools in collaboration with private entities in the mid-1990s.

Fourth, “socialization” of support services and facilities of public education was another form of marketization of education in China. Beginning in 1999, public higher education institutions were asked to hand over their support services and facilities, such as student housing, food services, and medical services, to external agencies (Fu, 2002). Prior to this point, these services were all provided as part of the universities. This movement in effect began to commercialize a large part of functions of universities. Universities were no longer responsible for constructing and maintaining student housing and cafeteria and providing other support services.

Lastly, another prominent form of marketization was school-operated enterprises. Both K-12 and higher education institutions entered the business of operating factories, companies, and other types of enterprises since the 1980s (Bray & Borevskaya, 2001). These business operations directly commercialize resources of the schools, be it inventions of the faculty or school-owned facilities.

Driving Forces of the Reforms

Decentralization and marketization (not necessarily privatization) are apparently the two most prominent features of China’s systemic education reform in the past 30 years. While they in many ways correspond to the overall pattern of changes in China a movement from a socialist planned economy toward a socialist market economy – they are motivated by two primary concerns: finance and quality.

China has ambitious goals in education, but as a developing country, the central government does not have the financial resources to realize them. Hence, the central government decentralized the fiscal responsibilities to local governments and introduced the market mechanism to bring in financial resources from the non-government sectors, including foreign donations and investments. Thus it can be said that China’s systemic reform in education has been primarily motivated by financial concerns (Bray & Borevskaya, 2001; Kwong, 1997; Mok, 1997b; Wang & Zhou, 2002; Wang, 2006).

Another major driver of the movement has been the concern over education quality. The decentralization of curriculum and textbooks, college entrance exams, and

authority over basic education is undoubtedly motivated by the concern that the central government's excessively tight control has been a barrier to improving the quality of education and that the more local autonomy would bring innovative ideas and strategies. The biggest concern that China has, after it has accomplished the goal of making education more accessible is the quality of education. The quality problem in China has been interpreted as the inability to produce creative talents needed to transform China from the world's factory into an innovation-driven society. Chinese students are generally considered not as creative as their western peers (Farrell & Grant, 2005) and not well prepared to compete in the global economy. According to a McKinsey study, only 10% of Chinese graduates are eligible for global job market competition. Although China produces 3.1 million college graduates and 600,000 engineers annually, there is a huge talent shortage for jobs such as that of designers, researchers, etc. (Farrell & Grant, 2005). China seems to have a limitless potential for high-rate economic growth, but it could falter badly if the workforce continued to be labor intensive and lacking of creativity.

Assessing the Reforms

After 30 years of continuous systemic reform, China's education has certainly become much more diversified, accessible, and decentralized. How successful are the reforms in accomplishing the two overarching goals: expanding access and improving quality? There is no definitive research-based answers, and the answers, as usual, vary depending on one's perspective. To some, China's basic education reform has been a clear success.

... the basic education system has experienced significant transformation in the two decades of reform. First and foremost, the reform goals of 9-year compulsory schooling and literacy have been largely realized. Second, resource mobilization has resulted in relatively adequate financial resources for 9-year compulsory schooling. Lastly, the educational landscape of diversity beyond the Ministry of Education (MOE) system has taken shape, particularly along with the significant expansion of private schools and NGO-sponsored Hope Schools and the indispensable contribution of Maoist *minban* ("people-managed," or community-supported) teachers in rural areas. Admittedly, governmental decisions were crucial in transforming the basic education system in a fundamental way. These decisions included moves to decentralize educational governance, universalize 9-year schooling and improve literacy, diversify educational financing, and enforce education taxation by garnering resources from communities and households. In the final analysis, China's basic education reform has been, in short, a success. (C. Wang & Zhou, 2002)

The same can be said of higher education. In 1978, 400,000 out of 11 million who participated in the first College Entrance Exam after the Cultural Revolution (winter of 1977 and summer of 1978) were admitted to colleges, with an admission rate of 29 to 1. In 2007, about 9.5 million students took the College Entrance Exam, and about 6 million of them were admitted to colleges with an admission rate of 1.9 to 1, which meant nearly 60% of those who took the exam were admitted to higher education institutions. Both in terms of enrollment rate and the number of

students, higher education in China has successfully transformed from serving a few elites to serving the mass. The decentralization and marketization reforms have been undoubtedly successful to enlarge the capacity of higher education for increased number of students.

But to others, the reforms have not been so successful. “Whether it is the vaunted concept of quality education or the reform of the exam-oriented system, I would say education reform is the most unsuccessful of all reforms in China since the 1980s,” according to Xu Haoyuan, a psychologist in China, as quoted by China Daily (Tao, 2003). This view is shared by many Chinese people. A 2005 survey found that over 77% of the public were either “very dissatisfied” or “somewhat dissatisfied” with the overall situation of education in China. Only 4.1% reported that they were “very satisfied” or “somewhat satisfied” (Yang, 2006).

The discontent mainly comes from two sources. First, the curriculum decentralization movement and other associated reforms have not achieved their objectives: more flexibility in curriculum, all-round education of the child, more independent thinking and creative talents, and less student burdens. Today, students and schools continue to be burdened by excessive amount of academic work and tests, which have been blamed for depriving students of time to engage in other activities and hurting students’ health, independent thinking, and overall psychological and mental development (Zhao, 2007).

Second, the decentralization and marketization movement has resulted in more inequality in education. Because of the uneven economic development in different regions in China, different provinces and cities have different levels of investment in education. The disparity in terms of government education input is appalling. According to data released by the MOE in 2006, Shanghai invested an average of over 9,400 *yuan* RMB per student in its primary schools, while Henan’s per pupil input was only 948 *yuan*, a difference of 10 times (MOE&NSB&MOF, 2006).

The inequality also comes from the financial capacity of families to pay education expenses. Despite the government’s efforts to make loans available, many families in China still cannot afford higher education. In 2004, the average annual tuition was about 5,000 *yuan* and dormitory rent was about 1,200 *yuan*, while the average net income of city residents and rural residents was 9,400 *yuan* and 2,400 *yuan*, respectively. In other words, it would take a city worker 4 years and a farmer 13 years to pay for 1 year’s higher education expenses, without them spending on anything else (XinhuaNews, 2007).

While the mixed reactions are expected of such large-scale reforms that span 30 years, it is apparent that the devolution of fiscal responsibilities and marketization of education have had positive effects on the education system. They have brought in more financial resources, diversified the system, and led to more educational opportunities. Of course, these reforms have created inequalities. And the government has begun to address these new inequalities through a new series of efforts – mostly recentralization. For example, the central government has devoted billions in recent years to building schools and boarding facilities, developing technology infrastructure and digital content, and covering the costs of textbooks and supplies for students in less-developed regions. The central government has also

taken a more active role in controlling higher education costs and providing financial assistance to poor students.

The reforms around curriculum, pedagogy, assessment, and other reform practices that aimed to enhance the quality of education or to transform traditional modes of education have been much less successful. Despite these efforts, the essence of education remains the same as before the reforms:

According to a recent national study by the Ministry of Education, although many educators seem to have accepted the concept of “quality education” and some teachers have changed their teaching practices, by and large the focus on the whole child remains lip service. “Quality education is loudly spoken, but test-oriented education gets the real attention,” notes the report. As a result, competition among students remains fierce, schools and teachers continue to teach to the test at the expense of students’ physical and mental health, test preparation overrides national curriculum requirements, and some schools resort to militaristic ways of managing their students. Under intense pressure, students spend all their time and energy on schoolwork. (Zhao, 2007)

Conclusions

China’s reform, like any other systemic reforms, have been neither straightforward nor completely successful. There are a number of lessons we can learn from China’s 30 years of systemic reforms.

First, reforms are always iterative and have unexpected consequences. In the case of China, while decentralization and marketization have been the consistent themes, they have resulted in some serious negative consequences that were not anticipated. Thus, reform agents should be prepared to be persistent and ready to introduce corrective actions. In China, when decentralization and marketization took place, the once tightly controlled system was suddenly liberated, which resulted in many unplanned actions at the local level. Some of these actions were positive and others not. The positive ones included bold experimentations with different financing models. As documented earlier in this chapter, public education institutions developed very creative ways to enhance their revenues. But such experiments also brought chaos, public discontent, and inequality. The government took action to recentralize some functions and passed laws to regulate the education market.

Second, structural changes are easier than cultural changes. In the case of China, decentralization and marketization of fiscal responsibilities, administrative structures, school governance, and even curriculum and textbooks took effect quickly. But the school culture, that is, how teaching and learning occur and what students, parents, and teachers value did not change much. Test-oriented education, which has been one of primary targets of the reforms, remains strong.

Third, governments must be actively involved in education reforms. Although decentralization and marketization seem to have been the trend in world education reforms, governments cannot remove itself from education, particularly in addressing the inequalities that inevitably result from decentralization and marketization. In China’s case, for a period time, the central government significantly reduced its

role in education financing, which resulted in increasing disparity in school funding. Growing disparities in turn resulted in serious social and educational problems. Fortunately, the central government has reassumed its responsibility and has taken actions to reduce the funding gap.

Lastly, it should be noted that what works in China may not work in other countries due to cultural differences. In this chapter, we have mostly discussed political actions but not much about the economic and historical context of education in China. But it should be emphasized that China's systemic reform strategies – decentralization and marketization – mimic its economic reforms over the past 30 years. In addition, shifting fiscal responsibilities to society and families works in China because it has a long tradition of valuing education. Education, in the eyes of most Chinese, is noble and practically the only means for upward mobility. These may not be the case in some other countries.

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Educational Leadership in Racially Divided Communities

Jonathan D. Jansen

Leading in deeply divided societies is at the same time an emotional, spiritual and political task. The volumes of instrumental writing on the subject of leadership, whether in the tentative language of academic writing or in the language of corporate certainty (“six steps or seven habits or twenty one laws ...”), hardly begin to capture this complexity. It is much more than *balancing* the interests of very different groups – like black and white, men and women, and majority and minority; leadership in divided communities is about engaging and transforming diverse constituencies even as the leader seeks to keep everyone in conversation. It is more than seeking out and applying the right technologies, for the challenges at hand extend way beyond manipulable techniques or validated instruments. Human behaviour where the rawness of racial division is still fresh is far more complex than such reductionist measures presume. And it is not simply about imposing change on others; leading in divided contexts is about being transformed even as one sets out, perhaps presumptuously, to transform others. This chapter offers an extended deliberation on the nature, purposes and consequences of leadership and educational change in post-conflict societies, invoking the South African experience as a case in point.

Over the Rainbow

Soaked in religious metaphor, South Africa attracted the admiration of people around the world for its peaceful transition to democracy after more than 350 years of colonialism and apartheid. Part of a deeply religious country, citizens of the new South Africa followed the cue of the great moral figure of Archbishop Tutu talking about the rainbow people of God; white political leaders spoke about Damascus Road experiences, referring to their political conversion; a few among black

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leaders saw nothing short of divine intervention that brought together sworn enemies to agree on a political settlement; and one remarkable white politician, the former minister of police, dropped to his knees in an act of contrition and washed the feet of the chief of staff of the Presidency, a black activist his forces once tried to kill.

Despite stubborn inequalities, a rampant AIDS pandemic, and waves of violent crime, South Africa managed to hold the centre with respect to racial tolerance, if not embrace. Schools integrated with relative ease; black and white mingled freely together in public spaces once rigidly segregated; corporate boardrooms gradually integrated as blacks, albeit a minority, gained economic muscle in an openly capitalist society; and black and white politicians populated the leadership of both the ruling party and the main opposition parties in a richly diverse parliament.

And, then, the wheels came off. In a short space of time, dramatic incidents of white racism suddenly threatened the common belief that South Africans had overcome the horrific racial prejudices of the past through a permanent settlement that would eventually lead to what the natives call *a non-racial society*. Four white high school students kick a homeless black man to death. An 18-year-old white youth takes a loaded gun into an impoverished black settlement and empties the weapon on the inhabitants, killing four people including a baby. And four white students capture on video their racist attack on black women workers at their university, including an act that coerced the staff to ingest food on which these students had allegedly urinated. In an instant, the public mood shifted, and South Africans started to question whether they were, in a manner of speaking, over the rainbow era of racial harmony and reconciliation.

What was striking about these three incidents was that the students were all senior high school and junior undergraduates, all male and all from the dominant group of white South Africans, the Afrikaners, who established and maintained the apartheid state with the generous support of English-speaking whites. This was the predominant ethnic group of the historically Afrikaans University of Pretoria where I served as the first black Dean of the largest of nine academic units, the Faculty of Education. In this essay, I will reflect on what I learned about pursuing educational change within this community, which, overnight, became both a demographic and a political minority within a democratic state in which black South Africans dominated postapartheid politics.

Into the Heart of Whiteness

It was always unreasonable to think that centuries of racial conflict and division would dissipate in the euphoria of liberation in the 1990s. What is striking about South Africa was that there were not more incidents of racial confrontation among black and white in a generally peaceful transition. Yet the seeds of antipathy and animosity still run deep. It was not, therefore, the coming together of black and white in previously segregated public spaces that caused the difficulties of racial tension; it was, I will argue, the unresolved problems of bitter knowledge about

history, identity, culture and politics that lay at the root of an untransformed society. And this failure to interrupt received knowledge is, in the first and last instance, an educational change problem.

How is it possible that young white students, born around the time of Mandela's release from prison, could hold such firm views about the past, such rigid views about black people and, especially among the boys, such fatalistic views about the future? This was the question that dogged me during my early years as Dean of Education at the University of Pretoria. It made no sense. These white students had no direct experience of apartheid; they did not live as masters and madams through the worst years of racial oppression; they did not police the townships during states of emergency; and the boys did not have to face the trauma of compulsory military service on and often beyond the borders of South Africa. Despite the fact that these were, technically speaking, postapartheid children, their beliefs and behaviours mirrored those of their parents – the people who upheld, supported and benefited directly from white domination in the decades before they were born. The more I listened to my almost all-white undergraduate class of more than 2,000 students, the more this question besieged me. After 7 years as Dean, I resigned from the University of Pretoria to complete a book that seeks to answer that question. The book is titled *Knowledge in the Blood* (2009).

The answer to the opening question first emerged when I encountered the work of Eva Hoffman, and in particular her book, *After Such Knowledge* (2004). Hoffman poses the question personally: how is it, she asks, that as second-generation Jews, who did not live through the horrors of the Holocaust as did our parents, we nevertheless behave as if we were there? She names this phenomenon *the paradoxes of indirect knowledge*. Indirect knowledge results from the intergenerational transmission of spoken and unspoken knowledge from the parents who were there to the children who were not. The consequences are devastating for the second generation, for they bear and express the bitterness and the loss of their parents long after the initial terror was actually lived. This insight stretched way beyond the trauma of the Holocaust; it explained the beliefs and the behaviours of my white students.

For those 7 years, I tried to immerse myself inside the lives of my white students. I attended and spoke in their different Afrikaans churches. I visited their homes. I spent time with their parents, often talking about adjustment and change to the promised non-racial order. I observed teaching and learning in white Afrikaans primary and high schools. I gave speeches at Afrikaans cultural festivals and workshops at Afrikaans cultural associations. I trained with principals and teachers from the Afrikaans school community and gave endless talks about sameness and difference at school events such as prize-giving ceremonies. I took the students to the malls and the movies and attended their sporting events. In their university residences and in bush camps, we talked for countless hours about race, identity and the transition into a new country and a changing university. And this is what I found.

The single most important finding from this intense experience working with white (mainly) Afrikaans students is that like all South African youth, they are decent, idealistic and committed to their country and are capable of change. These young people are not wide-eyed racists going about the university seeking out black

people for racial attack and humiliation. This is not my experience. There is however a serious problem. They carry within them the seeds of bitter knowledge that, left unchallenged, can easily germinate into the most vicious racial attacks on and outside the university campus.

In the case of white Afrikaner youth, how is this troubled knowledge transmitted? It is channelled through five influential agencies: the family, the church, the school, cultural associations and the peer group. In itself, such an observation about knowledge transmission is hardly novel within sociological observation. The problem is that these agencies transmit the same dangerous messages in all-white social circles over and over again; worse, these messages have not been interrupted over the period of transition despite the spectacular changes in the formal institutions of democracy. To be sure, some of the potency of these messages might have been diluted as a result of the collapse of some of the historical agencies of socialization – such as the state media under apartheid. But by and large, the three core messages of transmission have remained intact.

The first message is about *racial exclusivity* (we belong by ourselves), the second about *racial supremacy* (we are better than them) and the third about *racial victimization* (we are being targeted by them). What reinforces these messages in the hearts of young white people is the threat of social collapse around them through things like rampant crime, electricity failures, corruption in government and affirmative action. In the belief system of white youth, these social events are interpreted through a singular lens: black incompetence, black greed, black barbarism and black retaliation.

It is not difficult to understand, therefore, why white students stepping into their first integrated experiences in the undergraduate university years would revolt against learning and especially living together with black students. It is also not hard to grasp why right-wing political parties, without any chance of prominence within the broader society, would exploit the bitter knowledge of white students. This has been the primary strategy of the Freedom Front Plus, a conservative political party, as it infiltrated the white Afrikaans universities to wreak racial havoc on these campuses.

The strategy of the Freedom Front Plus was brilliant in its perversity. It would not appeal to *race* to purvey its inflammatory ideas; it would appeal to *rights*. Students should not be forced to live together; they have the rights of association. Students have the right to learn in their own languages, implying Afrikaans and therefore largely, if not exclusively, white classes. Students who pay for their education (erroneously implying only white students) should have the right to choose where they live on campus and in what language they are taught.

For institutions that for many years ran their student elections along party political lines, like the University of Pretoria, the Freedom Front Plus sailed into the perfect storm. It won every student election by substantial margins with election posters that contained the most grievous racial insults. And on campuses like the University of the Free State, where this bitter knowledge was fed through separate residences long after other institutions had deracialized their living arrangements, the advent of the Freedom Front Plus was like fire attracted to an oiled rag.

South Africa's education policies since 1994 have had as their presumptive audience black students in schools and universities – as the national curriculum so clearly demonstrates. Our national policies do not speak of engaging and disrupting the bitter knowledge of white students, from a policy standpoint. National education policy appears to assume that white knowledge either does not exist or that by some miraculous feat, white and black students (and teachers) thrown together in the same educational spaces would simply find each other despite the rival knowledges they bring into the learning commons.

Interrupting Bitter Knowledge

In our years of research and living among white students, we achieved some measure of success with educational change at this one institution, the University of Pretoria and, in particular, its Faculty of Education. What follows is some discussion of the limits of critical theory and the possibilities within a new approach to racial conflict and divided histories in post-conflict situations.

Critical theory remains a crucial body of scholarship in education that offers a lens for understanding the role of schools in perpetuating and subverting the race, class and gender interests of state and society. But critical theory, interpreted broadly,¹ is severely limited in post-conflict situations for making sense of troubled knowledge and for transforming those who carry the burden of such knowledge on both sides of divided communities. Critical theory both receives and constructs the world as divided between black and white, the working classes and the privileged classes, legal citizen and illegal immigrant, men and women, straight and queer, and oppressors and oppressed; its dialogical pretenses notwithstanding, the world is taken as torn among rival groups.

Critical theory then takes sides once this divided world is constructed in terms of these polarities. The goal of a critical education is liberation, to free the oppressed (those on the underside of history) from the shackles of their oppression and to take on evil systems and resist the agents of exploitation. As one review put it, “The primary goal of critical pedagogy is to empower students to understand the links between knowledge, history, and power and to use this knowledge to resist hegemonic structures and dominant ideologies (Hesford, 1999).” The evangel of critical theory therefore enables us to see the world from the perspective of those denied human rights or economic access or racial justice. And while critical theory has moved beyond the incisive class analyses of the 1960s into a more richly textured account of the *intersectionalist* character of oppression, it remains a *pedagogy of the oppressed* (Freire, 2000; Knudsen, 2007; Weis, McCarthy, & Dimitriadis, 2006).

¹For a useful discussion of the narrow and broad meanings of critical theory see the Stanford Encyclopedia of Philosophy's entry on Critical Theory (first published on Tuesday 8 March 2005), accessible on <http://plato.stanford.edu/entries/critical-theory> accessed on 26 January 2008.

Of course, much of the intellectual labor that spawned critical theories of education comes from within advanced capitalist societies, principally the United States, and this location in part explains the rather fixed terms of the debate – the oppressed classes struggling against the overwhelming power of an oppressive system (Choules, 2007). Still, the focus of this critical literature is less on what to do with the racist or tribalist in the classroom and more to do with how to *empower* or give *voice* or lend *recognition* to those marginalized within school and society.² The often facile deployment of these categories of course tend to gloss over the complexities of power and inequality represented in the classroom, a point made elegantly in Ellsworth's (1989) famed critique of the limits of critical pedagogy.

Yet it is not only that critical theory divides the world; in its more radical version, the enemy is not a human Other but a capitalist system, oppressive processes, imposing ideologies, the neoliberal state, and so forth. The task is to *face capital down*³ to challenge oppressive structures and to destabilize regnant pedagogies and beliefs. Such a conception of the other side, without real human beings to encounter, engage, confront and change, has little value for a post-conflict pedagogy. This is not to deny the systemic and institutionalized character of oppression; it is simply to lament the denial of what confronts teachers in schools and universities in the aftermath of genocide and conflict – real human beings. There is a different and more compelling question that confronts teachers within post-conflict societies, one posed so poignantly by Freema Elbaz-Luwisch (2004): “How is education possible when there is a body in the middle of the room?” Elbaz-Luwisch talks about the kind of pedagogy appropriate to contexts where Arab/Palestinian and Jewish students face each other in the same classroom. By extension, this is a question that applies equally to black and white children in the postapartheid classroom; to Catholic and Protestant children in Northern Ireland; to Hutu and Tutsi children in Rwanda, and so on (Davies, 2004).

These are of course extreme examples, but inequality and prejudice exist everywhere, and what critical theory does is to assume that a critical pedagogy can lead what is sometimes presented as a socially homogenous group of teachers and students towards a common understanding of the nature of oppression and how to confront its systemic elements.⁴ But classrooms are themselves deeply divided places where contending histories and rival lived experiences come embodied with indirect (and sometimes *direct*) knowledge into the same pedagogical space to create deeply complex challenges for teachers. And of course even within this space the divisions are not restricted to the student body.

²Two important criticisms of the conceptual and philosophical claims and assumptions of critical theory can be found in Maddock (1999) and Tubbs (1996).

³See the review of two books, one by and one on Peter McLaren, by Kahn (2005) and also McLaren (2006).

⁴It is a point made by Gur-Ze'ev (1998) as well, noting the tendency of critical theory to assume a “weak, controlled, and marginalized collectives” sharing a “common optimistic view of change”; see next footnote for full source details.

It follows therefore that it is not simply the master narratives of the official curriculum or the controlling ideologies of state examinations or the capitalist interests of the textbook industry that is at stake in the critical classroom; it is also the people there, the bodies in the classroom, who carry knowledge within themselves that must be engaged, interrupted and transformed. Moreover, these bearers of received knowledge do not come with one story about the past, a common understanding of the present and a shared vision of the future. It is divided knowledges *within* the classroom that constitute the starting point for a post-conflict pedagogy.

Taking sides, as in critical theory, is not therefore a very productive stance in settings where *the clash of martyrological memories* (Hoffman, 2004, pp. 140–141) confronts the teacher of the memory holders. The goal of a post-conflict pedagogy under these circumstances is first to understand the emotional, psychological and spiritual burden of indirect knowledge carried by all sides in the aftermath of conflict. The teacher takes position, for sure, but in a way that creates safe spaces within which the afflicted on all sides can speak openly and without fear of dismissal. Furthermore, even from positions in which the teacher is herself implicated – like the black teacher hearing white grievances about black people – there is at least an attempt to understand how such knowledge came about, what it does to white students and, then, how that knowledge can be productively engaged.

The important point here is that in the rush to judgment and openly taking one side, critical theory dislodges the teacher from a compassionate involvement with the knowledge of the other side. Such positioning estranges the teacher from those who are arguably most in need of critical engagement with their troubled knowledge and makes it impossible for constructive confrontation and transformation of this knowledge.

Critical Theory as Post-Conflict Pedagogy

What I have tried to convey is an argument that undoing oppression in dangerous and divided communities requires the bringing together of black and white into the same dialogic space. This means that there is diminished opportunity for such a social and educational encounter in segregated classrooms, for the presence and passion of the other enables the clash and engagement with conflicting and conflicted knowledges. The longer schools remain segregated and in cases where schools become re-segregated, the chances of creating opportunities for a post-conflict pedagogy to take root are dramatically reduced.⁵ This does not mean that inventive teachers cannot and do not create such extracurricular moments of encounter with others or that white teachers in black schools, for example, cannot provide such opportunities for cross-racial engagement through skilful teaching and exemplary leadership. But it does mean that intense and sustained opportunities for prolonged

⁵There is empirical substantiation for this point in the excellent study of integrated and non-integrated Catholic and Protestant schools in Northern Ireland; see Byrne (1997).

engagement among white and black students, in this case, are absent, and the chances of separate knowledges being retained, with all the consequences of stereotype and racism, will remain. With this in mind, what constitutes the *critical* in such a critical theory of education? More specifically, what are the critical elements of a post-conflict pedagogy?

The Power of Indirect Knowledge

A post-conflict theory of education recognizes the power of indirect knowledge. Students come into the school or university classroom with powerful ideas and constructs about the past, the present and the future. They carry knowledge of a past in which they did not live or which they did not experience, and yet it is a knowledge that has profound individual and social consequences for how they live, how they learn and how they see. This knowledge is not only cognitive knowledge but also emotional knowledge, for what the second generation of children carries with them is strongly attached to their ethnic, cultural, religious, language and even political identities.

It is not that these second-generation children carry knowledge of specific historical events, for they probably do not *know* the detail of dates and commanders in the war between Boer and Briton, or information about specific atrocities in specific encounters between the English imperialists and Zulu warriors. What they carry with them is thematic knowledge, meaning knowledge of broad themes about conquest and humiliation, struggle and survival, suffering and resilience, poverty and recovery, and black and white.⁶ While the more outrageous racial themes of apartheid are no longer trumpeted in public spaces, the underlying ideological and emotional attachments that come with such knowledge claims remain more or less undisturbed (da Cruz, 2005).

Because indirect knowledge is also emotional knowledge, it can be explosive in classroom situations in which teachers are unprepared to mediate such engagement. When such pedagogical explosions happen, from the side of white students, they do not simply round on the teacher but also on the black students in the same space. To say therefore that indirect knowledge is consequential is to imply that teacher preparation programs need to take account of this thinking in the development of educators and that in-service programs must prepare teachers in practice for something they did not have to encounter before.

Indirect knowledge is also partial knowledge. Of course, it needs to be remembered that all knowledge is partial and that the choices that every school and teacher makes about what to teach are not simply intellectual decisions about appealing

⁶As she digs into the personal history of apartheid's most notorious killer, the man called "Prime Evil" in the South African press, Pumla Gobodo-Madikizela (2003) uncovers the operation of what she calls "constant themes" and "refrains" in Afrikaner family and adult discourses that shaped Eugene de Kock's knowledge of past and future enemies, and that motivated his deadly ambitions (p. 21).

knowledge or a planning decision about appropriate knowledge (say for a particular grade level) but also a political decision about valued knowledge.

Any teacher who fails to recognize the existence and influence of indirect knowledge in, say, a history classroom or a language seminar, walks in the direction of a field littered with hidden landmines. It is true that teachers have found nimble ways of navigating these minefields in ways that circumvent any controversy or conflict by relaying official knowledge in very technical ways or doing so in all-white (or all-black) classrooms or avoiding it all together. Such curricular or pedagogic aversion postpones deep-rooted problems, continues to extend the supremacist ideas of white children, leaves unresolved the burden of knowledge they carry and denies the possibility of building community towards what Paul Gilroy (2000a, b) calls a planetary humanism.

The Importance of Listening

The natural compulsion of any teacher is to tell, to demonstrate authority and to inculcate (what a brutal word) knowledge. This is especially the case in authoritarian societies and explains the spectacular failure of Western pedagogies in third world states because of its insistence on open, critical, and student-centred classrooms (Jansen, 2005). When students initiate a question, the familiar impulse of the educator is to anticipate and correct, to respond and to direct an answer towards the goals of the lesson. This representation of the teacher as the authority who knows all and who controls the classroom is routinely presumed in texts and manuals on classroom management and student discipline. It is especially the case that when controversial questions or difficult subjects emerge, the teacher is even more attentive to *managing* the classroom situation lest things get out of control.

Unfortunately, this is the direct opposite of what is required for a critical dialogue in divided societies, schools and classrooms on subjects of history, identity and power. What a post-conflict pedagogy demands is a very different approach where the teacher has to consciously position himself/herself to listen; this will not come naturally, but without it, there is no chance of any speaking and certainly no opportunity for listening. This kind of proposition implies a highly skilled teacher who is not only confident in the subject matter and comfortable with different students but competent to manage difficult thematic knowledge. In other words, the success of a post-conflict pedagogy depends almost entirely on the qualities of those who teach.⁷

The problem with listening is that even well-intentioned teachers are emotionally drawn into student stories in ways that could render them off-balance in critical dialogues of the kind required for cross-border engagements. A white teacher under

⁷Few post-conflict interventions have achieved such resonance among black and white teachers than the listening that comes through hearing stories of the Other, as in *Facing the Past*, a non-governmental organization in South Africa. See Tibbits (2006).

attack for an action perceived by black students to be racist or taking sides could become defensive and find it difficult to listen to what students have to say. This is emotionally taxing work, and yet the steady position of the teacher is crucial for critical dialogue.

Listening is obviously more than the physical act of receiving auditory stimuli that flow from student to teacher. It is, more correctly, a process of hearing. This means listening for the pain that lies behind a claim, the distress that is concealed in an angry outburst and the sense of loss that is protested in a strident posture. Listening in a post-conflict pedagogy does not mean that anything goes and that the recklessness of accusation is simply tolerated – not at all. The teacher has a crucial role in setting an atmosphere that enables talking and listening to take place in the first place (more about this later) and, at crucial points, to reprimand where talking randomly insults other students or the teacher herself. But hearing in this sense means delaying interruption, enabling expression and understanding the claims and the silences, the body language and the spoken word, and the pain inside the voice.

Listening in a post-conflict pedagogy is therefore an active rather than a passive event, but it is also attentive to being even-handed in allowing all to speak in equal measure. This is difficult, for on the one hand the teacher has to listen to and follow what is being said, and on the other hand, the teacher has to be conscious of who spoke, what they said, how they said it and what they failed to say. The identity of the speaker matters; giving voice to students in a tense and intense critical dialogue is all about allowing for expression, yet being conscious of one's own identity all the time. Listening is also important in terms of who does not speak at all; an observant teacher is listening for silences, sulkiness, anger, and disappointment. This requires emotional attunement to the classroom as a whole, and is another level of listening crucial for enabling and sustaining critical dialogues between white and black students. It is also critical knowledge for disrupting received knowledge.

The Disruption of Received Knowledge

Listening signals respect not agreement; it is an empathetic attempt to understand, not an amoral attempt to condone. The indirect knowledge that students receive and carry should be directly challenged and critically engaged as a matter of social justice – for white students. The indirect knowledge that the second generation brings into learning and living spaces comes from closed circles of socialization that reinforce single messages about white superiority and black subordination. It essentializes and triumphalizes a white ethnic identity in opposition to rival identities – black, English and other – and in the process, assigns differential and hierarchical value to these subordinate identities. For these reasons alone, indirect knowledge should be made explicit and its potential and real harm discussed openly.

The harm that white knowledge imposed on black children is well documented before and since apartheid (Barbarin & Richter, 2001; Burman & Reynolds, 1986; Straker, 1992) and is readily visible in the social, economic, psychological and

educational consequences of racism and inequality deep into the years of democracy in South Africa. What is less obvious in the critical literatures on schooling is what indirect knowledge does to white children, the second generation of apartheid's rulers. Their received knowledge renders white students incapable of competent cross-cultural communication; it limits their ability to gain freely from the richness of the intercultural experience; it has done an as yet unmeasured harm to their racial psyches – one moment the masters, equal citizens the next and minority subjects forever in the new social order; it leaves them isolated and fearful within the new national arrangement where, no matter what they do, whites are framed by the majority as racial suspects all the time; it deprives them of the skills, knowledge and values to meaningfully access the changing and more cosmopolitan knowledge of the new regime; and it leaves them stunted in their social, moral and emotional development in the same way that apartheid distorted their parents' sense of themselves within the human community, a distortion transmitted to the children.⁸

It does not help that the postapartheid state constructs official victims, those who deserve empathy, support and resources, and those who do not. Official victims do not include poor whites even though socio-economic status is a more equitable and sensible way of accounting for difference in a capitalist society that professes a commitment to what is called *non-racialism*. In the new narrative, official victims alone carry a burden from the past; white parents and their children do not. This is crucial, for the pain of white second-generation students show that even though they were not directly involved in the atrocities, not being born at the time, they nevertheless inherit relative economic privilege as well as the pounding burden of guilty knowledge.

The disruption of received knowledge requires attention to a relational pedagogy. The disruptive knowledge advocated requires that white students be set in critical dialogue with black students, observe examples of leadership and living that counters and confronts their own logics of race and identity, and engage critical knowledge presented through the re-examination of the old knowledge received.

The Significance of Pedagogic Dissonance

The value of pedagogic dissonance cannot be overstated. It is *pedagogic* because it is designed and lived to teach, without the necessity of speaking, the contradictions inherent in a racially organized and a racist world view. Dissonance happens when, for example, a white student observes a black student outperforming him in

⁸Throughout the research for this book I would only encounter brief, often very emotional, reflections by white children on incidents in the course of growing up that had a lasting impact on their racial formation; there is, to my knowledge, no systematic inquiry on this subject in educational contexts.

mathematics, and when the evidence is irrefutable in this subject that white patriachs singled out as *not for him*, then white doubt sets in and the process of disruption unfolds.

This was the case with Surgeon Xolo, a brilliant young black high school graduate who scored reasonable marks in his rural, black high school in mathematics. Sought out to come into the Faculty of Education and given the unfamiliar resources, he started to score the highest marks in mathematics in all his education classes from the 1st to 4th year of study, and he did this in the midst of almost all-white classes composed of students from well-endowed white schools with qualified teachers in mainly middle-class suburbs. At one of the many prize-giving ceremonies, this one for a team task, a white woman student in her acceptance speech tells the mainly white crowd: "I was only able to do this because of Surgeon." A massive pedagogic dissonance is on display here, one that does not need a moralizing *see-what-happens-when* lesson by teachers. It is simply there in a public and disruptive way and it is all the more powerful because it is not *taught* directly.

One incident of pedagogic dissonance does not of course lead to personal change, but it can *begin* to erode sure knowledge. It is, moreover, the collection of dissonant events, spread over multiple school years, that eventually collapses the foundations of indirect knowledge. Dissonance happens when black school or university leaders step forward with acts of kindness and generosity towards their white staff. Seen from the other side of the bridge, dissonance is unavoidable when a white woman undergraduate student comes into the office of a black male Dean to hold his hand and to bless him. Dissonance is imposed on a school or university campus when the institutional culture and the public curriculum includes and integrates multiple knowledges within a social justice framework.

The case for dissonance in a post-conflict pedagogy is not, however, a simplistic concern for *overcoming resistance*⁹ or *motivating the disinterested* among privileged students. It is, rather, a pedagogical commitment to locate, interrogate and engage troubled knowledge within (in this case) white students in ways that allow for disruption of received authority. Only in this way, through human engagement, can a broader inquiry into the ideological and structural foundations of racism proceed.

Even so, direct and unmediated confrontation with disruptive knowledge seldom works; it is more likely to fuel egotistical aggression. Taking the commonsense with which white students live, and asking them to reflect on that which they embrace, is much more likely to begin to alter secure and intimate knowledge. For the interruption of received knowledge to work, the white student must first be drawn into a trusting relationship (more later), but again, knowledge disruption is a complex endeavour not attained by the simple (simplistic?) ambition of the new nationalists to merely inscribe victor knowledge onto a new curriculum.

⁹I am arguing here with McFalls and Cobb-Roberts (2001).

The Acknowledgement of Brokenness

The construct of brokenness carries the idea that in our human state we are prone to failure and incompleteness and that as imperfect humans we constantly seek a higher order of living. Brokenness is the realization of imperfection, the spiritual state of recognizing one's humanness and the need for forgiveness and love. Yet brokenness is even more than this; it is the profound outward acknowledgement of inward struggle done in such a way as to invite communion with other people and with the divine.

In a post-conflict pedagogy, therefore, the teacher and the leader are part of the classroom story. They are not distant and *objective* pedagogues floating above the emotional and political divides that separate those in the classroom. Teachers in this pedagogy not only bring in their own identities, they also carry their own knowledge of the past. Such knowledge is out in the open and shared as part of the process of making sense of how to live together in the shadow of a shared history and with the prospects of a common future.

Brokenness compels dialogue. I have worked with white high school girls that want to share their own stories about how they wrestle with parents and other significant adults in their lives and are caught between an old knowledge that is faltering and a new knowledge that is compelling. They have questions about what happened and how it could have happened, and as they move forward to talk, they risk confiding in a (black) stranger but also breaking primordial bonds of loyalty with the (white) family. This is a highly significant moment in a post-conflict pedagogical situation and the beginning of the end for the certainty conveyed thus far through indirect knowledge. And it is only possible when, and because, white students witness the humanity of the other side through the concession of brokenness.

Contrary to the logic of masculine thought, brokenness is not weakness. By contrast, brokenness reveals inner strength, the capacity to acknowledge not only human frailty but also human sameness. It is the paradox conveyed in Christian verse: "when I am weak, then I am strong." This sounds like a near-impossible task for a teacher trained to and, indeed, eager to establish her authority in the classroom. And yet it is crucial to draw the students in and, more importantly, to demonstrate what it means to live openly and honestly with one's own knowledge about and in relation to those in the classroom.

The Importance of Hope

A post-conflict pedagogy is founded on hope. It does not get lost within a circularity of oppression talk where whites retell stories of *them* as being less and blacks retell stories of *us* as being harmed. It is strongly against any sense of victimhood, which traps white and black in an endlessly downward spiral of defeat. This kind of critical pedagogy recognizes the power and the pain at play in school and society and its effects on young people and then asks *how* things could be better. It shifts

martyrological memories (Hoffman, 2004) towards seeing the possibility in others, and in ourselves. But this kind of sight (vision) is not possible when the characters in the divided setting are seen as essentially evil, as white racists, or as terminally disempowered, as black victims. Hope imagines, in a very real sense, a way out of the two quagmires, one black and one white. Hope starts by asking that same question within the pedagogical situation: “how do I move towards . . .” in order to relocate to a safer and more secure place, with others.

Hope in a post-conflict pedagogy is not some empty, airheaded and aspirational quest of pedagogical Pollyannas detached from the hard ideological and material conditions that constrain and shape interracial relations. In this argument, hope recognizes and works through those conditions of oppression by recognizing the common bonds and bondage of white and black students and teachers in school and community. Hope requires the recognition of racism and the privilege it bestows, and hope demands that these consequences of white history and power be redressed. However, it cannot be taken on without the bonds of solidarity being first established between white and black, and this in turn cannot happen until the participants in the classroom and indeed in the community come to understand and confront themselves, and their disparate knowledges, in the historical and contemporary story.

Hope in this kind of pedagogy therefore begins with the quest for individual and collective understanding within the classroom. Under post-conflict conditions, there can be no discourse of, or even desire for, hope unless and until human beings within the same lived and learning space achieve some amount of self-understanding, some measure of common humanity, and some degree of disrupted knowledge. And, in this context, the teachers and the students are drawn into the same ambition.

A post-conflict pedagogy founded on hope once again requires that intergenerational stories of victimhood be disrupted. It is my firm belief that in addition to the very real structural fault lines that sustain divided communities, there are also the repeated and well-worn stories of defeat transmitted from one generation of children to the next. In this regard, I distinguish stories that remind black children about their shared heritage of a colonial past or a slave history (that is crucial) from stories that conclude with terminal endings of despair and distress. What destroys hope is that the story of the bondage of slavery is not always accompanied by a story of the bravery of the enslaved. One pedagogical story told by a black parent to the next generation might be to see Nelson Mandela as imprisoned for his beliefs by evil white captors; a complementary way of telling the story is to show how he imprisoned his white guards by the sheer force of his moral authority and political cause. The first story alone leads to despair; the story added signals hope.

Hope in a post-conflict pedagogy inside divided communities insists that the stories about oppressing and overcoming are mutually conceived and resolved. In other words, it is absolutely crucial that students understand that from the very beginning there were white resisters to slavery and colonialism fighting alongside the black cause. It is crucial in Rwanda that stories be told of Hutu resisters who lost their lives as one of the most efficient genocides in history was visited on the Tutsi minority by their Hutu neighbors. That there were Germans who stood by Jews, that there

were Afrikaners who stood with blacks, that there were whites in the civil rights marches of the United States – all of whom faced the same ferocity of attack as those originally targeted because of their race or ethnicity or religion. Embedded in such stories of solidarity are stories of hope. And what students learn is that there is no genetic or social *essence* that predisposes any group of people towards hatred or, for that matter, towards love.

The Necessity for Establishing Risk-Accommodating Environments

White students do not rush into pedagogic spaces confessing guilt or acknowledging racism, nor do white parents suddenly own up to years of privilege at the expense of black citizens. Even when such compulsion is felt, it is extremely difficult for human beings to unburden themselves in private or public spaces. This was the most important mistake of the Truth and Reconciliation Commission (TRC) in South Africa, the assumption that whites, given the platform, would stream forward to tell the truth about their complicity in, and benefiting from, apartheid. The chair of the TRC, Archbishop Tutu was adamant: whites should use this invitation to not only speak the truth but, in the process, advance reconciliation. This of course did not happen, for a very good reason: human beings do not willingly release painful memories, especially not on a public platform, that could draw the ire of black victims and impose the shame of association with and support of apartheid.

When I did such workshops on risk accommodation within the classroom, invariably a teacher or professor would become adamant: there can be no reconciliation without truth. People need to acknowledge their racism and privilege as a very first step, or there's nothing to talk about. This is a particularly Western way of thinking: "fess up," as if this is an involuntary reflex to some central command. The explosion of talk shows in American public culture in which the most personal and the most bizarre behaviours are displayed without restraint to live audiences on national television strikes many in the third world as disgusting. This is not the real world. Guilt and shame are more common responses to burdensome knowledge than the apparent reveling in extreme and obnoxious behaviour.

Nevertheless, when I sense the adamant position that whites must simply step forward and acknowledge their racism, I ask a simple question: "Do any of you here have a memory of something so painful that you have not shared that memory with anyone, even those closest to you?" As the thud of this unexpected question takes hold in the room, I scan the faces of the participants as they struggle for a few seconds to process what was just asked. Slowly, most of the hands in the room would go up, acknowledging that there is a knowledge of something known only to them that cannot be spoken. Nothing demonstrates this point more powerfully than the acknowledgement of Gunter Grass, after so many years, that the Nobel Laureate for literature was actually a youthful member of Hitler's notorious Waffen-SS during the Second World War. For half a century, the author of *The Tin Drum* was the moral conscience of postwar Germany, urging his fellow citizens to own up to their

terrible knowledge about the Holocaust and their role in that horrendous conflict. But he harboured secret knowledge such that “What I had accepted with the stupid pride of youth I wanted to conceal after the war out of a recurrent sense of shame” (Isaacson, 2007).

It is crucial in a post-conflict pedagogy that the teacher creates the atmosphere and structures the teaching–learning episodes in ways that reduce the risk of speaking openly about direct and indirect knowledge. Students must be able to speak without feeling that they will be judged or despised for what they believe. They must know that in a divided classroom there will be an attempt to *hear them out* even if their ideas are, on the face of it, outrageous, even offensive. The students must be reassured through the example of the teacher–leader that she/he can be trusted with such personal and ethnic knowledge. What is true, in this example, for white students is of course true also for black students, especially when the latter group is a minority within the classroom. To repeat, this creation of risk-accommodating environments does not mean that *anything goes* and that a student can spout offensive words about another group without consequences. Long before the pedagogic encounter, the atmosphere should have been set, the terms of engagement explained, the rules of the dialogue shared. Such difficult dialogues can only take place if trust in the teacher–leader is already ensured through the demonstration of a profound example of conciliation within and outside the classroom. The notion that *the lesson* starts in the classroom is clearly misguided.

Nonetheless, such encounters remain risky. I used to speak about risk-removing classroom climates; that is clearly impossible. At best the teacher will work towards a risk-accommodating environment in which students, in taking risks, are assured that they will be treated fairly and their positions given serious consideration irrespective of what they hold. It is only when students trust the teacher–leader, however, that the ability to speak is made possible. It is also when such trust is established that the teacher can take what is said and steer the students in the divided classroom towards a dialogue that counters racism, sexism and classism (among other things that divide) and demonstrate the harmfulness and the offensiveness of bigotry in school and society.

The Value of Demonstrative Leadership

For a post-conflict pedagogy to gain any traction in divided and suspicious learning contexts, the critical key is the quality and depth of leadership. I take leadership to be not as much a formal position but a set of dispositions and not an allocated posting but the ability to influence the behaviour of followers.¹⁰ This kind of conception of leadership therefore accepts as given the notion of distributed leadership, and it

¹⁰I am grateful to Gene Carter, Executive Director of the Association for Supervision and Curriculum Development, for sharing this conception of leadership with me.

also understands that such leadership can be student, teacher or principal leadership within any educational setting.

The one thing that became repeatedly clear to me over the years of leadership among white students, staff and parents is that they had absolutely no reason to accept my authority outside of the formal designation of *Dean of the Faculty*. Indeed, in the first months of my appointment, there was very little contact with white students. They walked right past me, heads dropping or staring straight ahead to avoid eye contact. They always seemed to be in a hurry when I was around and engaged in tight conversation with friends when I passed by. When I did initially introduce myself there were cold stares, and, out of sheer demands of Afrikaner decency, they would mumble a greeting. I could not, at that time, sustain any conversation without making a fool out of myself. For many this was, after all, their first contact with a black person in authority of any kind, and I had more than a fair suspicion that the subject of my deanship must have come up at home and among peers.

Words, with teenagers, have very little meaning in a cynical world. Civic, political, religious, sporting, artistic and family leaders dominate the front pages of a globalised media testifying to a profound breakdown in leadership at all levels and across national borders. Young people know this and see this. In post-conflict situations where divides run deep, the credibility of leadership is more important than ever. Conventional leadership training focuses on and measures performance in terms of technical competency; this is not enough to bridge deep divides. The credibility of the leader is crucial to convince black and white students or black and white staff to even consider the possibility of crossing over.

Teachers and leaders (here, the same thing) are being watched more than they are being heard, for we know that what students remember and value is not the subject matter content taught as much as the life led, the example set and the actions demonstrating value. In a racially divided community, it makes no sense whatsoever for those who teach about multicultural education or who espouse values of interracial community when their daily lives do not demonstrate the living out of such commitments in practice. This is crucial. Do students see within the teacher a choice of close friends that goes against the grain of her own ethnic or religious origins? If not, no amount of professing in the classroom will have much meaning with youth. Do leaders speak out against injustice of any kind but especially when it is committed by those regarded as part of his/her ethnic or religious or national group? If not, such leaders should not expect strong responsiveness to taught ideals within the student body. Do leaders demonstrate the same distress when their nation's children are killed as when the children of a self-designated *evil empire* are horrifically wounded or killed in battle? The superficiality of common school plans that isolate compassion and consciousness within a global week or ethnic holiday or AIDS day or even a black history month is clearly wasting valuable curricular and pedagogical resources. Students do not respond, I found, to empty symbolism or occasional bouts of liberal conscience; they are drawn towards personal involvement in their lives and daily, demonstrable commitments of what is worthwhile in the pursuit of social justice.

Students are surprised by lives and leaders who act against the grain of their own biographies. Touching leadership in a post-conflict pedagogy does the unexpected. It is the story of the white principals whom I have studied as they integrate their former all-white Afrikaner schools by transforming the student body, the teaching staff, the curriculum as well as the culture and ethos of the school in ways that embrace black citizens as part of the school community. It is the story of Sipho Ngobeni, the residence student head, as he welcomes white parents onto their historical campus in ways that embrace and include the surprised parents. It is the story of a white student who comes to pray for her black Dean. And when this happens, those who observe leadership come to respect it and wish to emulate it. But this is not always the case.

Such leadership against the grain can be a costly exercise. It risks losing friends and alienating family. It often draws criticism from those still comfortable within the racialized zones defined by their received knowledge. It means that invitations to homes and special events like weddings dry up. This is a painful isolation that must not be underestimated in the life of the courageous leader. But leadership on principle draws in new friends and eventually enlarges circles of friendship; crucially, it eventually demands the respect, also, of those watching from a distance. Like any critical position, a post-conflict pedagogy takes a stand on what is important and demonstrates in practice what is possible by leading upstream in divided schools and society.

Conclusion

Pursuing change in deeply divided communities is exacting work on the human emotions of educational leaders. In such contexts, politics and emotions collide in the classroom as new knowledge confronts received knowledge among white students. The argument in this essay is that the conventions of critical theory do not allow for a compassionate and transformative engagement between perpetrator and victim, and that a different methodology, a different idiom, for talking about educational change is required. I have called this a post-conflict pedagogy, one that fundamentally alters the terms and the terrain on which racial division is bridged. Ignoring the fact that bitter knowledge exists in *the bodies in the classroom* is to risk further alienation, hatred and division among black and white students. More than anything else, the power of demonstrative leadership, guided by the principles of a post-conflict pedagogy, can begin to confront, to heal and to reconcile the second generation in the aftermath of conflict.

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Educational Change in Chile: Reform or Improvements? (1990–2007)

Beatrice Avalos

Very soon after Michelle Bachelet, the new president of Chile, took office in 2006, secondary public school students went out onto the streets to protest. Initially, their complaints had to do with specific issues such as free bus tickets on weekends, but gradually the movement became a more serious call to improve education in the public school system including private subsidised schools. They had many complaints, but underlying them all was the notion that large numbers of young people in public schools lacked the opportunities open to the affluent groups who attend the private school system. The student movement gained support from the public, and from many organisations such as the Teachers Union, political groups and university students, as well as private school students who perhaps recognised their own privileged situation.

As the protests became more centred on macro issues, there were three that stood out:

- the need to enact a new Education Law to replace the existing Organic Law;
- the need to change the municipal system of administration of public schools and
- the need for greater funding for the improvement of teaching and learning in the public school system.

Recognising that these demands were serious and hit at the heart of the education system, the government agreed to form an Advisory Presidential Commission on the Quality of Education with representatives from a wide array of civil society institutions: political parties, teachers' union, churches, students (secondary and university) and academics. The Commission produced its report towards the end of 2006, and as this chapter is being written two laws have been passed in Parliament that address the issues of concern.

To those who know of the Chilean government's involvement in improving the quality and equity of education since the early 1990s, the impact of this massive

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protest may have come as a surprise. The purpose of this chapter, then, is to discuss these changes, their focus and their achievements; to highlight the tensions involved in the process of improving the education system including the conflicting ideologies underlying the efforts and finally to assess the importance of what effectively can be considered an improvement as well as the reforms that are still needed to better the education results of students.

From Improvement Programmes to Reform (1990–1996)

The 1990s began with the key political overhaul from a military dictatorship to a democratically elected government, in the context of transition and not revolution. This meant that whatever was to change had to be done with caution, so as not to arouse suspicions on the part of the relatively large group that still supported the military government and feared “reforms” that might appear as veiled intentions to reinstate the principles of the socialist government that had been overthrown by the military government in 1973. The educational situation in 1990 was adequate in quantitative terms compared to other Latin American and developing countries (Matear, 2007). There was almost full primary level coverage, that is, 97% Basic Education (8 years), around 75% secondary enrolment (4-year secondary school) and 5.2% illiteracy compared to 16.4% in 1960. However, the fundamental issue then and now is not so much the expansion of enrolments in schools but the quality of education provided to students. In order to explore the quality of education in Chile in this chapter, we will

- examine how the education system was handed over to the new democratic government;
- identify the urgent needs of change detected at the time and
- discuss how these were converted into what were called “improvement” programmes.

The Education System and the Legal Structure Inherited from the Military Government

The last major structural education reform before 1990 took place in 1965, when, in line with UNESCO recommendations at the time to extend compulsory education from 6 to 8 or 9 years, the 6-year primary education system was converted into an 8-year Basic School and made compulsory for all. The secondary system at the time was in turn shortened to a 4-year Middle School with two streams: an academic and a technical-vocational, both of which in turn would make it possible to apply for higher education programmes. In line with this structure, the system of teacher education was also modified so as to prepare generalist teachers for the Basic school

and specialised university trained teachers for the Middle school. Despite curricular changes, the structure of the system has remained the same until today and, as we shall see later, stands in need of reform.

Until the early 1980s, the education system was primarily a public one with a limited number of private schools geared to the more affluent social groups. In 1981 the military government transferred the administration of public schools to the municipalities, arguing that this would allow for a better and more participatory form of school management, although such participation was limited given the non-elected condition of municipal authorities until the system was changed in the 1990s. In reality, the municipalisation of schools responded to the market economy principles upheld by the military authorities involving the belief that educational quality could be assured through competition among schools in line with their degree of effectiveness in achieving learning results. Accordingly, the military government modified the funding of schools introducing a system of vouchers. The system was a variation of Milton Friedman's (Friedman & Friedman, 1980) voucher scheme, as subsidies would go to school managements (municipal and private) on the basis of actual student attendance rather than directly to parents. It was expected that through this system private subsidised schools would attract more students than the less effective municipal ones and gradually produce a shift from a public to a private school system. This shift did not happen in the 1980s, but since the end of the 1990s it has begun to occur. At present around 49% of students are enrolled in municipal schools compared to 43% in private subsidised schools, while the rest attend the paid private schools (Ministerio de Educación de Chile, 2007).

In terms of overall funding levels, the last decade of the military government showed a major decrease in funding levels for the publicly subsidised system (27% between 1982 and 1990) that affected teacher salaries and their working conditions and the money available for teaching resources in schools (Cox, 2003). This decrease in funding also lowered Basic School education enrolment between 1985 and 1990 from 98 to 93% (Cox, 2003).

The most contentious inheritance of the Military Regime was the Organic Law of Education, which was passed 1 day before the change of government (10 March 1990). This Law was designed to ensure the maintenance of the changes put in place by the military government such as the municipal administration of schools and the voucher system of funding (Cox, 2003), because it required a very high quorum of agreement in Parliament to be changed, a condition which has been impossible to fulfil until very recently.

Change Needs Faced by the Newly Elected Government in the Early 1990s

Bound by the restrictions of the Organic Law, the political coalition (known as the *Concertación*) that took office in 1990, and is now in its fourth period of government, needed to address two urgent situations: improve the working conditions of

teachers and the educational opportunities of students in the light of equity and quality principles.

Teachers had undergone grave injustices during the military government. Not only had many been arbitrarily dismissed, but they had also lost their former rights as public servants (Avalos, 2004a) and suffered a substantial reduction of their salaries compared to what they earned in the early 1970s. Improving the situation of teachers meant altering their status as employees of the municipal school system and improving their salaries and working conditions. This was achieved through the passing of the Teacher Statute (Law 19.070, 1991), which recognised teaching as a profession and the right to continuing professional development as well as to adequate working conditions. While municipal authorities retained the power to appoint teachers, they no longer could dismiss tenured ones.¹ There would be a minimal national salary with added benefits on the basis of experience, professional development courses, work in difficult areas and managerial responsibilities. Salary increases for municipal teachers would be negotiated periodically by the Teachers Union and the government, while teachers in private subsidised schools would be bound by the general labour laws. From 1991 onwards, teachers' salaries have increased to the point that they are now, around 150% higher than what they were in 1990. While this salary improvement is not entirely satisfactory in the eyes of the Union, the problems are more clearly focussed on the high number of pupils per class (officially 45) and of teaching hours (around 30 per week for a full-time teacher), as well as low differentials between beginning teachers, teachers with 15 years experience and teachers at the end of their career (see OECD, 2005).

The forecast that municipal administration of schools would show poorer learning results as compared to the private subsidised ones appeared true at the beginning of the 1990s and has remained so for several reasons. Municipal schools enrol students from the lowest socio-economic groups who in turn, despite the efforts of better municipal schools, tend to show lower results on national assessments than their counterparts in private subsidised schools. Municipal schools also are not allowed to select their students on the basis of ability (nor for other reasons), which in fact puts them in an unequal situation with private schools that practice selection. Another reason is that private subsidised schools, within limits, are allowed to charge fees, thus increasing the amount of money per student that these schools have. This has brought to the fore the negative effects of providing an equal subsidy per student regardless of their condition and needs, a situation that affects the municipal schools more drastically as they are faced with having to compensate for the advantages of students in private schools without sufficient resources for this purpose.

¹This is a controversial issue as municipalities find themselves very limited in their possibilities of selecting good teachers while others considered less competent remain in post. Thus there has been a longstanding demand from municipalities and the political opposition to change or eliminate the Teachers Statute.

At the start of the 1990s the issues of equity in education were a key concern (García-Huidobro, 1999). It was obvious that students in more disadvantaged conditions who attended municipal schools were not learning as expected, but also that across the subsidised system teaching and learning processes were inadequate. The situation required urgent attention.

Nine hundred schools were first identified as in need of special educational assistance, and the programme put in place for this purpose, appropriately known as P-900, gained worldwide recognition (Filp, 1994). The P-900's target was to improve learning results through several actions: teacher development workshops, special help for students standing behind in their achievement and resources such as textbooks and teaching/learning materials. The key intervention of the programme was the organisation of "learning workshops" with 15–20 children (first to fourth grade) with learning difficulties. They worked, after school hours, with monitors or facilitators (generally secondary school graduates in the communities where the children belonged) who were prepared for the task by programme staff. While the programme continued all through the 1990s (gradually covering all of the eight grades of the Basic School), it did not target the same schools, as once a school attained reasonable learning levels as measured by the national assessment test, it left the programme and another school took its place. An external evaluation showed that over the decade of the 1990s there was a continued lowering of the achievement gap in relation to the mainstream Basic School results and also there were better results compared to schools with similar characteristics not in the programme (García-Huidobro, Jara, & Sotomayor, 2002).

About 16% of students attend rural schools, many of which are small and managed by one or two teachers. An innovative programme known as Programme for the Improvement of Quality and Equity in Education (MECE) Rural targeted these schools from the early 1990s on. Rural schools had been operating in impoverished conditions and with little support for their teachers. While the MECE Rural programme provided funds for the improvement of buildings and teaching/learning resources, its most important intervention was the establishment of the "Rural Microcentres". These were monthly professional development meetings of teachers from nearby schools at a host school. Assisted by a school supervisor and often with invited guests, teachers exchanged experiences, discussed their problems and examined the demands of the curriculum and how to manage multigrade teaching as most lacked any prior preparation in this respect. The external evaluation of the programme carried out at the end of the 1990s (Avalos, 2004b) showed that the Microcentre meetings together with other professional development opportunities contributed around 40% to learning results in the schools, and that these in turn improved over time in national learning assessments.

Beyond these actions focused on the poorest and more vulnerable school population, the government initiated in 1992 a programme that was to continue throughout the 1990s directed to the overall qualitative improvement of schooling. Known as the MECE and partially funded through a World Bank loan, it gradually covered the entire school system from pre-school to secondary level. School building infrastructure was improved; free textbooks were provided first for all Basic School students

and after 1995 for secondary students in the subsidised system (municipal and private). A new curriculum framework was approved for Basic schools (1995) and for secondary schools (1998) together with syllabuses for each one of the main curriculum subjects that schools could use if they so wished (in practice most schools use them). Resources were provided for classroom libraries in Basic schools, improvement of school libraries and the setting up of educational material resource centres. Opportunities for school-based teacher professional development were especially structured and supported for secondary schools (Avalos, 1998) besides those already in place in P-900 and rural schools.

Perhaps the most innovative of the improvement initiatives of the 1990s was the introduction of computing into schools. Beginning in 1990 the ENLACES programme, as it came to be known, gradually extended the provision of computers to schools (beginning with primary level), established a platform for communication later superseded by widespread Internet connection and an education portal, set up training opportunities for teachers in schools and provided software for educational purposes. Today, practically all the schools have a computer laboratory, and teachers and students have access to a rich education portal to assist in the teaching and learning activities of the school (Hinostroza & Guzmán, 2002).

Change or Reform?

Throughout the effervescence produced by the development of these improvement programmes in the early 1990s, the word *reform* was never used. Essentially, this was related to the nature of the transition period from a military dictatorship to democracy and the fact that the former dictator remained as head of the Armed Forces. There was a certain degree of concern that anything that might appear as a radical change (i.e. reform) might unleash unnecessary suspicion and resistance. However, when Eduardo Frei, the second democratic president, took office in 1995, the time seemed ripe to use the word *reform*. On the basis of proposals embodied in the report of a national commission on education convened in 1994, President Frei used the concept of “education reform” in the announcement of three major policy targets in his Address to the Nation (1996): education as a government priority, doubling of expenditure within a 6-year period and lengthening of the school day. The speech also informed of the provision of special funds to strengthen the teaching profession (initial preparation and continuing professional development) and a programme to support the development of a number of high-quality municipal secondary schools throughout the country.

The next two governments in fact continued the trend to expand public expenditure in education (2.4 of GDP in 1990 to 3.2 of GDP in 1996) with big increases in infrastructure to support the longer school day and assist the development of teacher education and other related teacher programmes. The existing MECE and ENLACES programmes continued their expansion throughout the decade as stated above.

Progress and Setbacks in Education Quality (1996–2006)

Perhaps the most important policy that became a law in 1997 was the lengthening of the school day from six 45-min periods to eight, meaning that double-shift schools would gradually give way to single-shift ones, involving a substantial increase in investments in building and infrastructure. The lengthening of the school day was considered an important equity factor under the assumption that students with poorer cultural background need more time to engage in the kind of learning that the new curriculum and more constructivist teaching strategies require (Cox, 2003). The process of transforming the system in this direction is now almost completed. Most students today remain in schools longer, and many teachers are concentrating their teaching in one school rather than in two or three as occurred before.

The effects of lengthening the school day on learning are not yet visible (as far as national assessment results show), and there still is not an adequate use of the extra time for learning. As shown in independent evaluations, there are a number of schools that use the time to repeat curricular content already taught, thus increasing the boredom of students (DESUC, 2005). Nevertheless, there is a new context for furthering better teaching practices and more interesting educational opportunities for students.

Teacher Policies: Education, Incentives and Evaluation

Other than dealing in 1991 with the vexing issue of teacher salaries and contractual conditions through the Teacher Statute, insufficient attention was given to engaging teacher participation in the reform initiatives. From a sociological perspective, Bellei (2001) concluded that while privately and with greater or lesser willingness teachers accepted the reforms of the 1990s, in their public expressions they complained about their lack of participation in the framing of reform initiatives and continued to complain about their working conditions. From the perspective of teacher education, although each improvement programme had considered some form of professional development action, no comprehensive and long-term policy directed to teacher development (including initial preparation) had been embedded in the reform policies (Avalos, 2003).

Teachers began to get increased attention after the presidential address of 1996 in several ways: improvement of initial teacher education and better opportunities for professional development, incentives based on student results and the establishment of a system of formative teacher evaluation.

Teacher Initial Education and Professional Development

Around 1996 it was publicly acknowledged that initial teacher education was in poor condition, due to insufficient funding, inadequate curriculum and low institutional

prestige resulting from contradictory policies during the military government.² To deal with the situation, the government provided a fund to be allocated on a competitive basis to teacher education programmes that presented reasonable improvement projects. Thus, 17 university teacher education programmes that covered about 80% of the future teacher population were able to engage in 5-year projects (1997–2002). These projects addressed practically all the key areas in need of change: curriculum improvement, capacity building of teacher educators and greater practical experience covering the entire period of teacher preparation. The teacher education institutions were able to improve their libraries, their computing facilities and their buildings (for example, office space for lecturers and meeting space for students). International links were established with teacher education institutions in a number of countries as a result of study visits, and participation of well-known researchers and teacher education practitioners in workshops and seminars organised in Chile. By the end of the programme, there was a noticeable increase in the qualifications of applicants for teacher education, in the qualifications of teacher educators and in the overall structure and quality of the teacher education curriculum.³ During the period of implementation of the projects the Ministry of Education held an important support role, which unfortunately was not continued to the same degree after the completion of the projects.

Teacher professional development was also encouraged in several ways. A programme was established to send teachers on study visits abroad with the purpose of visiting innovative schools and classrooms that provided examples of different ways of facing subject-teaching, dealing with diversity, multicultural learning as well as school organisation and leadership. Around 6,000 teachers benefited from this programme between 1996 and 2003. Currently, the programme has focused on a smaller number of teachers being awarded grants to complete post-degree diplomas in their field of teaching.

Changes in the curriculum made it imperative to provide teachers with short informative courses to acquaint them with the nature of these changes. Thus, year after year, as the changes were implemented teachers were offered curriculum upgrading through short summer courses. However, this form of curriculum upgrading was shown not to be appropriate for the change of teachers' prior view of the curriculum and much less for adequate implementation of changes in their classrooms. Thus, more recently and with the assistance of university lecturers, the courses are being designed with a stronger opportunity to understand changes and with continued support in the classroom during the year. Also, more recently the Curriculum and Evaluation Unit has been working on curriculum support materials that contain performance standards for each of five subjects along the continuum

²For example, the secondary (and much of primary) teacher initial education that had traditionally been offered at university level was demoted to tertiary non-university level and then again restored to its former position towards the end of the military government. This, as well as low status, salary and working conditions of teachers deterred qualified school graduates from pursuing teaching as a profession.

³For an account of this programme see Avalos (2005).

from 1st to 12th grade. These materials, known as Progress Maps, are the result of joint collaboration between Chilean and Australian professionals, based on similar materials developed by the Australian Council of Education Research. To ensure that teachers understand and feel motivated to use the materials, one of the universities piloted a strategy for the purpose with a group of around 200 teachers. At the end of the 4-month activity participant teachers had recognised the potential of these materials to improve their teaching strategies and student learning (UMCE, 2007). But it will take some time to broaden the experience to other teachers within the system.

More in line with the concept of school-based teacher development over time, the Ministry of Education has undertaken a number of activities that engage teachers in workshops, professional discussions and interactions across schools with and without assistance from facilitators. However, as these activities cease to be experimental and are engulfed within the Ministry of Education's structure, they tend to lose prominence in relation to other priorities and new initiatives. Thus, for example, the Teacher Professional Groups, which was a very successful programme for secondary teachers (Avalos, 1998), no longer receives specific support, so that only schools that are strongly motivated and able to continue with the Groups have done so.

More recently and linked to policies involving teacher evaluation, a network structure of teachers who act as professional developers for other teachers has begun to operate. These teachers are selected from those who are judged to be highly competent by the teacher evaluation system.

Improving Teacher Performance Through Incentives and Teacher Performance Evaluation

The 1991 Teacher Statute included a clause requiring municipal teacher performance to be evaluated, but more as a means of control than as a stimulus for improvement. This interpretation resisted by the Teachers Union stopped for some years the development of a system of teacher evaluation. However, political pressures to establish such a system and the recognition on the part of the Union that evaluation in itself could be a useful tool for teacher improvement prepared the way for all parties to undertake a lengthy series of discussions and negotiations that finally led to the establishment in 2002 of a formative evaluation system (Avalos & Assael, 2006). The system, which is being gradually implemented, is based on a framework or set of criteria describing competent teaching against which teachers are judged, and which was approved through wide teacher consultation. Teachers are evaluated on the basis of a portfolio, peer interviews and head-teacher reports, as well as the video of one of their lessons. As a result they may be considered "excellent", "competent", "basic" or "unsatisfactory". Teachers judged as "basic" and "unsatisfactory" are entitled to extra professional development opportunities in their area of weakness, and unsatisfactory teachers are evaluated in two further opportunities before they are asked to leave the municipal education system. Teachers who are willing to pass a content-knowledge test are eligible for a salary

bonus. Additionally, a voluntary system to reward excellent performance similar to the USA National Board examination has been implemented since 2002. Teachers who apply must pass a content-test as well as provide a portfolio and video as evidence of their performance. Those who are successful receive a salary bonus for 10 years.

As can be seen, Chile has followed the tendencies towards greater teacher accountability in systems such as the USA and British ones that link controls and incentives. However, the measures in place have critics on both sides of the ideological spectrum: for conservatives the evaluation system is too soft (formative), while for some left-wing teacher groups the system expresses neo-liberal market policies that confront teachers with each other in pursuit of a reward.

Learning Results: How Equitable Have the Changes Turned Out to Be?

Chile has a system of student assessment in place since the 1980s known as the System for Measurement of Educational Achievement (SIMCE). Since its inception, the system has undergone a series of changes, of which the most recent one is a modification of the way in which results are communicated.⁴ SIMCE covers language, mathematics, science and social studies in fourth, eighth and tenth grades. Students in fourth grade are assessed every year, while students in eighth and tenth grades are assessed every 2 years. Besides this national assessment, Chile has participated in Trends in International Mathematics and Science Study (TIMSS), the UNESCO Latin American assessment (LLECE) and PISA evaluations.

As can easily be noted, the country has a fair amount of information on the learning progress of students. Furthermore, each time SIMCE or other assessment results are published, there is no lack of public comment and judgement about how the education system is performing and how effective are its reform programmes.

Until SIMCE changed the frequency of measurement of fourth grade students (2006), it was not possible to follow cohorts from fourth to eighth and tenth grades, and therefore to get value-added measures. Each administration of the tests offered a snapshot of the learning levels of the school population. Because results have not been as expected in the light of investments and efforts to improve educational provisions and because they generally show lower results for the municipal schools, there is a recent effort to examine (even without value-added measures) how the different types of schools perform in relation to the socio-economic level of their students. Although the presentation of results in relation to the school population attended allows for a more nuanced assessment of effects, with municipal schools sometimes outperforming the private subsidised schools in relation to the same socio-economic

⁴Thus instead of each school getting a score for each subject measured which compares with scores of other schools and the mean score, results will be reported against two standards or learning levels each with a description of what the level means.

group, there is a continuous critique of the municipal management system vis-à-vis the private subsidised ones. Those favouring the concept of “private is good” help to create a public feeling that municipal education is failing, and this explains the constant exodus of students from municipal to private subsidised schools. On the other hand others, including the government, recognise that municipal schools operate in unfavourable conditions in terms of funding, decision-making power of school heads and type of school population attended. In other words, students who are poorer have less chance of reaching satisfactory achievement levels. The laws under discussion at present are attempting to deal with the situation.

Beyond the discussion of what type of school is better, it is still a fact that learning results have not improved much since reforms began in the early 1990s. The report prepared by the Chilean government on occasion of the OECD external review of Chilean policies (OECD, 2004) notes fluctuations in results over the period 1992–2002 in terms of decreasing the achievement gap between municipal and private schools. Those programmes that got special attention in the 1990s (P-900 and Rural Schools) progressed consistently upwards, thus decreasing the achievement gap with the rest of the system. But on the whole as the Report suggests, “national achievement averages remain below the objectives defined by the curriculum and far from the international standards to which they aspire” (OECD, 2004, p. 44).

The People’s View: Report of the President’s Advisory Commission on Education

The “penguin revolution” referred to at the start of this chapter bore its fruits. The discussions among the 80-plus members of the President’s Advisory Committee reflected not only the concerns but also the tensions that have accompanied the implementation of reforms since these begun in the 1990s. The discussions served as well to highlight avenues for change that had not been considered earlier. We look at the tensions and situations that emerged as critical for the improvement of education, and in the last section of the chapter we hypothesise about what the future of education of Chile may look like.

Tensions

Throughout the entire period under description, a persistent ideological dichotomy has marked discussions, proposals and critiques. The following word dyads aptly describe these dichotomies: private–public, outcomes–processes, programmes–policies, centralisation–decentralisation and improvement–reform. To some extent we dealt earlier in this chapter with the conceptual shift in the mid-1990s from “improvement programmes” to “educational reform”, illustrating the tension between the need to move ahead and the need to contain the opposition of former

military government supporters. The “public–private” relationship however exemplifies one of the acute tensions that remain a part of policy discussions and reform efforts. The tension is illustrated in many ways but mainly in the extent to which the power to administer the education system is vested in the State (either the central government or decentralised municipalities) or devolved to subsidised private institutional management. One of the key issues brought out for discussion in the President’s Advisory Committee (Consejo Asesor, 2006) precisely refers to where the power to regulate education and secure education quality should reside. The education law and a subsidiary law under parliamentary discussion at present grant greater regulatory power to the State and to its ministry of education. However, the law proposal has been challenged in an alternative proposal by the political opposition that calls for an independent regulatory institution and for more managerial autonomy for public municipal schools.

Within the same logic of a public–private tension, the political opposition considers that the unsatisfactory learning results of students in municipal schools are the effect of their management system (mostly vested on municipal authorities rather than the school principal). It also blames the situation on the difficulty of dismissing teachers who are deemed ineffective due to protective clauses in the Teachers’ Statute. Without disagreeing with this view, the government and especially the Teachers’ Union consider that the main reason for poor results in municipal schools is the school population they attend and the lack of selection practices. However, neither side sufficiently considers the effect also of high student–teacher ratios (up to 45 students per class) and high teaching loads (up to 36 periods per week) that affect many of the schools that serve poorer social groups.

The policies set in place by the governments of the past 15 years to improve teacher performance (besides more opportunities for professional development), such as teacher performance evaluation and monetary incentives, are not considered entirely appropriate by the political opposition. Their criticism is directed to the “formative” character of the evaluation (not linked to student results) that makes it very difficult to dismiss a teacher with unsatisfactory performance. Their preferred method is to have a stringent form of evaluation and very good incentives for effective teaching as measured by student results.

Perhaps the most vexing issue also resulting in different explanations of why this occurs is the growing inequality in educational results between the lower and the affluent social groups with greater cultural capital. The most obvious explanation provided by all groups is that there has been insufficient investment per student in education giving the same to rich and poor. The voucher system in place has been criticised on this account, and as a result a new law will grant bigger subsidies per student to schools that cater for the poorer social groups. These schools will also get extra funding to improve their resources and/or contract better qualified teachers able to deal with the different educational needs of their students. The schools getting these additional funds will need, however, to prove that they are using them well for improvement and will be closely monitored in this regard.

Finally, and only recently acknowledged in the new education law, is the problem of the education structure and the system of teacher preparation which follows this

structure. As indicated earlier in the chapter, there is an 8-year basic school set in place by the 1965 Education Reform Law. Although the curriculum of Basic Education is divided into two cycles (1–4 and 5–8), both cycles tend to be taught by generalist Basic Education teachers. This has had a detrimental effect on the learning opportunities of those students attending municipal schools (mostly the poorer ones), as private schools tend to contract subject specialists for the second cycle of the Basic School. Teacher education institutions are beginning to reform their programmes so as to provide Basic Teachers with subject specialisation for grades 5–8. But this will probably not happen in all institutions, unless the curricular structure of the system is altered, and specialised teacher education becomes a necessity. In the meantime, this situation exacerbates the already unequal opportunities of students who attend municipal schools in relation to their peers in private schools.

Conclusion

The educational system has moved well beyond the situation it was in at the beginning of the 1990s. In sheer numbers, there is practically universal coverage in Basic Education and over 90% enrolment in secondary school. The curriculum has been updated and new curricular materials are being offered to teachers to assist them in dealing with the diversity of student learning needs. In almost all schools there is a longer day and better infrastructure and learning resources. Teachers are getting more opportunities for professional development and have an evaluation system that helps them detect their needs and deal with them accordingly. But there is still a way to go in terms of deciding what kind of an education system needs to be put in place to provide equal learning opportunities, especially for the poor, and to improve learning results, especially among the more vulnerable social groups.

The current discussion involving new education laws deals with issues related to governance, funding and monitoring of quality. The role of the Ministry of Education and of semi- or non-governmental regulating institutions has recently been agreed upon. Systemic policies have been wanting and must be considered when the new conditions are implemented. The current preparation of teachers, especially for primary and lower secondary level, needs reform. The questions raised by the “penguin movement” and the solutions proposed by the President’s Advisory Committee may get blurred in the ensuing discussions that are taking place among all stakeholders, but especially among the politicians who have to approve the new laws. The policies needed to provide opportunities in the public education system need to be put in place, even if this requires a radical change in the municipal system of management. Selection policies and fee charges in subsidised schools need to be stopped. The role of civil society in maintaining the key issues and their most adequate (as well as feasible) solutions alive in public discussions is essential, so that the changes of the 1990s do result in better educational conditions for all when Chile celebrates the bicentennial of its independence (2010).

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A Market for Knowledge?

Frederick M. Hess

For more than a decade, market-oriented education reformers have touted the ability of competition to improve American education. While arguing that competition will nonetheless promote quality, efficiency, and innovation, these advocates have avoided the blunt, self-interested language of markets.

The result has been a strange politics of half-hearted debate. Proponents of deregulation have hesitated to use the instrumental language of markets. Even the champions of reform have opted for the gentler language of “choice” – while paying homage to the societal mission of schooling and its value as a public good. This has made for some astonishing, or astonishingly inept, efforts at market making. In K-12, for instance, champions of competition have chosen to ignore questions about existing incentives for schools or managers, or the manner in which collective bargaining agreements restrict the ability of schools to respond to competition.

In the context of deregulatory politics, it is vital to understand that American education is not a regulated system in any conventional sense. K-12 schooling is, quite simply, a government-operated system with a small private sector. As for “deregulation,” most such policy is not concerned with reducing government restrictions on private entities but with encouraging publicly managed entities to act “as if” they were private entities. These realities of the education sector have seldom been recognized by proponents and opponents of market-based reform, whose debates rest on the unstated assumption that publicly governed schools and colleges will behave like traditional profit-seeking firms when confronted with students empowered to attend the school of their choice.

In K-12 education, there is substantially less competition and much more ambivalence about whether schools and educators should be subject to competition. Nonetheless, teachers compete to win positions in advantaged districts, superintendents and principals vie for the career-making accolades showered upon innovators, school districts compete with private firms to provide tutoring under the federal

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No Child Left Behind Act (NCLB), and principals eagerly explain how they contend for students who could attend other schools. More obviously, for-profit firms have always competed to supply schools with academic products and services such as testing, textbooks, curricula, professional development, and instructional supplies.

In short, rather than suggesting that competition does not exist in education, it is more accurate for proponents of market reform to argue that education is currently subjected to *inadequate* or *unhealthy* competitive pressures, and that market-based reform will yield more constructive dynamics. This, however, places a particular burden upon reformers. If the problem is that existing competition is unproductive or toothless, then simply promoting increased choice is an insufficient solution. It becomes paramount for reformers to embrace changes that will trump existing pressures, alter the rules of the game, and rationalize behavior in the intended manner.

Education has two purposes: a “private” purpose and a “public” purpose. Education is a private good to the extent that individuals benefit from the skills and training produced by schooling and is a public good insofar as one is learning skills, dispositions, or values that make for a better citizen and neighbor. It is generally agreed that the public content of schooling is highest in the elementary grades and declines through secondary school and higher education, though there is no objective way to determine the size of the public component at any particular grade level. To the extent that education is a private matter, proponents of choice-based reform contend that public officials should regulate with a light hand and should not privilege state-run institutions. Those who see education as primarily a public good, meanwhile, argue that the state should oversee its provision and ensure its quality.

In both K-12 and postsecondary education, a persistent difficulty for market proponents has been the disparity between the rhetoric and reality of competition. Confusingly, there has been a tendency to conflate two very different dynamics and call them both “competition”: one is the unleashing of self-interested incentives to compel public providers to improve, and the other is a loosening of restraints that hobble nontraditional and private providers.

It is vital to distinguish between competition intended to force public school systems to change in desirable ways and competition intended to permit new providers to emerge and thrive. This distinction yields two theories of change. The most straightforward way to unleash competition is to make it relatively simple for private providers to receive public funding for their educational services. If the accompanying regulation does not erect immense barriers to entry, this kind of *displacement* can yield immense change whether or not existing institutions respond productively. The alternative course is to use the threat from private providers and changes in public agency funding to compel a productive *public sector response*, trusting that self-interest will drive public schools to improve in response to competitive pressure. In contemporary policy debates, the rhetoric of public sector response is more common than that of displacement.

The Landscape of Education Competition

Competitive forces are most evident in four areas of K-12 education, each a product of relatively recent changes to state or federal policy. First, somewhere between 1 and 1½% of children are currently homeschooled. State laws rendered homeschooling illegal in nearly all states until the 1970s, when Christian groups spearheaded an effort to relax school attendance laws and ensure the right of parents to educate their children at home. Today, homeschooling is legal in all fifty states, operating under a variety of statutory restrictions. Estimates vary, but most place the homeschooling population at about 1 million. This has fostered a variety of opportunities for entrepreneurial providers, as families seek curricular materials and web-based instructional support.

Second, as of fall 2006, 1,150,000 students were enrolled in 3,977 “charter schools” nationwide. These schools held charters from state-designated entities that permitted them to operate independently from the local school district. Charter school legislation, first enacted in Minnesota in 1991, funds schools with formulas based on enrollment, thus linking competitive performance to revenue. States fund charters to varying degrees, some at the same level as other public schools but many at a considerably reduced level. Only a few states offer charter schools substantial support when it comes to facilities and construction. As a result, entrepreneurs have encountered significant difficulty in getting charter schools started, often relying on philanthropic support and using third-rate facilities.

Third, publicly funded school voucher programs, first enacted in Milwaukee in 1990, now operate in some cities (e.g., Cleveland and Washington, D.C.) and on a limited statewide basis in Florida. Under voucher arrangements, the government provides individuals with a specified amount of money to be used toward tuition at any eligible provider. In each case, students are able to use the vouchers to attend private schools, including religious schools. Vouchers make the financial state of a school directly dependent on whether students enroll there, though most programs set per-pupil funding at a substantially lower level than for local public schools.

Fourth, the landmark No Child Left Behind Act of 2002 requires low-performing districts to use federal funds to create a competitive market for after-school tutoring services. More than 2,500 state-approved supplemental service providers are now competing for federal funds that average \$800–900 per eligible student. While many of the approved providers are school districts themselves or other nonprofits, a number are small for-profits and larger national for-profits. Harvard University business professor Clay Christensen has argued that most disruptive innovation tends to be pioneered by low-cost “down-market” providers who find ways to undercut established, pricey producers by delivering functional substitute products at dramatic savings (Christensen, 1997; Christensen & Raynor, 2003). Historically, the absence of for-profits, coupled with K-12 funding formulas and higher education subsidies, has stifled the emergence of cost-effective providers.

Existing arrangements insulate educational leaders, administrators, and teachers from the consequences of their performance. Because individual teachers are not

promoted or rewarded for exemplary performance, and because they do not face termination or demotion for poor performance, it is difficult for even determined leadership to spur employees to efforts beyond those they are disposed to put forth. And because neither school principals nor district superintendents are rewarded for attracting enrollment, they have little incentive to engage in controversial or unpopular measures to do so. Lacking the ability to readily assess, reward, or select subordinates, and in an environment where only the rarest school systems resort to layoffs, most principals and superintendents lack the means to answer market forces.

Competitive Response of Public Schools

Markets work precisely because they are neither gentle nor forgiving. They are impersonal mechanisms that gain their power by harnessing self-interest and drawing on desire and fear. The power of the market lurks in the knowledge that even dominant firms may be only one innovation away from being overthrown, that hungry garage inventors may be only one breakthrough away from success. It is the handful of entrepreneurs who take the chances and embrace the risk that drive innovation and growth, as with the entrepreneurs who have exploited new opportunities in vocational colleges or in services to homeschooling families.

In the private sector, when competition is threatening enough – such as when American electronic manufacturers were met with an onslaught of Japanese competitors in the 1980s – it can bring these protective edifices crashing down. Firms either cast off inefficient rules and procedures or are overtaken by new providers. This is not a pleasant process or a painless one, and it raises concerns about capriciousness and equity. Nonetheless, this is how competition actually works.

It is immediately clear that the very nature of public organizations such as schools, colleges, and universities makes it possible to limit the effects of markets in two key ways. First, the market threat can be neutralized by political fiat. Public agencies are not threatened by bankruptcy in the same way that private firms are. Legislatures may require a public agency to begin competing against other entities, but they are free to buffer schools and colleges from the revenue losses that might attend a shrinking clientele. Second, the incentives for officials in public school districts are fundamentally different from those for executives of private firms. Private firms are driven by investors anxiously watching profitability or by owner-managers who have their own wealth riding on the future of the firm. When confronted by competitors, the pressure to improve profitability propels executives to find new market opportunities, root out organizational inefficiencies, and pursue increased profitability. If executives do not take these steps, they risk being displaced by leaders who will.

Public schools, in particular, are not well suited to act boldly. Public employees face extensive procedural requirements. Given substantial penalties for violating a statute and few rewards for effective performance, public servants have incentives to hew to procedural requirements – even when the requirements seem inefficient.

Employees who respect these prosper, while entrepreneurs who violate norms or offend constituencies encounter difficulties. Consequently, when compelled to launch a public response to the threat of market competition, leaders are constricted in their course of action. One response is to enhance advertising and public outreach. A second, more interesting, response is the tendency of officials to relax procedures so as to permit the development of new programs and initiatives.

Even for managers in the private sector, it is arduous and unpleasant to undertake significant organizational changes. They do so only when they have to, relying upon their capacity to recruit and promote supportive managers, reward cooperative employees, monitor performance, and sanction or fire the uncooperative. Managers in public schools generally lack such tools. So, rather than forcing change upon their subordinates, they prefer reforms that allow entrepreneurial employees to step forward. The result is enhanced opportunities for principals to launch new specialty schools. This solution avoids the conflicts provoked by coercion, while producing visible evidence of organizational change.

Unorthodox opportunities to provide new services appeal to entrepreneurial personalities, the same individuals marginalized in process-oriented public sector agencies. In fields such as education, these entrepreneurs are rarely motivated by self-interest as traditionally understood in economic discourse. Having forgone more lucrative opportunities of the private sector, they are frequently motivated by a sense of calling, intrinsic desire, or a desire for new challenges.

Competition-induced pressure can encourage influential constituencies to accept some relaxation of procedures, enabling entrepreneurs to punch small holes through regulatory barriers. Though inefficient practices are not rooted out, new initiatives – such as new schools, departments, or hiring programs – may spring up beside existing practices. Pressured to provide a visible response, officials may chip holes in the regulations and procedures that run like kudzu through public sector organizations. These holes permit entrepreneurs to bypass traditional gatekeepers, creating new pockets of reform and possibly starting to topple the existing edifice.

Policy and Educational Competition

Most proposals to reform education through enhanced competition fail to wrestle seriously with what that course of action entails. In areas where competition is driving change, providers have exploited new opportunities to offer narrowly defined services and displace existing public agencies. Efforts to compel public schools to respond through market-based measures have enjoyed less success.

There is a stark difference between reforms that create new room for nonpublic operators and those that harness competition to force public providers to change. Ambivalence toward this distinction is at the heart of market-based reform. On one hand, reformers highlight the need for competition to challenge insulated institutions, unleash entrepreneurial energies, focus attention on productivity, and create incentives to find efficiencies. On the other hand, they hesitate to violate established notions of educational decorum, worry that vulnerable students may be harmed

by marketplace dislocations, feel uncertain about for-profit educators, and prefer a “kinder, gentler” competitive regime.

Proponents of educational competition have proceeded with studied inattention to the central truth of market-based reform. Competition requires that producers have incentives to address consumer demands in ways that promote performance and productivity. However, this is precisely where public agencies, especially those with high levels of public support, can pursue rules and regulations that stifle potential competitors and buffer themselves from the consequences of competition. When asked to compete with private providers, public providers have significant incentive to choke off entry, lobby for protections, and satisfy constituents with symbolic gestures, while using the resulting slack to avoid structural changes that competition intends to force. Incentives of this nature suppress the pressures driving the technology of change.

Although the public might be expected to support efficiency-minded proposals intended to control costs, there is no evidence of a coherent or influential constituency for cost-effectiveness at the K-12 level. Rather than express any concerns about productivity, public opinion has consistently supported increased spending, and a plurality of the public routinely says that a lack of money is the greatest single challenge facing schools. While some observers trace undisciplined spending to the influence that teachers’ unions exert on school boards, the reality is that President George W. Bush increased federal spending on K-12 education more rapidly than any previous president – and was criticized primarily for not spending enough. Ultimately, the centrality of education to American notions of opportunity and meritocracy, sensitivity to questions of educational access and equity, and the public’s abiding affection for educators and local institutions make it inordinately difficult to promote radical policy change in this area or to rally support on behalf of productivity or cost containment.

Americans have great faith in the ideal of public schooling, express a high rate of satisfaction with their local school, and are averse to proposals for radical change (Moe, 2002). Hence, it ought not be a surprise that they are uncomfortable with importing into education the “creative destruction” that is the signature of market-driven improvement. There is also much ambivalence about embracing a new breed of educators who are expansionist, profit seeking, or focused on cost-efficiencies, especially when it cannot be proven that they will be more effective than traditional educators. Given the hesitance of both the public and reformers toward market-based school reform, political efforts to promote specific deregulatory measures – such as relaxing the licensure of teachers and administrators, allowing money to follow students more readily from school to school, or instituting more flexible compensation – might ultimately prove to have a more dramatic effect on educational provision than proposals for choice-based reform.

Exactly how deregulation will proceed in such an environment is unclear. How will it impel a public that regards educational expenditure as a rough proxy for quality to endorse cost-effectiveness? And how will it spur publicly managed schools to compete as if they were private sector organizations or encourage nonprofits to behave more like profit-maximizing firms? If the success of market-based reform

ultimately hinges upon the entry and expansion of for-profits, precious little consideration has been devoted to either desirable regulatory measures or the political implications. Given that markets do not implement themselves but are ultimately dependent on the rules within which they operate and the fidelity with which their rules are monitored and maintained, this inattention leaves unclear what meaningful educational deregulation would even look like.

“Deregulating” a marketplace can mean very different things, depending on the sector, the politics, and the context. Thatcherite reform in Great Britain consisted of dismantling state monopolies and creating competitive markets. Deregulation of the airline and trucking industries was a matter of the government making it easier for firms to pursue profit-driven agendas. In education, not even the most ardent champions of markets wish to see the government dismantle its system of schools. Meanwhile, the vast majority of non-state providers are nonprofit institutions, in which concerns about culture, comfort, and prestige, for example, often take precedence over the imperatives of maximizing revenues or minimizing costs. Exactly how deregulation will proceed in such an environment is unclear. In the end, the abiding American faith in markets and in public institutions comes to a head in the case of schooling, where strong and passionate defenders of existing public institutions exist.

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Marketization and Post-Marketization in Education

Geoff Whitty

Education has become increasingly “marketized” in recent years. Although the detail in this chapter relates to the situation in England, where neo-liberal policies have been in place for more than three decades now, these developments are now part of a much broader trend. The emergence of comparable reforms across continents has led some to suggest that the current restructuring of education needs to be understood as part of the economic, political and cultural processes of globalization in which national differences erode, state bureaucracies fragment and mass systems of public welfare disintegrate.

Although we always need to bear in mind both the commonality and specificity of contemporary education reform, the English case is of particular interest, partly because of its longevity and also because it has been looked to as a source of evidence by advocates and critics of neo-liberal reforms alike. It is also of interest because it is sometimes suggested that the neo-liberalism of Thatcherism was superseded by something significantly different under Tony Blair’s New Labour government of 1997–2007 and this shift too has been echoed in other countries (see, for example, FPCJ, 2007).

I will begin by outlining the emergence of neo-liberal policies in England under the Conservatives from the 1980s and show how these relate to notions of the “free economy and the strong state” (Gamble, 1988) and “steering at a distance” (Neave, 1988). I then turn to the record of New Labour and the tensions that have resulted from New Labour’s commitment to tackling disadvantage within the broader policy context established by the preceding Conservative administrations.

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Education Policy under the Conservatives, 1979–1997

Marketization

Neo-liberal reforms were spearheaded in England by the Conservative government that came to power in 1979 under Margaret Thatcher. In the case of education, the government's public sector reforms focused primarily on the local government – or local education authority (LEA) – allocation of school places by catchment area. If governments allow schools a captive market in this way, it was argued, schools have no need to innovate or to respond efficiently, if at all, to consumer (parental) preferences (Shleifer, 1998). At the same time, the Conservatives regarded the LEAs as having been “captured” by the so-called “educational establishment” of teachers and the universities that trained them, whom they saw as left-leaning and favouring what in their view were highly questionable “progressive” or “child-centred” approaches to teaching. Together, they argued, state allocation of places and “progressive” teaching methods had brought a dull uniformity to the system and a levelling down of standards.

Accordingly, throughout its time in office the Conservative government acted to reduce the power of the “producers” and increase that of the “consumer.” The key piece of legislation in this respect was the 1988 Education Reform Act. This gave state schools the opportunity to “opt out” of their LEAs and run themselves as grant-maintained schools with direct funding from central government. Even those schools that chose to remain with their LEAs had to take greater control over their own budgets and day-to-day management. Equally significantly, 80% of that devolved budget would be determined directly by the number and ages of its pupils.

This per capita funding was coupled with open enrolment and the right for all families to express a preference for any school, even one outside their local authority. Some radical Conservatives characterized this as moving towards a “virtual voucher” system (Sexton, 1987). Open enrollment allowed popular schools to attract as many students as possible, at least up to their physical capacity. Consequently, schools could no longer rely on a given intake and had to attract sufficient numbers themselves to remain viable. The market choice argument was that schools which failed to attract pupils should not be “buttressed” but closed. In practice, existing rules on admission, such as prioritizing sibling enrolment and those living closest to the school, were retained once schools were oversubscribed. This obviously weakened the market in education that the government wanted to achieve, but its overall policies were still successful in embedding a change of ideology in education policy.

Subsequent to the 1988 Act, the Conservatives continued to divert even more money away from LEAs into schools, and extended the right for schools to opt out of LEA control. The government also encouraged diversity and choice by introducing a new type of school within the state sector. Known as specialist schools, these schools had a curriculum specialism, received additional funding to support their area of specialization and were permitted to select up to 10% of their pupils by aptitude.

Accountability

However, while the Conservatives were enthusiastic about making schools more receptive to parents' wishes, they were unwilling to relinquish control over the outcomes that schools should achieve. In this, Conservative education policy provides a clear illustration of the tendency for liberal democracies to develop along the lines of the "strong state" and the "free economy" (Gamble, 1988) and the associated shift in the way the public sector is coordinated and controlled by government – to what can be characterized as "steering at a distance". While processes of devolution appear to offer organizations greater autonomy, the state retains overall strategic control by setting the outputs that providers need to achieve and publishing tables of performance against them (Neave, 1988, p. 11; Whitty, Power, & Halpin, 1998). These indicators arguably influence the priorities of service users, who in turn reinforce the pressure on providers to work to them (Adnett & Davies, 2003).

The main mechanism for such central steering under the Conservatives was the establishment of a standard "National Curriculum" and related system of student assessment for all schools. While seen largely as a centralizing measure, standardizing the curriculum generated important data on school performance, thereby facilitating school choice. The more intensive approach to school inspections introduced under the Conservatives through the 1992 Education (Schools) Act generated similar data on school performance (see Wilcox & Gray, 1996).

New Labour and the attempt to balance Choice and Equity

The approach to public sector management that emerged during the 1980s has since become a major policy thrust across countries and political parties. As indicated earlier, choice and competition, devolution and performativity and centralization and prescription now represent global trends in education policy (Ball, 2001; Whitty et al., 1998). Nevertheless, their acceptance by the New Labour government represented a significant move away from the party's traditional ideology. It therefore sought to differentiate its policies from those of the Conservatives, but perhaps more importantly to "spin" them differently in an effort to bridge the ideological divide.

Rhetorically, New Labour's education policy has been rooted in the government's commitment to the "Third Way," which has been presented as a creative partnership between neo-liberal capitalism and social democracy (Lawton, 2005) and a means of linking market approaches with social justice (Barber, 1997; Blair, 1998; Giddens, 1998). In practice, however, many commentators have concluded that New Labour has not delivered a substantially new education policy (see Power & Whitty, 1999). Indeed, in some respects it has gone further down the marketization route, and much further down the privatization route, than the Conservatives ever achieved, as well increasing the central steerage of the system. The effect of this has been to limit the impact of the more progressive aspects of New Labour rhetoric that were initially intended to differentiate the "new" policies from those of the previous government.

Targeted attempts to tackle Disadvantage

Yet that rhetoric was partly a response to claims that marketization under the Conservatives had led to inequalities in educational provision and outcomes (Mortimore & Whitty, 1997; Whitty et al., 1998). “High quality education for the many rather than excellence for the few” was the Labour Party’s slogan immediately following the 1997 election. Early initiatives focused on raising educational attainment in areas of particularly intense social exclusion through the allocation of additional resources. These initiatives included the “Education Action Zones” (EAZs), “Excellence in Cities”, “London Challenge” and the “extended schools” programme, whereby schools offer access to a range of after-school, health and welfare services.

Evaluation findings for EAZs have generally been disappointing (Power, Whitty, Gewirtz, Halpin, & Dickson, 2004), showing a failure to raise attainment and improve skills and attitudes across *all* students, especially the most disadvantaged (see also Machin, McNally, & Meghir, 2007). In contrast, the recent evaluation of the extended schools pilot found that, despite the challenges, such provision has had some positive outcomes for poorer families by providing stability and improving their children’s engagement in learning. Encouragingly, its final report indicated that the achievement gap between advantaged and disadvantaged pupils, based on eligibility for Free School Meals, was narrower in these schools than in others (Cummings et al., 2007). London Challenge too appears to have had some success, both in reducing the number of “failing” schools and increasing the relative achievement of disadvantaged children within them (see Ofsted, 2006).

What is significant is that these gains, though small, have been identified from initiatives that, to some extent at least, run counter to the marketization of recent policies in that they recognize the importance of structural and cultural influences on educational performance. Oddly, New Labour has long seemed to recognize the importance of such factors in its broader policies, but it has seemed reluctant to apply these insights to its understanding of differential performance in schools. Instead, too many of New Labour’s school policies have been founded “... on the belief that quality differences between schools are primarily the responsibility of schools themselves and can therefore be tackled by initiatives at the school level” (Thrupp & Lupton, 2006, p. 315). This is reflected in the government’s focus on “standards, not structures.”

“Standards, not Structures”

In 1997 New Labour committed itself to an “unrelenting” focus on raising educational standards through a system of “high challenge and high support” (DfEE, 1997). This school improvement approach – based around the “exemplary school discourse” and the idea that all schools can replicate the example of the best (Thrupp & Lupton, 2006) – has included the setting of ambitious standards for pupil attainment and clear targets for schools to reach. A particularly important

component has been the principle of government intervention in inverse proportion to a school's success.

"Successful" schools – those that perform well against government targets and in school inspections – are rewarded with new freedoms. From 2003, and reminiscent of earlier neo-liberal thinking on education markets, this included the opportunity for the best schools to expand their pupil numbers. In contrast, "failing" schools are subjected to tough measures and targeted support. Not surprisingly, there is a high correlation between the results of Ofsted inspections and schools' indicators of pupil disadvantage (Gorard, 2005), with the majority of schools in "special measures" or facing closure located in areas of socio-economic disadvantage. This provides a stark illustration of the systematic effects of social class on children's attainment, which New Labour has consistently understated (Plewis & Goldstein, 1998).

Important here is the research showing that, with the same input, children from advantaged homes tend to progress at a faster rate than those from disadvantaged backgrounds. Thus, if all schools performed as well as the best schools, the stratification of achievement by social class would be even starker than it is now (Mortimore & Whitty, 1997). Indeed, data released by the government itself in 2005 seemed to show the deficiencies of its approach in this respect. They showed that while all primary school pupils achieved higher standards in English and mathematics in 2004 than in 1998, those from higher income families had made more progress than disadvantaged pupils – resulting in a persistent attainment gap between these two groups of pupils (Kelly, 2005).

These findings have now prompted action on the part of the government. Importantly, this has led to a greater focus on disadvantaged pupils themselves, rather than just on schools in disadvantaged areas – as was the case with some of the interventions I noted earlier. The 2005 schools White Paper (DfES, 2005) emphasizes the tailoring of education around the needs of each child, including catch-up provision for those who need it. This shift includes the expansion of the "Reading Recovery" programme, which offers one-to-one support for children who have fallen behind with their reading in the early years.

Such provision may or may not have a significant impact on the social class achievement gap in the future. In 2006, then Education Minister Ruth Kelly announced that new research would show that "... if anything, there has been a slight closing of the [attainment] gap at age 14 and 16" (Kelly, 2006). To have achieved only a very modest closing of the gap after three terms in office still reflects poorly on the record of a government committed to social justice and might have been expected to stimulate a fundamental reassessment of the benefits of diversity and choice.

"Diversity and Choice"

Alongside its "high challenge, high support" approach to school improvement, New Labour has favoured the "modernization" of the comprehensive system through the differentiation of schools. It has increasingly placed an emphasis on the supposed

link between school diversity and higher standards for all (Blair, 2006. See also Evans, Castle, Cooper, Glatter, & Woods, 2005). Accordingly, the amount of differentiation among schools has increased under New Labour with academies and trust schools being added to the existing mix of community, foundation and faith schools. Increasing numbers of secondary schools have curricular specialisms. But the key ingredient for linking differentiation to standards and excellence has remained choice.

Even so, the evidence to support the case that diversity and choice are the key to higher standards for all remains weak and highly contested. That the superior performance of some schools may be partly due to the nature of their pupil intakes does not seem to have been fully acknowledged by the government. Yet the data on the proportions of children on Free School Meals in different types of school is telling in this respect (Braswell, 2005; Sutton Trust, 2006). The school types that are generally most academically successful typically have higher proportions of middle class pupils and correspondingly lower proportions of disadvantaged pupils, thus generating a “virtuous circle” of strong performance against government attainment targets and popularity among more affluent families. The danger of the diversity and choice agenda, then, is the creation of a “multi-tier” system of secondary schools based on the sorts of children who attend them (Riddell, 2003).

This outcome is made more likely by a peculiar feature of the English system. Some schools, including many faith-based schools, have control over admission of their pupils, while the allocation of pupils to some other schools is undertaken by local authorities. There has long been a suspicion that schools use their control over their own admissions to operate systems of academic and social selection. For example, Tough and Brooks (2007) found that schools that are their own admissions authorities are six to ten times more likely to be highly unrepresentative of their surrounding area than schools where the local authority is the admissions authority.

In this context, the evidence on the positive impact of diversity and choice is therefore not sufficiently robust to justify New Labour’s strong commitment to this approach. Furthermore, a well-balanced assessment of the evidence concluded that “. . . whatever performance advantages it offers [and they did show some], further expansion of market mechanisms . . . may come at the cost of increased social polarisation” (Gibbons, Machin, & Silva, 2006).

The extent to which recent policies have or have not increased social segregation is, however, contested in the literature (Gorard, Taylor, & Fitz, 2003; Jenkins, Micklewright, & Schnepf, 2006). Whether or not the position has become worse as a result of these policies, there is no doubt that advantaged schools and advantaged parents have been able to seek each other out.

A new admissions code introduced in 2007 requires all schools to act in accordance with common national guidelines. It prohibits schools from giving priority to children on the basis of their interests or knowledge, and this is to be combined with existing plans for free school transport to open up choice to less advantaged families and “choice advisers” to assist these families in negotiating their child’s transition to secondary school (DfES, 2005). This is a belated recognition of the impact of structural and cultural factors on the capacity of different groups to exercise choice

meaningfully in a diverse system of schooling. But it will take these provisions many years to begin to address more covert forms of selection and the way in which middle class parents learn to decipher the “real” admissions criteria, as revealed in research by Gewirtz, Ball, and Bowe (1995) and by Reay and Ball (1998).

Beyond Marketization?

Meanwhile, there have been other attempts to counter the negative effects of marketization and its associated hierarchies of schools. “Collegiates” in Birmingham and federations of schools elsewhere seek to foster collaboration rather than competition and enable schools to work together in the interests of optimum provision for all pupils. However, early evaluation evidence suggests that, although there is widespread professional support for this move, its impact on outcomes has been limited (Lindsay et al., 2007). It is questionable whether genuine, long-term and productive collegiality among schools can be easily established where schools are on different legal and budgetary footings, have very different pupil intakes and have their results reported separately (Adnett & Davies, 2003).

Many opponents of marketization have united around the call for good schools in all areas – for all children (Education Alliance, 2006). Unfortunately, the evidence suggests that a good school in every locality is very much harder to achieve in some areas than others (Lupton, 2005; Thrupp & Lupton, 2006). So, while diversity and choice may not be the way of ensuring high standards for all, neighbourhood schools may not be the answer either. As I have indicated, wider structural influences mean that the performance of schools is significantly affected by the sorts of children who attend them and a critical mass of children from more aspirational backgrounds does make a difference in raising a school’s overall attainment (Maden, 2003; Thrupp, 1999).

Unfortunately, it is not easy to find ways of balancing intakes academically and socially in a politically acceptable way. As Giddens (1998) recognizes, social exclusion is a dual process that operates at the “top” as well as the “bottom” of society. Unless they feel their needs are being met, there is always a danger that more middle class parents will withdraw their children from the state sector and move them into private schools (Whitty, 2002). For electoral reasons, New Labour has felt that its policies have to speak particularly to the middle class and aspiring middle class voters who constitute the “swing” vote that decides modern elections – especially in the first-past-the-post electoral system that exists in England. New Labour was initially so concerned about this electoral logic that it was very wary of limiting the opportunities for middle class advantage and this included putting limits on school choice.

However, the new admissions code noted earlier permits local authorities to seek to balance intakes by ensuring that schools have to take pupils from all ability bands. It also permits oversubscribed schools to allocate places by ballot. Nevertheless, neither of these measures is mandatory and the evidence so far is that they are unlikely to prove popular with either schools or parents.

If a climate of public opinion that supports policies to balance school intakes is now to be created, the implications of school mix need to be better understood. This need not centre exclusively on the social costs of a highly segregated schooling system, but also on the way in which interventions to balance admissions could reduce what is at stake for individual middle class families when selecting their secondary schools. Clearly, such a re-adjustment of public opinion will take time. But only by using its powers more robustly to counter the negative effects of marketization can New Labour properly claim to be fostering social justice rather than sustaining the manifestly unjust system it inherited from the Conservatives.

It remains to be seen whether the replacement of Tony Blair by Gordon Brown as prime minister in 2007 will lead to a clearer break with neo-liberal policies and a decisive move into a post-marketized era of education policy in England. As Peter Wilby puts it, “a Brown government will need courage and ingenuity to reconcile egalitarian ambitions with political realities” (Wilby, 2007).

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Large-Scale Assessment for Accountability Purposes

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The past two decades have witnessed a dramatic increase in the importance and prevalence of large-scale assessment for accountability purposes. Programs have been introduced with the expectation of realizing significant collective and individual benefits, including raised educational standards, particularly for traditionally low-achieving groups of students; greater attention to important curriculum content; better information about student progress for the purposes of informing parents and guiding and improving teaching and learning; and greater transparency regarding the performance of schools and systems.

These are worthy and legitimate reasons for pursuing large-scale assessment. Unfortunately, the anticipated benefits are not always fully realized and sometimes costs outweigh benefits. It would be contended that the majority of systems are now committed to large-scale assessment programs that are less than optimal in delivering what they were supposed to achieve.

This is not news to most educators. Much has been written and said about the real and potential negative consequences of pursuing accountability for student learning through large-scale assessment (e.g., Black, 1998; Hursh, 2007; Linn, 2000; Mehrens, 1998). This is not to suggest that policy-makers should abandon current systems, but rather that most need significant adjustments. Unfortunately, misunderstandings and indeed misinformation persist about what exactly large-scale testing can and cannot do, negative washback effects have been underestimated, and design and/or implementation problems need fixing.

This chapter is in three parts. The first part is a brief overview of the emergence of large-scale assessment for accountability purposes. The second part identifies some of the key dimensions of change along which “assessment for accountability” systems vary and what can be done to improve them. The third and final part speculates on the likely future evolution of assessment for accountability purposes.

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The Emergence of Large-Scale Assessment for Accountability Purposes

Large-scale educational assessment is not a new phenomenon, nor is it of Western origin. It was invented by the Chinese centuries, if not millennia, ago. The practice of basing selection for the bureaucracy on results achieved in national examinations or tests can be traced back to the Han Dynasty (206BC–AD220) (Ingulsrud, 1994). These were very tough assessments and required years of preparation and study of classical texts. Competition was fierce and some candidates spent a lifetime trying to pass them and to secure access to what remains to this day in the Orient a coveted goal – a position in the senior ranks of the civil service. In modern-day Nanjing one can visit the remains of the Jiangnan Gongyuan Imperial Examination Center. First built in 1169, it became the largest imperial civil examination center in the Ming-Qing period with 20,644 rooms for examinees. This was assessment on a scale that is impressive even by today's standards.

China's examination system was copied by the Japanese as early as the eighth century, but the concept was unknown in the West for another 900 years when the Chinese system was described in letters written by missionary members of that most academic of Catholic orders, the Jesuits. Examinations were subsequently advocated by eighteenth century thinkers including Adam Smith and Voltaire, but the idea did not catch on in the West until the nineteenth century. Western nations have since made up for lost time.

Traditionally, large-scale assessment in education has existed for placement, progression, end-of-school certification, graduation, and above all, for selection purposes. In other words, it has been carried out to facilitate decision-making that has potentially serious or "high stakes" consequences for the examinee or test-taker. It has determined which school one went to, whether one would progress to the next grade, graduate from high school, get into the university program of one's choice, or get a job. It has been the instrument by which societies have moved from an aristocratic to a meritocratic basis for regulating access to the professions and to opening up opportunities for people in all strata of society.

In Europe, subject-based examinations, typically including a significant proportion of open-ended, subjective questions requiring extended written responses (especially essays), have prevailed, as exemplified by the British "General Certificate of Secondary Education" (GCSE) and "A-Level" examinations, the French "Baccalaureate," and the German and Finnish "Arbitur."

In the USA, large-scale educational assessment had its origins not in the context of recruitment to the civil service, but rather to the military. In World War I, some 1.9 million men were tested on the Army Alpha test of intelligence for "literate," and the Army Beta test of intelligence for illiterates and non-English speakers, especially new immigrants (Wigdor & Green, 1991). The numbers are staggering. These were "mental" tests associated with the new science of intelligence testing, new theories of psychometrics, and the invention of the multiple-choice question, allowing fast and efficient testing of large numbers of people. This history goes a long way to explaining the predominance in North America of objectively scored academic

apptitude tests. The Standard Attainment Tests (SAT) evolved in the 1920s out of the Army intelligence quotient (IQ) tests and modern-day school graduation tests build on the same assessment technology.

Modern large-scale assessment got underway in the mid-60s as the result of the convergence of two factors. The first was a concern about the educational roots of inequalities in society that in the USA had become manifested through the civil rights movement. The second was advances in computer technology that made it possible for the first time to conduct and analyze the results from large-scale surveys of educational outcomes. The report into educational opportunities of Coleman et al. (1966) initiated a new era of educational research inspired by the twin notions that education is the key to maintaining social stability and progress, and that the key to improving educational outcomes is through scientific study of the factors that lead to improvement.

Much of the assessment technology underpinning current uses of large-scale assessment for accountability purposes was developed through programs that got underway in the wake of the Coleman Report, notably the National Assessment of Educational Progress (NAEP) in the USA and successive international surveys of educational achievement conducted by the International Association for the Evaluation of Educational Achievement (IEA). These surveys set new standards of excellence in test construction, sampling design, psychometrics to equate performances and enable the monitoring of standards over time, and research methods to understand influences on achievement for different groups of students within and across countries. These programs have typically been “low stakes” programs.

Since the 1980s, however, large-scale assessment has been used for more “high-stakes” purposes to hold providers (systems, schools, and teachers) directly accountable for the performance of their students. Justification for much of the current emphasis on assessment for the purposes of accountability was provided by research conducted from the mid-70s onwards into school effectiveness. School effectiveness research revealed modest but nonetheless significant differences among schools in the value that they add to learning by students having adjusted for resource inputs and student backgrounds and starting points. Evaluations of various school-reform initiatives reinforced the notion that the route to improvement lay in adopting evidence-based approaches to determining what works. This was in general agreement with the practices first introduced decades earlier by pioneers such as William Edwards Deming to improve quality and reduce costs in business and industry, and into later reforms that have transformed other areas of government service provision.

The shift in logic from the notion that it is possible to create schools that systematically adopt mechanisms for bringing about ongoing improvements in student learning to the notion of holding schools and school systems directly accountable for the progress of their students as measured by scores on tests was a small one, and one that resonated well with increasingly frustrated and anxious voters who were losing confidence in the capacity of public school systems to deliver a quality education.

And so the accountability movement arrived. Its declared aim has been to define standards, measure progress toward those standards, and hold schools publicly accountable for the progress their students make. While previous assessment

programs involved “high stakes” consequences for the examinee or test-taker, assessment programs for the purpose of provider accountability are “high stakes” for teachers and school administrators, though with spillover consequences for parents and students. In a context in which market forces have increasingly been allowed to operate in determining school enrolments, these programs have influenced which schools flourish and which will be subject to remedial measures of even closure. They have been used to decide whose careers will be advanced and whose careers will be questioned.

Policy-makers have moved with boldness to ensure that pressure is applied to schools and school systems to improve student performance. For example, in the UK, national testing of all students at the end of each Key Stage of schooling, including the dissemination of individual reports to parents and the publication of individual schools’ results, was first introduced in 1995 as part of the Conservative Government’s education policies, but consolidated and extended under the Blair Labour Government. Students were required to take SATs at the ages of 7, 11, and 14 and national examinations (typically GCSEs) at the age of 16. The term “league tables” (after the tables used to rank soccer clubs) was coined to refer to the rankings of schools published annually in the media. Apart from the impact of being “named and shamed,” some “failing” schools have been restructured or even in a very small number of cases closed down as a result of consistently poor performance on the SATs.

In the USA, the *No Child Left Behind* (NCLB) legislation enacted in January 2002, required states to:

- establish standards for academic proficiency in reading, mathematics and science;
- establish measures for assessing all students in public schools each year in English and math in grades 3–8 and in one of grades 10–12, and later on in science;
- develop a definition of what would constitute “adequate yearly progress” (AYP) toward the standard that has been set for academic proficiency; and
- set targets for schools to enable them to achieve 100% academic proficiency over 12 years.

In addition, the NCLB legislation incorporated the requirement that states will implement “high-stakes” consequences for schools and districts that fail to demonstrate AYP.

What is significant in the two countries cited is the way in which large-scale assessment for accountability purposes has been supported by opposing political parties. It came as a surprise to many when the Blair Labour Government continued the Conservative Party policies with respect to national key stage testing in the UK. In the USA, the NCLB legislation was passed with overwhelming support from both sides of politics. While this may have been due in no small measure to the fact that the legislation reinforced what was already a central theme of many state policies (Linn, Baker, & Betebenner, 2002), it was nonetheless a rare example of bipartisan cooperation.

Why have opposing parties in these two countries supported large-scale testing for accountability purposes? In part the answer is that it is regarded as a powerful means of promoting very different political goals. For example, from the perspective of social democratic liberalism, it is seen as a means whereby society can promote greater equality of opportunity by focusing on the performance of those students traditionally achieving low educational outcomes and seeking to have these students achieve at a level of proficiency that will enable them to cope effectively in the modern world. At the same time, from a neoliberal perspective it is seen as the necessary response to the challenges of globalization; free market capitalism; deregulation and privatization, requiring the creating of an informed public that can exercise choice in where they send their children to school (Hursh, 2007), and leading to ongoing improvements in the quality of educational provision as schools compete with one another for students.

In part the answer may come down to pragmatic considerations. After all, as Bismark famously said a century and a half ago: “Politics is the art of the possible” and large-scale testing has some compelling features given the real world in which politicians need to operate. Linn (2000) cites four: (1) it is inexpensive relative to most policy initiatives; (2) it is easy to mandate relative to other interventions; (3) it can be rapidly implemented within the term of office of elected officials; and (4) it generates visible results which typically show an increase in scores in the first few years of any new program. One can think of other reasons, including the public perception that test scores can be trusted, which in turn lends credibility to policy-makers who promote assessment-based policies.

And over and above political considerations, there are those mega trends in the consciousness of people everywhere (Caldwell & Spinks, 1992), of which one is the belief that justice and progress can occur only under conditions of transparency, full knowledge of the facts, (Fullan, 2008) and accountability for any failures to meet expectations. One manifestation of this mega trend is the growing conviction among parents that they are entitled to know how their child is progressing and how the child’s school and school system is performing. It comes with a corresponding belief in the right to remediation or withdrawal of support when their child is not making adequate progress, and when the child’s school or school system is not performing to expectation.

As a consequence, and for varied reasons, the accountability movement has prompted major initiatives in many countries to centrally prescribe content and performance standards in core areas of the curriculum, especially literacy and numeracy; to undertake annual population testing of cohorts of students; to implement policies governing the publication or otherwise of results; to implicitly or explicitly provide incentives for high performance or improvement; and to mandate support and sanctions for low performance. This is now true in most countries, although with some notable exceptions, including some that get excellent results in the Organization of Economic Development and Cooperation’s (OECD) Programme for International Student Assessment (PISA) and that have thus far eschewed accountability testing programs (notably Finland and Japan).

Optimizing Large-Scale Assessment for Accountability Purposes

While large-scale assessment for accountability purposes is now widespread, much remains to be done to ensure that it is effective. This is particularly so because most programs were designed without taking into account their likely “washback” or test impact effects (Bachman & Palmer, 1996, pp. 29–35). This section considers some of the ways in which large-scale assessment systems differ and identifies some lessons regarding what can be done to optimize their fitness for purpose; to avoid negative washback effects; and to promote positive washback on the curriculum, learning, professional practice, motivation, decision-making, and trust.

Fitness for Purpose

In any area of endeavor, getting the right match between the intended purpose and a technical solution is critical. Assessment programs can only be effective if there is a good fit between their design and how the results are used. Assessment programs designed for one purpose are often unsuited for other purposes. For example, a test that measures generic outcomes and the ability to apply knowledge involving a wide span of curricula content will be of little assistance to schools in improving instruction. Such a test will indicate whether students are achieving broad educational goals, but it will not indicate what needs to be attended to in order to improve outcomes for these students.

In order to maximize the benefits of large-scale assessment, transparency and clarity of purpose is critical. In many programs there are significant differences between declared purposes, undeclared purposes, and perceived purposes. When such differences exist, problems almost always arise.

For example, the *declared* purposes of a state or national assessment program may be to monitor the overall standards of instruction in different areas of the curriculum, to provide information to assist schools to improve learning, and to ensure that students at risk of falling behind are given the necessary support to catch up. However, *undeclared* purposes may include ensuring compliance with the curriculum and greater effort by teachers to improve student performance. School principals and teachers may *perceive* the purpose of the program as being to expose poorly performing schools; to shift responsibility for poor system-wide performance and lack of support to them; and to accumulate the evidence to justify school closures, restructuring of schools, and dismissal of poorly performing staff. Students may have no clear idea about the purpose of the tests, but nevertheless make some effort to do well on them if for no other reason than to please their anxious teachers. Parents may perceive the purpose of the program as to give them access to the information they have always wanted, namely definitive rankings of schools to enable them to decide which is best for their child. When purposes are this confused, the interests of stakeholders cannot be satisfied.

Newton (2007) identifies three kinds of purposes that are particularly important to clarify, namely:

- the technical or measurement purpose;
- the decision purpose, or what use will be made of the assessment; and
- the consequential purpose, or the intended impact of the assessment program.

If the primary decision purpose is to monitor the performance of systems and schools over time with reference to an overall standard representing proficiency or basic competence, then it is important that the technical or measurement purpose is aligned to that purpose. For example, the measurement purpose might be to provide a series of unique tests that remain valid over time, provide maximum discrimination around the designated cut score representing achievement of the standard, and allow equating with tests administered in previous years. Such an assessment program is unlikely, however, to be useful in making decisions about the performance of the school as a whole because it will do a poor job in assessing those who are operating well above the cut score. The school may be doing a good job in targeting those students at risk of not meeting the minimum standard, but a poor job with its more able students. While the intended impact of the program may have been to improve outcomes of “at risk” students, neglecting other students would clearly be an unintended consequence.

Lesson 1

Ensure that what you seek to measure, the use you make of the results and what you intend to achieve by using results in this manner, are in alignment; that you declare your purposes, and don’t undermine trust by retaining undeclared purposes, or allowing others to believe you have a hidden agenda.

The Curriculum

A recurring criticism of many large-scale accountability assessment programs is that they have the effect of narrowing the curriculum to a subset of the basic knowledge and of focusing on minimum competencies at the expense of promoting excellence across a wide range of outcomes. There is research evidence that this does occur in most cases, but with significant exceptions, depending on the nature and structure of the tests used (Au, 2007).

Many systems opt to measure a fairly narrow albeit critical subset of curriculum outcomes, namely those concerned with core competencies within the domains of literacy and numeracy. At the same time, modern curricula typically require students to not only master a defined body of content but also to be able to apply this knowledge in order to solve problems or address issues. They emphasize higher-order thinking skills including creativity, the ability to be a strategic learner, the ability to learn independently, and the ability to make sensible and rationale choices.

Objectively scored multiple-choice test items struggle to assess many of these competencies. Examination questions that make use of open-ended response formats and that require students to refer to a range of information in answering the question fare much better, but they bring with them accompanying considerations of development and marking costs and costs in maintaining acceptable levels of interrater reliability. Assessment tasks conducted at the school level and involving the extended projects, laboratory work, fieldwork, and so on can go even further, but generate other problems, including the amount of time involved, ensuring that the work is genuinely that of the student, and the need to moderate assessments made by different schools.

In short, there are challenges in designing and implementing assessment programs that fully reflect the intentions of modern curricula. These challenges are primarily a matter of ensuring the validity of assessments. Baker (2007) is of the view that this is an unexamined aspect of most assessment programs:

“How well do any of our external tests work?” The answer is that we don’t know enough to know. We have little evidence that tests are in sync with their stated or de facto purposes or that their results lead to appropriate decisions. Nevertheless, we act as if tests were valid in the face of weak or limited evidence. We make heavy and far-reaching decisions about schools and students, talk about gaps, and applaud progress . . . Yet test validity languishes as a largely unexamined, prior question because of inexorable schedules and budget constraints. With tests of uncertain validity, adequate yearly progress (AYP), value-added, or other growth modeling analyses will have limited meaning in accountability interpretations. (p. 310)

In other words, if the tests themselves are invalid, then all else that may be done with them is also invalid.

Lesson 2

Build into the accountability system tests that can assess all key curriculum outcomes and work with the best teachers in the system and with the test developers to ensure that tests are well designed, comprehensive, and contain high-quality questions that probe students’ ability to apply the knowledge and understandings they have learnt in school to solving real and challenging problems. Consider developing different forms of each test, so that a wider range of outcomes can be assessed, but administer each student only one form to minimize the amount of testing. Remember, you get what you pay for and that quality is generally more important than quantity.

Impact on Learning

Most large-scale assessment for accountability programs make the claim that through the information provided and the associated incentives, support, or consequences, learning will improve. This is particularly so for those systems in which there are high-stakes consequences for failure to meet targets. In most programs, the necessary and sufficient evidence that improvement has occurred is taken to be

the scores on the accountability tests themselves. If the test scores go up, then it is concluded that learning has improved.

There are many factors that get in the way of such an interpretation. If the same test is used on more than one occasion, or even if successive tests closely follow the same “blueprint,” there is a real risk that any improvements in scores are due to familiarity with the test or tests. If new tests are used each year (the preferred arrangement), one must be sure that they have been properly and rigorously equated. Assuming rigorous equating of successive tests, one must exclude the possibility that any gains are not due to changes regarding which students have been excluded from the testing program. Even then, one must ask whether any improvements are due to excessive drilling of students on ways of maximizing their test scores and a host of other actions that may be taken by teachers, school administrators, and system officials to “game the system.”

For these reasons, it is important to establish whether gains on high-stakes accountability tests are reflected in gains on other measures of learning. In the UK, following accusations that official statistics of National Curriculum Key Stage test scores for monitoring standards in primary schools over time exaggerated improvements in performance (Tymms, 2004), the Statistics Commission initiated an investigation which concluded that the improvement in Key Stage 2 (KS2) test scores between 1995 and 2000 substantially overstated the improvement in standards in English primary schools over that period, but that there was nevertheless some rise in standards (Statistics Commission, 2005).

In the USA, a number of studies have compared performance on high-stakes state-wide testing programs with scores on low-stakes NAEP tests (Carnoy & Loeb, 2002). While the evidence is mixed, some of the most widely publicized success stories almost certainly overstate gains. For example, there is evidence that the dramatic improvements reported for Texas were largely accounted for by various strategies to “game the system” especially through exclusions and retention practices (Heilig & Darling Hammond, 2008).

In other words, test scores can improve but learning may not improve. It is important for the credibility of any scheme that alternative explanations are explored before rash claims are made on the basis of an improvement in test scores, especially when the improvements are dramatic. This applies to individual schools as well as to school systems.

Lesson 3

Make sure you have a way of confirming whether gains on accountability tests reflect real improvements in learning and of investigating any alternative explanations, or you risk being misled and/or discredited.

Impact on Motivation

“Gaming the system” can be a polite term for what others might describe as “cheating” or “professional misconduct.” Self-preservation will cause people to defend

themselves and even to justify as ethical behavior action others would question if it conflicts with what they see as the best interests of those whom they are duty-bound to protect. For example, inflating students' scores may be regarded by some school administrators as ethical if it avoids closure of the local school.

It is therefore critical that systems consider carefully the role of motivation and incentives in determining the actual consequences of their policies. In any large-scale assessment program for accountability purposes, one must assume that those for whom the stakes are high will exploit *all* avenues to improve measured performance (Meyer, 1996). In so doing, they can subvert the outcomes that the accountability system was intended to promote, generate loss of confidence in the system and diminish the validity and reliability of the assessments.

Punitive measures may act as a deterrent, but are not good for morale. Openness, transparency, and frank discussion of the purposes of any accountability program are essential, so that there is alignment between declared and perceived purposes. But positive steps to build motivation are even more important.

Lesson 4

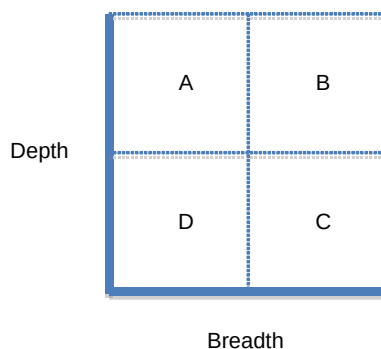
Avoid policies and perceptions of high-stakes negative consequences for those charged with bringing about improved performance. These may indeed be appropriate in extreme cases, but perceptions of threat should be removed from the majority for whom the emphasis should be on persuasion regarding the moral purpose of the program and on rewards for improvement.

Professional Practice

One of the claims often made by many accountability assessment programs is that they provide schools and teachers with valuable information for guiding and improving teaching and learning. In other words, an important reason for administering the tests is that the feedback they provide can enhance teachers' professional practice. Often schools and teachers are given access to detailed breakdowns of the performance of different group of students on individual test items or on subsets of items assessing specific aspects of the curriculum.

Certainly, it is important that teachers have access to objective information on both the absolute and relative levels of performance of their students. But the potential of the test results to improve teaching and learning is often overstated. Results typically reach schools many weeks or even months after students take the tests, by which time they may be in another grade, in another class and with another teacher, so the information is too late to inform practice. Even when there is timely feedback to schools, the information is rarely specific or precise enough to inform practice or improve learning in any but a very general way.

Tests can be thought of as being located along two dimensions, one relating to breadth of curriculum coverage and the other to depth of ability assessed, as indicated diagrammatically in Fig. 1.

Fig. 1 Test dimensions

A test located in quadrant A assesses a wide range of abilities on a narrow range of curriculum outcomes. A test in quadrant B assesses a wide range of abilities on a wide range of curriculum outcomes, and so on.

Most accountability tests are designed to provide both depth and breadth. In other words, they are quadrant B tests. But in order to keep them to a manageable length, light sampling of items is necessary so that there is a wide spread of item difficulties and few items per content area. This leads to imprecision in the measurement of abilities around any given cut score and less information about student performance on any given curriculum outcome. While the tests can provide global information with respect to the goals achieved by diverse students – information that is particularly relevant at a system level – they are unable to provide accurate or specific information of the kind necessary to improve instruction for particular students. There is then the danger that teachers will read too much into any detailed analysis of performance on individual test items. Instruction is about the steps required to reach longer-term outcomes and the most useful assessments will be quadrant D assessments. So-called formative assessments belong in this quadrant. Their purpose is to facilitate “instructional adjustment decisions” by teachers or “learning tactic adjustment decisions” by students (Popham, 2008), and so they need to be aligned to the ability of the learner and narrow in what they assess in order to reflect the current instructional focus.

As we will discuss later on, if there is a desire to provide schools and teachers with valuable information for guiding and improving teaching and learning as part of a system of accountability – and this is a perfectly legitimate desire – then consideration needs to be given to how formative assessment can become a pervasive, systemic endeavor and not just something left to teachers to figure out and implement at a classroom level.

Lesson 5

Be cautious in assuming that providing schools with detailed information on the performance of their students on accountability tests is going to be useful to teachers in improving instruction. Most accountability tests provide little more than a general indication of strengths and weaknesses of students within a given school. If you want

to assist teachers to improve their instruction you need to invest in good formative assessment.

Decision-Making

In most accountability assessment programs, results are used to inform high-stakes policy decisions that affect individual schools. These include decisions about the level and kind of support a school will receive or about consequences for the staff of failure to demonstrate satisfactory outcomes.

Good decisions require the right information and a proper understanding of this information. In making decisions about the performance of individual schools, it is important to have, in addition to test scores, data on the school context and on other aspects of school performance. In particular, it is important that in addition to measures of *status* (e.g., the percent meeting a defined standard), there are measures of growth or trends over time. Status measures typically say more about the nature of the school's student intake than they do about the value that the school is adding to the students' learning. Status is important, but equally important, and arguably even more important, is knowing whether individual schools are improving over time. A school serving a disadvantaged intake that has low absolute standards but is showing steady improvement may be less cause for concern than a school that has higher absolute standards but is in decline.

Few accountability systems make good use of value-added measures or time-series analyses to plot trends over several years, with adjustments for the nature of the student intake. Partly this is because of the technical complexity in undertaking the relevant analyses and in presenting the information in a readily understandable way. Partly it may reflect a lack of longitudinal data or simply a conscious but misguided decision by policy-makers to keep the focus on absolute standards.

In making high-stakes policy decisions about schools it is also important that decision-makers understand the limitations of the data. In particular, they need to be aware that in any assessment of student achievement, measurement error is unavoidable. This is something that does not resonate well with the general public who typically adopt the view that any "error" is inexcusable and that all assessments should be completely accurate. The notion that a school ranked at the 80th percentile may be, from a statistical point of view, indistinguishable from a school ranked at the 70th percentile is something that is rarely made clear to users of school-performance data. Unfortunately no assessment system can deliver completely accurate information on student performance and it is important to be upfront about this and to let users know how accurate the data are in order to minimize incorrect decisions.

Confidence intervals around scores of individual students are readily calculated, although not all systems take the trouble to report them. "Truth in testing" requires that they should. Typically, results for schools are reported in terms of the percentages of students at or above a given level (e.g., "proficient" or "competent") as represented by one or more cut scores on the test or examination. Such statistics are commonly adopted because they are intuitive and readily understood in the

community at large. But they are much more unstable than say a mean score on a test. This is a serious issue in view of the high-stakes consequences of many testing programs. For many small schools, the degree of uncertainty around the school's percentage of students meeting a given standard turns out to be greater than the percentage change which the system has declared to be necessary in order to demonstrate adequate progress. As a consequence of the failure to understand confidence intervals, many schools erroneously conclude that they did very well one year but poorly the next, when in fact the differences were not statistically different. This can have serious implications for decision-making.

As an aside, there is no direct way of calculating confidence intervals around the percentages within schools meeting a given standard, although they can be estimated using various statistical inference procedures such as bootstrapping. It should be standard practice to report them if such statistics (i.e., percent meeting a given standard within the school) are to be used, but it would be even better if greater attention was paid to more stable statistics such as averages scores. Averages summarize the performance of all students; percent meeting the standard statistics can conceal critical details. For example, they can hide cases of mediocre performance of students performing above the cut score.

One further issue relating to the use of test-score data in making accountability decisions relates to problems arising from the creation and use of pseudoscientific indices of a school's performance, as for example when scores on examinations are converted into a limited set of grades or levels of performance which in turn are assigned points, which are then combined together across subjects to give an overall index. At the first stage, fine-grained score-point information is reduced to broad ordinal categories, while at the second stage, "apples and oranges" are added together as if they were equivalent, when often the difficulty of obtaining say a grade of B in one subject is not the same as the difficulty in gaining a B in another. The final indicator may hide more than it reveals and create perverse incentives to game the system (say focus on improving scores of those likely to be just below the threshold grade or level of performance, or encouraging students to opt for "easier" subjects).

Lesson 6

Make use of multiple indicators in judging the performance of a school, including measures that give an indication of trends over time having adjusted for student intake characteristics. Be aware of the limitations of the data and the degree of uncertainty around measures of status or growth and do not project a false impression of accuracy. Be wary of creating bogus indices from test results that hide the true performance of those tested and create perverse incentives to "game the system."

Trust

The standard explanation for the emergence of the accountability movement, not just in education, but also in other aspects of public life, is that it is the successor to trust

(Fukuyama, 1995; Putnam, 2000). Trust according to this explanation was once the social “glue” that held civil society together. When trust in the institutions of civil society was lost, it was replaced by accountability for performance. According to this explanation, once trust is lost, it cannot readily be restored. (Many would argue that modern media, particularly the high-circulation dailies, have played a key role in undermining trust in social institutions through their relentless focus on negative reporting. Interestingly enough, while trust in education systems is invariably lacking, trust in local schools and individual teachers is often quite high.)

O’Neil (2005) takes issue with this interpretation and argues that accountability can never replace trust because it is not possible to have any system of accountability unless there is trust in the system itself. She says:

Trust-free accountability is a mirage. We should not be surprised that replacing trust with accountability, life world with system world, only pushes the question of where to place and where to refuse trust further back. We need to ask of any system of accountability why it should—or should not—command our trust. The various systems of accountability that use the outcomes of educational assessment are no exception. We need to ask whether and when we have reason to trust them. (p. 6)

In other words, she argues for a form of intelligent accountability in which stakeholders trust the accountability system because they are sufficiently informed and persuaded of its value and are provided with the evidence they need as a basis for placing or refusing trust in schools, teachers, and assessments.

The reality is, however, that in many systems there is widespread misunderstanding and mistrust of assessment for accountability, and this is most evident within the teaching profession itself, which then undermines the trust that the public at large should have in the system. Unless the profession supports the system, the likelihood of it working properly and not generating perverse incentives and negative backwash effects are minimal. The answer is not to abandon such accountability systems or to impose them in spite of opposition from the profession, but to fully engage the profession in the design and implementation of systems that *do* have their support. This is perhaps a tall order and in the past may have seemed unthinkable, but there has been a sea change in attitudes to assessment and the use of data in schools and while challenging, is something with which the teaching profession must eventually come to grips in the same way other professions have embraced enhanced accountability.

An important avenue for building trust by the profession in accountability systems is through embracing the concept of *reciprocal accountability*, which Elmore (2004) states as implying that “For each unit of performance I demand of you, I have equal and reciprocal responsibility to provide you with a unit of capacity to produce that performance, if you do not already have that capacity” (pp. 244–245). Tucker and Coddling (2002) have observed that the theory of change underpinning so many accountability systems often appears to involve the somewhat disingenuous notion “. . . that educators have always known how to greatly improve student performance, but were just waiting for someone to put more pressure on them to do it” (p. 2). However, the reality is typically that teachers and principals don’t know how to significantly improve learning outcomes for their students and need help from someone who does. The implications of reciprocal accountability for how systems

operate and are staffed are enormous. But reciprocal accountability is not just about system–school responsibilities, it also applies to parent–school responsibilities and internal school administration – teacher responsibilities.

Lesson 7

Involve the profession in the design and implementation of the accountability system, seek their support for it, and give them an active role in assisting other stakeholders, particularly parents, to understand and support it. Accept the notion of reciprocal accountability and ensure that you can provide schools and teachers with the capacity to meet your expectations.

The Future Evolution of Assessment for Accountability Purposes

What of the future of large-scale assessment for accountability purposes? One thing that can be said with some confidence is that it is here to stay. The issue is what form it will take and at what pace change will occur. In this final section, some thoughts are offered on the possible future evolution of assessment for accountability purposes.

In the short term, changes can be expected as a result of pressures to modify existing accountability systems in order to minimize negative washback effects, to better meet public expectations, and to improve the quality of information available for decision-making purposes. Systems will realize that they need to conduct systematic, expert audits of their assessment programs and accountability frameworks, and to use the findings as a basis for negotiating with stakeholders' progressive modifications to existing arrangements to ensure a greater chance of delivering intended outcomes. Significant improvements are possible through greater transparency, increased awareness of the impact of various kinds of programs, and a commitment to ongoing use of data to drive improvement.

In the middle to longer term, it can be expected that systems will adopt a multi-level approach to assessment for accountability purposes. At a macrolevel, they will want to benchmark their performance internationally. For example, they will wish to know the answers to questions such as, "How does, say, the province of Alberta or the states of Texas or of Western Australia compare with say Finland or Hong Kong in terms of student performance, and what lessons can be learnt from international comparisons with high-performing nations?" For this purpose, systems will continue to seek to participate in international surveys, especially the OECD's triannual PISA surveys.

At an intermediate level, they will want to continue to monitor performance against local curricula and standards using national or statewide tests. Indeed, for many systems there is a legislative requirement to do so. However, at a more microlevel, it is to be expected that they will also increasingly wish to lever the power of feedback and of formative assessment to improve teaching and learning. The reviews of the relevant research by Black and Wiliam (1998) and of Hattie and Timperley (2007) bear ample testimony to the positive effects of using assessment

to provide the kind of feedback that can, as Popham (2008) has expressed it, facilitate “instructional adjustment decisions” by teachers or “learning tactic adjustment decisions” by students. But so far, systems have tended to leave it to teachers to work out how to embed formative assessment in their daily instructional practice and very few have considered how it could and why it should be incorporated into an overall accountability framework.

The trouble is that formative assessment is too difficult for most teachers to implement on a daily basis unaided. As we argue in *Breakthrough* (Fullan, Hill, & Crévola, 2006), there are a number of missing ingredients that systems need to provide, namely:

- (1) A set of powerful and aligned assessment tools . . . that give the teacher access to accurate and comprehensive information on the progress of each student on a daily basis, and that can be administered without unduly interrupting normal classroom routines.
- (2) A method to allow the formative assessment data to be captured in a way that is not time-consuming; of analyzing the data automatically, and; a means of converting it into information that is powerful enough to drive instructional decisions not sometime in the future, but tomorrow.
- (3) A means of using the assessment information on each student to design and implement personalized instruction.
- (4) A built-in means of monitoring and managing learning, of testing what works, and of systematically improving the effectiveness of classroom instruction so that it more precisely responds to the learning needs of each student in the class (pp. 36–37).

Having provided the missing ingredients, namely the tools, there is also the substantial professional learning and instructional leadership needed for change to occur, much of which assumes principals who understand instructional leadership and have the time and mandate to exercise it, and site-based learning and the appointment of school-based coaches that can work alongside teachers in their classrooms to effect changes in professional practice. Once these are in place, new possibilities exist for implementing powerful and localized forms of accountability based on access to information that can let teachers, school administrators, parents, and the system know precisely and at any point in time the current status of the learner, what has been provided by way of instruction, and what have been the outcomes of that instruction. What is more, because the information would be updated daily, it could allow for immediate adjustments when progress is unsatisfactory, rather than having to wait many months, by which time remedial action is all too late. Above all, such microlevel accountability could be expected to rebuild trust from the bottom up, through direct and daily feedback to the major stakeholders, especially to parents.

Some commercial providers have begun to develop assessment systems that begin to provide tools for a more systemic approach to formative assessment. Examples include Wireless Generation’s mCLASS:DIBELS and Pearson’s DRA

Online Management System. But school systems are only just beginning to take ownership of the task of building the kind of solutions called for in *Breakthrough* that would ultimately transform approaches to assessment for accountability purposes. Building such systems is a major task that can only be done through a rigorously planned and adequately resourced research and development effort and require high levels of investment and a partnership between publicly funded university research centers, school systems, and private companies.

Building such systems is just the technical challenge. The more difficult challenge is bringing about the necessary changes in thinking and practice at the level of classrooms, schools, and systems that are entailed in implementing a systemic approach to formative assessment as part of an overall accountability and instructional framework. However, all the indications are that a quantum breakthrough of this kind is tantalizingly close and that a tipping point has been reached that will propel systems in this direction over the next decade.

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Digital Technologies and Educational Change

Juana M. Sancho

The essence of technology is by no means anything technological. Thus we shall never experience our relationship to the essence of technology so long as we merely conceive and push forward the technological, put up with it, or evade it. Everywhere, we remain unfree and chained to technology whether we passionately affirm or deny it. But we are delivered over to it in the worst possible way when we regarded it as something neutral

(Heidegger, 1977, p. 4).

Among all the forces that can bring about positive and deliberate educational change, one of the most strongly and persistently advocated is new technology. Technology has been hailed as the savior of educational change many times in the past. Television, video, language laboratories, audio-recorded reading programs, and pocket calculators have all been proposed as ways to move learning from the teacher to the learner – and all have fallen short of initial expectations.

But today's digital technologies are different. They are faster, more ubiquitous, and more integrated into the everyday lives of the children, youth, and young adults who were "born" more digital than at any other time before. But the benefits of technological transformation are hotly debated. Are the digital generations more connected or more distracted? Is the knowledge that instant technology makes available also always reliable? These are just some of the questions that are being posed about the relationship between education and technology and they are as much questions about technology and society as they are about technology and schools.

Mapping out the interconnections between digital technologies and educational change therefore requires taking into account the wider societal and political context in which these technologies and educational systems are located. Digital technologies are not merely teaching and learning aids that have a given impact on

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learning achievement. They are embedded in and part of technology-driven change in practically all social realms.

In the educational field, new situations that schools have to tackle (often brought about by unpredictable, unwanted, and unwelcome change) can be explained not only by the impressive growth of digital technologies, but also by the political and economic forces that shape the development and uses of these technologies as well as the nature of educational reform. Nevertheless, the massive influence of digital technologies on new generations is transforming not only children's and young people's ways of learning along with their attitudes and predispositions to learn, but also how knowledge is conceived, used, and valued.

In practically all countries, but especially in those that are technologically and economically developed, children's and young people's culture has changed dramatically. Young people's expectations, views on life, values, ways of learning, and modes of accessing information have undergone deep and fundamental changes. However, schools, as institutions in charge of providing education to these groups, are finding it extremely hard to introduce the changes needed to soften their structures and offer more meaningful learning experiences to students. Digital technologies are being regarded more and more as powerful levers of educational change and as clear means for updating education and making it more meaningful to students.

However, schools and school systems have adapted slowly and sporadically to the opportunities of technologically driven change and have often become disconnected from the learning patterns and lives of the children and young people whose development is profoundly influenced by it. Though there are Smart Boards, interactive whiteboards, computer labs, laptops, and PowerPoint presentations, most lesson structures and school structures remain fundamentally the same.

In 1998, in the first *International Handbook of Educational Change*, Bigum and Kenway (1998) identified and described four different perspectives that had been adopted by experts and others in relation to the possibilities and pitfalls of new technology in relation to teaching and learning and in relation to the ways in which they could be interpreted into learning in schools.

- *Boosters* were optimistic advocates of new technology and its potential and even predictable future impact on the transformation of teaching and learning.
- *Anti-schoolers* went even further and argued that these technologies would make the 150-year-old models of subjects, classes, and schools as separate institutions obsolete as learning through technology occurred in other ways.
- *Doomsters* dwelled on the problems of new technology narrowing or trivializing learning, making it less deep and critical and dividing the privileged who had easy access from the underprivileged who did not.
- *Critics* were more evenhanded – enthusiastic about the opportunities while also articulate and aware of the obstacles and threats.

In the last 10 years, the number of boosters has considerably increased, doomsters' voices seem to be fading, anti-schoolers are gaining their greatest footholds in higher education and homeschooling, and critics continue to argue for a more

rigorous and evidence-based approach to the benefits and drawbacks of digital technologies and their adaptation in educational policy and practice. I am among the critics – searching to look for the best ways to use and integrate the digital technologies that have transformed young people’s lives into the ongoing processes of teaching and learning within and outside schools. How do we bring together the transformative world of digital technology in the life, learning, and culture of young people, with the largely untransformed traditional structures of schooling?

The Social Context of Digital Technologies

The last decade has witnessed deep and fundamental change not only in the field of digital technology but also in almost all realms underpinning social organization and values. Digital technology applications have become second nature, especially to people from the most developed countries, who would find it difficult to live without having access to computers, mobile phones, MP3 players, play stations, digital TV, or the multiple forms of digital equipment developed and used in homes, labs, hospitals, companies, farming, agriculture, and so on. If, as Roberts, Foehr, and Rideout (2005, p. 36) stress, “a typical 8-to-18-year old is exposed to 8 1/2 hours of recreational media content daily,” it is not hard to see the impact of the world outside and its digital aspects on students’ developmental processes. In these 10 years through the ubiquitous and intangible Internet, a dense and multimodal fabric has been woven. The developmental trends and impacts of digital technology have also been influenced by new systems of thought, values, and positions. These include the globalization of change, of finance and capital, and now of debt and economic collapse; the growth of immigration and mobility and the increasing acceptance and interaction of diverse points of view; the idea that ordinary people are producers and circulators rather than merely consumers of new knowledge; and the conviction that we are living in an unstable and uncertain “liquid” life where interactions are fast and fleeting, identities are unstable, and are transient and temporary.

New information and communication technologies alter the structure of our interests (the things we think about), change the nature of symbols (the things about which we think), and modify the nature of the community (the area in which we develop our thought) (Sancho, 2005).

In this context of global change and constant movement, where almost everything is transforming beyond recognition, one institution – the school – remains practically unchanged after almost 150 years of becoming practically universal.

- Educational systems are still highly dependent on political party-related interests and political decision-making. Only a few countries, among them the highly-praised Finland due to its excellent results in PISA, consider education a national question not to be *used* for the benefit or interest of confronting political parties (Hargreaves, Halász, & Pont, 2007).
- Compared with other social institutions, schools are subject to huge expectations to eliminate achievement gaps and advance all children’s development that

exceed their real power and available resources (Bransford, Brown, & Cocking, 1999; Hargreaves, 2003).

- Schools are continually urged to introduce, adopt, adapt, and integrate new products and organizational models such as Taylorism, Total Quality Management, or Toyotism – developed in other contexts and for other aims (Darling-Hammond, 1997; Noble, 1991) or are required to *buy* services producing significant profits for selling companies. This pressure can paradoxically reinforce stagnation, keeping schools and teachers busy with superficial matters (Rowan, 2002).
- Models of teaching have remained basically the same. While students in some countries have been given a little more space to make their voice heard, and while several countries have sought to overcome transmission models of teaching by fostering constructivist approaches, the prevailing “school grammar” (Tyack & Tobin, 1994) and cultural beliefs about education still support the idea that teaching is telling, learning is listening, and knowledge is what is in books (Cuban, 1993), or now in educational software. Indeed, countries like the United States and England have introduced and increased standardized testing that reinforces the most traditional aspects of drill and practice teaching, along with other *collateral effects* (Nichols & Berliner, 2007).

This juxtaposition of a fast-moving world, where children and young people’s lives are undergoing rapid changes and are surrounded by myriad stimuli, competing with a rather *immobile* institution that fails to understand the educational needs of a population of whom everyone seems afraid, helps explain why a considerable percentage of young people do not feel engaged with school. According to the OECD (2003), there is a low sense of belonging at school among an average of one in four 15-year-old students, with one in five admitting to being regularly absent. As more and more young people feel completely at home in the digital world, there is a widening gap between schools that were founded in the nineteenth century and the current population they serve in the technological and cultural age of the twenty-first century.

Evidence of Impact

Over recent decades, digital technology-driven proposals have been heralded as the quintessence of educational innovation. Parallels with the fundamental contributions of digital technologies to business, commerce, agriculture, and medicine have been repeatedly drawn. It is commonly claimed that these technologies could considerably improve learning results and economic modernization if used in the *right* way and if educators were able to use their *full potential* (Ogilvy, 2006).

At the moment, it would be difficult to find a country not caught up in the rhetoric of digital technologies, not only as educational improvement levers, but also as forces of economic modernization. For example, according to Järvelä (2006, p. 40),

Based on research and practical experience, the following principles are the best arguments for implementing ICT in learning:

- ICT can increase authenticity and interest.
- ICT can build virtual communities among different schools, collaborating teams, and teachers.
- ICT can help to share perspectives among students with different expertise, proving peer support and “benchmarking practices” in different fields.
- ICT facilitates the use of technology-supported inquiry approaches and problem-based models for increasing learning-to-learn skills.
- ICT provides innovative ways (e.g., mobile tools) of integrating “just-in-time” support and interaction in different learning contexts.

In contrast to these promises, evaluations of the educational use of digital technologies give an uncertain picture of their contribution to improvement in learning results. Findings are often inconsistent or difficult to generalize. Even studies conducted by boosters such as Järvelä, discussed earlier, could not find significantly better results for digital technology versus nondigital technology mediated learning. Yet digital technology did seem to have an indirect impact on the overall learning environment in terms of the creation of more innovative pedagogical models; increased collaboration among teachers, students, and administrators; and enhanced lifelong learning among the students (Järvelä, 2006).

Balanskat, Blamire, and Kefala (2006) accomplished a review of 17 impact studies and surveys carried out at national, European, and international levels. All the studies acknowledge a set of important benefits of digital technologies in learning, ranging from students’ motivation and skills to independent learning and teamwork. Some of these studies show statistical evidence that digital technologies can enhance achievement in subjects such as English, science and design, and technology. Interactive whiteboards in the UK had a positive effect on pupil performances in literacy, mathematics, and science tests compared to students in other schools.¹ They especially improved the performance of low-achieving pupils in English and impact was greatest on writing. Nevertheless, only a few studies – mainly in the UK – actually establish a direct link between the use of computer technology and achievement.

On the other hand, international studies such as SITES-M2 have focused on the innovative pedagogical uses of digital technologies in 174 schools in North and South America, Africa, Europe, Asia, and Australia. Overall, the schools in the study report, through opinion-based questionnaires, a substantially positive effect of their innovative use on students: 62% reported increased subject matter acquisition; 68% of schools reported increased positive attitudes by students toward learning; and 63% improved collaborative skills (Kozman, 2003).

These studies, and others carried out in the last 30 years, largely concentrate on how technology affects conventional kinds of learning, achievement, and results (as

¹It has to be noted that devices such as whiteboards tend to reinforce traditional transmissive models that seem to suit test achievement levels, but generate serious doubts about its power to foster lifelong learning skills.

measured by standardized tests). These evaluations are less likely to show impacts on how to transfer knowledge and experience to other contexts, how to confront new situations, or how to collaborate with others. Moreover, it is not always clear that improvement in learning is due to the use of computers and digital technologies and not to other factors such as teaching methods, students' predispositions, or previous learning experiences. As McFarlane, Harrison, Somekh, Scrimshaw, Harrison & Lewin (2000, p. 9) state, "The problem is analogous to that of asking whether books are having an impact on learning: books are a medium for transmitting information, they cover a vast range of content, structure and genres, and they can be used in infinitive ways." Thus, rather than speaking about the impact of computer and digital technologies, we should start looking at concrete applications, paying special attention to the educational value of end users' learning experience. The key question is how technology can help transform schools into cutting-edge educational institutions ready to cater for students' individual and social needs.

Several studies reveal that even if computers are available in a good number of schools, not all teachers use them (Becker, 2001; Conlon & Simpson, 2003; Pelgrum, 2001; Plomp, Anderson, Law, & Quale, 2003; Wilson, Notar, & Yunker, 2003). When computers *are* used, teachers find it difficult to modify their classroom routines and their expectations about students' predispositions to learn. Technology by itself does not produce "mega-changes" in teaching and learning practices (Cuban, 2001; Cuban, Kirkpatrick & Peck, 2001; Kozman, 2003; Ringstaff & Kelley, 2002; OECD, 2004; Sancho, Hernández, Bosco, Müller, Larraín, Giró, Nuri & Cernochova, 2004; Schofield & Davidson, 2002). In fact, the majority of teachers seem to explore digital technologies as tools to enhance existing traditional practice, then progressively build it into the curriculum and only eventually transform their teaching practice (Comber, Watling, Lawson, Cavendish, McEune & Paterson, 2002).

Although we lack an integrated framework to guide effective educational change by making an effective use of digital technologies, knowledge of what affects school and classroom use (or nonuse) of computers is steadily growing (Becker & Ravitz, 2001; Cuban, Kirkpatrick, & Peck, 2001; Rosen & Weil, 1995; Sandholtz, Ringstaff, & Dwyer, 1997; Specht, Wood, & Willoughby, 2002; Wood, Willoughby, Specht, Sterne-Cavalcante, & Childs, 2002). In a European project, we found *re-engineering* the school environment in order to convert it into a cutting-edge educational institution through making the most of digital technology proved to be difficult. The main constraints for implementing innovative approaches by taking advantages of digital technology were set by:

- lack of governmental policy to support changes in education
- specifications and standards of national curricula
- centralized systems of supervision of schools
- conventional structures of teaching (standard lessons lasting 45–50 min)
- space allocation – access to computers; number of students in classrooms; school building architecture; arrangement of desks inside of classrooms.

- professional development of teachers in technology that does not encourage profound educational change
- subject-oriented curricula that avoid transdisciplinary and problem-driven teaching
- lack of teachers' motivation in applying new methods and lack of understanding of why to apply digital technology
- reduced student and teacher autonomy in curriculum and pedagogical decisions (Sancho et al., 2004).

In summary, digital technology-driven change in education is practically impossible while the rest of the educational system remains virtually the same. And yet, as the problem continues to remain unaddressed and unresolved, the new generations that are making up the rest of the world are changing beyond recognition.

The Digital Generations

Children and young people are living in settings where they are bombarded by aural, visual, and sensorial stimuli providing them with very distinctive life and learning experiences that are often neglected or rejected by the unchanging structures and orientations of schools. According to Twenge (2006), those who were between the ages of 7 and 36 in 2006 belong to Generation Me. GenMe moves through the world beholden to few social rules and with the unshakable belief that *I am important*. It is the first generation plainly speaking the language of self as its native tongue. "Just be yourself." "Believe in yourself." "Express yourself." "Respect yourself." "Be honest with yourself." "You have to love yourself before you can love someone else." "Yes, stand up for yourself" (Twenge, 2006). Many members of this generation find it difficult to fit into an institution aimed more at homogenizing rather than individualizing people, where it is hard to discover their own sense of being and have their voice heard. As a result, one of OECD's objectives in meeting current educational challenges is that of "personalizing education" (OECD-CERI, 2006).

The philosophy of the so-called Web2.0 seems perfect for expressing the "self" as a second generation of Web-based communities and hosted services – such as social networking sites (e.g., MySpace and Facebook mostly used in the Anglosphere and Friendster in Asia), wikis, folksonomies (e.g., Flickr or del.icio.us), Weblogs (blogs), social bookmarking, podcasts, RSS feeds, and so on. These facilitate authorship, creativity, collaboration and sharing between users, and effective information handling. Howe and Strauss (2000) call those people born from the 1980s onward, and who have been raised in a context where digital technologies are a substantial part of daily life, *Millennials*.² These are the first generations to grow

²In 2006, the Centre for Educational Research and Innovation (CERI) of the OECD launched a research and development project called New Millennium Learners. http://www.oecd.org/document/10/0,3343,en_2649_35845581_38358154_1_1_1_1,00.html

up surrounded by digital media. Most of their activities dealing with peer-to-peer communication and knowledge management are mediated by these technologies. Millennials are thought to be skillful with computers, creative with technology and, above all, highly proficient at multitasking in a world where ubiquitous connections are taken for granted. These generations are also often referred to as the *Instant-Message Generation* (Lenhart, Rainie, & Lewis, 2001), *homo zappiens* (Veen & Vrakking, 2006), the *Net Generation* (Oblinger & Oblinger, 2005), or the *Gamer Generation* (Carstens & Beck, 2005).

Millennials usually take multitasking for granted as the normal approach to using digital media: being online while watching TV, speaking on the phone, and doing homework, for example. Their recurrent activity with these technologies fundamentally shapes their notions of communication, knowledge management, learning, and even personal and social values.

In a world with apparently unlimited technology and information, everyone is seeking to attract the attention of individuals. Human relations, publicity, media, schools, and churches are all trying to obtain this limited human attribute. Without paying attention (which implies time), friendship, love, family, followers, business, work, and learning, are impossible. In the new economy, the scarcest product is attention (Lanham, 2006; Lankshear & Knobel, 2001). As people's capacities for producing consumer goods, information, and so forth surpass their capacity for consuming them, the need to attract attention and the changes of increased distractibility are becoming a key focus.

In this *war for attention*, schools are the losers. In the media-saturated environment no sense is left free; there is no more attention span remaining. Saturation produces lack of concentration and attention and hyperactivity disorders multiply in school, where children increasingly lack the required amount of concentration and attention to accomplish school work. A key issue today is how to educate people who are overstimulated and feel bored. The crux of the matter is not the *pedagogy of the oppressed*,³ but the *pedagogy of the bored* (Corea & Lewkowicz, 2004). This task is massive and its solution is not to be found in more technology and more information, but in our ability to meet the emergent challenges that they raise.

Challenges

To respond to the disparity of children's and young people's experiences in and out of school, educational systems will need to address a set of essential challenges.

Bridging the past with future knowledge. Today's generations admire the present, are attracted by the future, and look down on the past. They increasingly find curriculum content irrelevant to their lives and take it as a pill to be swallowed to pass to the next educational stage, forgetting what they have been taught as soon they have passed the exams. For Bauman (2005), in the current precariousness and

³Referring to Paulo Freire's seminal work.

uncertainty of life, people no longer think it is advisable to learn from experience and trust in strategies and tactics successfully used in the past, because past endeavours are regarded as useless for the dizzy, unforeseen, and unpredictable changes of circumstance. Within this frenetic setting, educational systems must decide the basic foundation needed for the next generation in order to take advantage of what is already known and avoid making the same mistakes, and also to *pass this foundation* on to students in a meaningful way.

Engaging students in passionate personal and social projects. In a media-saturated world, schools cannot be just another source of fragmented information. In schools, students are grateful when new media breaks down routine or gives them more active roles to play. Schools cannot compete with the huge amount of dynamic information to which children and young people have access. But they can help make sense of it. People need frameworks to make information meaningful, and schools should consider how to connect with students' interests, curiosity, and desire to learn in order to enable them to move on from superficial information to depth of personal and social knowledge.

Maintaining social cohesion. Historically, public educational systems have played a fundamental role in promoting social cohesion. Nowadays, movements toward privatization, high stakes testing, competition among schools, and intensified accountability systems are enemies of social cohesion. So too is the asymmetrical use of digital technologies outside school. While PISA 2003 data reveal a generally positive relationship between ICT use and educational attainment (OECD, 2003), greater achievement is related to better access to technology, previous experience, frequency of use (where moderate use gives the best results), and a level of confidence with computers. These data provide further evidence for the digital divide as all these factors are more likely to converge in middle-class students. If educational systems are not to contribute to this new form of exclusion, they should try to bridge the digital divide by extending use of the collaborative mode and mood of more and more computer-literate students.

Updating educators' knowledge of contemporary world issues. In the OECD countries, more than 50% of teachers – and sometimes up to 75% of teachers – are more than 40 years old (OECD, 2005). The same is true for teacher educators and educational policy-makers. Most people working in the field of education could have finished their initial professional development as teachers between 1968 and 1988. Most of them were baby boomers socialized in a discrete world made up of the family and the neighborhood, the church and the school, that was gradually enlarged by books and magazines, cinema and television. This large group of people started their careers in an analogue world and today they have to teach, train teachers, or develop educational policies in a digital one. School systems must therefore seek ways of bringing aging educators and administrators closer to the complexities of the current world and to the changing values and learning processes of young people. As the Millennial generation moves more into teaching positions and then more importantly into leadership roles, it will become increasingly probable that digital modes of being will be incorporated into the teaching and learning processes, as well as the systems and structures of schools.

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Toward a Theory of Teacher Education for Social Justice

Marilyn Cochran-Smith

During the last decade, dramatic changes have occurred in education policy and practice and in the larger economic and political contexts in the USA and elsewhere. Based on the widely shared view that education and the economy are inextricably linked, it is now assumed that teachers can – and should – teach all students as per world-class standards, serve as the linchpins in educational reforms of all kinds, and produce a well-qualified labor force to preserve the nation’s position in the global economy. In the face of these daunting – and arguable – expectations, the question of how teachers are recruited and prepared has become a hot topic in the educational discourse of many nations. In the USA, despite many critiques (e.g., Earley, 2005; Michelli, 2005; Sleeter, 2009), a “new teacher education” (Cochran-Smith, 2005) has emerged, which is regarded as a problem that can be solved by the “right” public policies, based on evidence rather than values or ideals, and judged by outcomes rather than processes, resources, or curricula.

What has also emerged over the last decade is increasing emphasis on “social justice” as a theme in teacher education. There is great variation in the use of this language, however. Some programs emphasize teachers’ beliefs and identity, others focus on democratic education, and many others concentrate on multicultural issues. Although a few programs feature community partnerships or other structural innovations (e.g., Murrell, 2001; Quartz, 2003; Seidl & Friend, 2002), most concentrate on changing course requirements or other aspects of curriculum within traditional programs (Zeichner, 2006). Both internal and external critics assert that “teacher education for social justice” is conceptually ambiguous with multiple instantiations and inadequate theoretical grounding (Cochran-Smith, Barnatt, Lahann, Shakman, & Terrell, 2009; Crowe, 2008; Damon, 2005; Zeichner, 2006). Further, only a few of those who write about teacher education and social justice are explicit about the philosophical and political roots of social justice education (McDonald & Zeichner, 2009; North, 2006), which increases the likelihood that it exists in name only (Grant & Agosto, 2008) or that it is diluted, trivialized or co-opted.

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This chapter¹ offers ideas toward a contemporary theory of teacher education for social justice, which is especially significant within the context of sharp critiques of social justice agendas (e.g., Hess, 2005; Lukianoff, 2007; Mac Donald, 1998); the political climate which, until very recently, has been acutely conservative; and policy makers' preoccupation with testing regimes that may reinforce existing inequities and systems of power and privilege. The chapter begins by laying the groundwork for a theory in terms of major premises and critiques. Next the chapter outlines a theory with three aspects: (1) a theory of justice that makes explicit its ultimate goals and considers the relationships of competing conceptions of justice; (2) a theory of practice that characterizes the relationship of teaching and learning, the nature of teachers' work, and the knowledge, strategies, and values that inform teachers' efforts for social justice; and (3) a theory of teacher preparation that focuses on how teachers learn to teach for justice, the structures that support their learning over time, and the outcomes that are appropriate for preparation programs with social justice goals. It is important to point out that the three parts of this theory are integrated and overlapping with one another rather than discrete. Likewise, the questions they engender are interdependent: What do we mean by justice? How do we think about teaching and learning in a way that enhances justice? How do we conceptualize and assess teacher education that prepares teachers to foster justice and supports them as they try to live out this commitment by working in educational settings? Figure 1 introduces this theory, which is then elaborated in Figs. 2, 3, and 4. The chapter devotes proportionately more space to the first aspect of the theory because it has received less attention in teacher education previously.

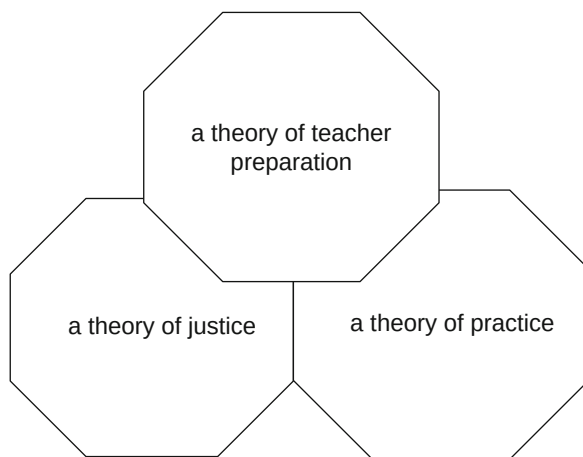


Fig. 1 Toward a theory of teacher education for social justice

¹The author wishes to acknowledge the very helpful comments of Kenneth Howe and Susan Lytle on earlier drafts of this chapter as well as feedback from Boston College Evidence Team members, Sarah Enterline, Ann Marie Gleeson, Larry Ludlow, Karen Shakman, and Dianna Terrell.

Laying the Groundwork for a Theory

Four major premises form the groundwork for a theory of teacher education for social justice. First, although the term “social justice” has been used to mean almost any aspect or method of teacher education even loosely related to equity or multicultural education, the premise here is that teacher education for social justice is *not* about methods. That is, teacher education for social justice is not about requiring a fieldwork experience in a diverse setting nor is it about having teacher candidates read something like Peggy McIntosh’s (1989) widely used article on “white privilege.” Although either of these might be valuable for teacher candidates, the point of offering a theory is that teacher education for social justice is *not* merely activities, but a coherent and intellectual approach to the preparation of teachers that acknowledges the social and political contexts in which teaching, learning, schooling, and ideas about justice have been located historically as well as acknowledging the tensions among competing goals.

Second, this chapter takes as a premise that teaching and teacher education are inescapably political and ideological activities in that they inherently involve ideas, ideals, power, and access to learning and life opportunities. On the other hand, many of the critiques of teacher education for social justice, which I have analyzed in detail elsewhere (Cochran-Smith et al., 2009),² are based on the twin assumptions that academic knowledge, professional education, and educational policy can be – and ought to be – neutral and that current structures of teacher preparation (and schooling more broadly) neither create nor reinforce systems of power and privilege. These assumptions lead critics to the conclusion that preparation for social justice is blatantly political, biased, and even proselytizing as opposed to some other imagined kind of teacher preparation that is apolitical and objective. This chapter assumes that neutrality is impossible and that democracy depends on some core skills, such as civic deliberation, and some core values, such as respect for differences.

The third premise is that teacher preparation is a key interval in the process of learning to teach with the potential to be a site for educational change. Although teacher preparation has long been considered a weak intervention (Kennedy, 2005), we now know that what teachers learn from preparation depends in part on the beliefs and perspectives they bring with them (Wideen, Mayer-Smith, & Moon, 1998). Whether, how, how much, and when new teachers use what they have learned once they get into classrooms also depends on the cultures of schools, including resources, supports and constraints, and mentoring and induction programs (Achinstein & Ogawa, 2006; Cohen, Raudenbush, & Ball, 2002; Grossman et al., 2000). What this adds up to, then, may not be that the impact of preparation is cancelled out in the press of school life, but that it interacts in complex

²We argue that four major critiques of teacher education for social justice can be identified in the current educational discourse: the ambiguity critique, the knowledge critique, the ideology critique, and the free speech critique. These are connected to differing professional and political agendas and play out in policy and practice in highly politicized ways.

ways with the conditions and cultures of schools and the larger accountability contexts in which these are embedded. In addition, given the high rate of new teacher attrition (Ingersoll, 2003), which truncates the impact of school-based professional development, what new teachers learn during initial preparation may have greater importance than previously thought.

The final premise of this chapter is that teacher education for social justice is for all teacher candidates – not only for monolingual, middle-class white teachers who are preparing to teach those who are not like them and not only for teachers (whatever their own racial, cultural, or linguistic backgrounds) preparing to teach in urban or other schools where the pupils are poor or minority and where disparities in resources and achievement are large. This premise about teacher education for social justice depends on its corollary about teaching for social justice: teaching for social justice is for all pupils, not only those who are poor, minority, or historically disadvantaged by the system but also those whom the system advantages. The point here, as I elaborate in the pages that follow, is that teaching and teacher education for social justice are fundamental to the learning and life chances of all teachers and pupils who are current and future participants in a diverse democratic nation and who are able to both imagine and work toward a more just society. Without the perspectives inherent in social justice goals, the understandings and opportunities of all teachers and students are attenuated.

The theory I propose in this chapter is informed by research in many areas of education, pedagogy, schools, and communities as well as teacher education, professional development, and teacher quality. This also draws on my experience as a teacher education practitioner and researcher over 30-some years, my previous conceptual and empirical research on this topic, and collaborative work with my Boston College colleagues who are members of the *Teachers for a New Era* cross-disciplinary Evidence Team,³ which has attempted to conceptualize learning to teach for social justice as a legitimate and measurable outcome of teacher education.

A Theory of Justice

Although social justice has become a watchword for teacher education, the concept is undertheorized, as indicated by reviews of the literature (Grant & Agosto, 2008; North, 2006; Wiedeman, 2002) and related discussions (Gewirtz, 1998; Westheimer & Suurtamm, 2009; Zeichner, 2006). Despite the lack of conceptual

³The Evidence Team includes Boston College faculty members and administrators, Marilyn Cochran-Smith (chair), Alan Kafka, Fran Loftus, Larry Ludlow, Patrick McQuillan, Joseph Pedulla, and Gerald Pine; TNE administrators, Jane Carter and Jeff Gilligan; and doctoral students Joan Barnatt, Robert Baroz, Lisa D'Souza, Sarah Enterline, Ann Marie Gleeson, Cindy Jong, Kara Mitchell, Emilie Mitescu, Aubrey Scheopner, Karen Shakman, Yves Fernandez Solomon, and Diana Terrell.

clarity about social justice in teacher education generally, a number of educators, myself included, have forwarded social justice as a major theme of preservice teacher education over the last two decades. (See, for example: Cochran-Smith, 1991, 1995, 1999, 2005; Gay, 1993, 2000; Gay & Howard, 2000; King, 2006, 2008; King & Castenell, 2001; King, Hollins, & Hayman, 1997; Ladson-Billings, 1994, 1999, 2000, 2001; Michelli, 2004; Michelli & Keiser, 2005; Oakes, Blasi, & Rogers, 2004; Oakes & Lipton, 1999; Oakes, Rogers, & Lipton, 2006; Sleeter, 1989, 1995, 1996; Villegas, 1991; Villegas & Lucas, 2002, 2004; Zeichner, 1993, 2003, 2006; Zeichner & Hoeft, 1996.) Much of this work is cited in the next two sections of this chapter.

In general, however, and with very few exceptions (e.g., McDonald, 2005), references to or discussions of teacher education for social justice have not been grounded in an articulated theory of justice, outside of occasional references to Rawls' (1971) concept of distributive justice (e.g., Grant & Agosto, 2008; Keiser, 2005). In this chapter, then, I turn to the first question in a theory of teacher education for social justice: How should we conceptualize justice in relation to teacher education? This question draws on conceptualizations of justice from other disciplines, primarily political philosophy, the field that has taken up this issue most extensively. Figure 2 portrays a concept of justice for teacher education, which I develop below. The figure is intended to emphasize two pairs of justice goals – distribution and recognition, and autonomy and identity – which are in tension with one another. The graphic also suggests that a theory of justice for teacher education is necessarily multiperspectival, combining critical and democratic perspectives with commitments to anti-oppressive policies and practices.

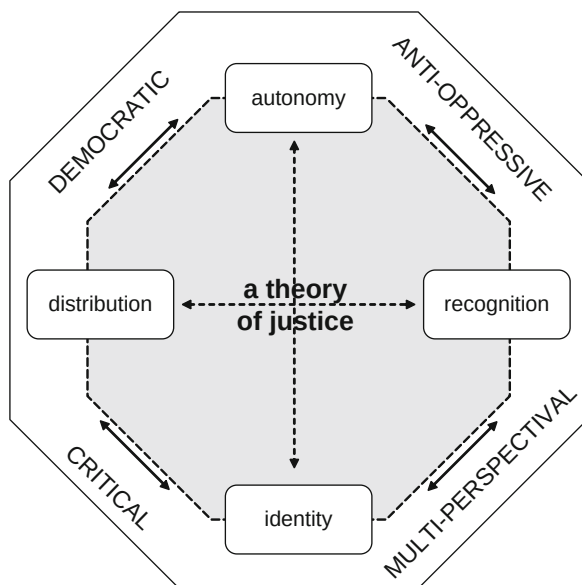


Fig. 2 A theory of justice

Distribution and Recognition

The distributive paradigm dominated theories of justice for the latter half of the last century (Fraser, 2003; Howe, 1997), especially after the publication of Rawls' now classic text on justice in 1971. However, in contemporary debates about justice, the "politics of difference," which emerged from group-based social movements of the 1960s and 1970s and emphasized recognition rather than redistribution (Young, 1990), has now taken center stage. The heading of this section, "Distribution and Recognition," reflects Fraser and Honneth's (2003) political-philosophical exchange about these seemingly opposing paradigms of justice and also draws from analyses by Gewirtz (1998), Gewirtz and Cribb (2002), and North (2006).

In short, the distributive paradigm of justice, which grows out of liberal democratic theory, focuses on equality of individuals, civic engagement, and a common political commitment to all citizens' autonomy to pursue their own ideas of the good life (Rawls, 1971). Here *injustice* is defined as inequalities rooted in the socioeconomic structure of society, including exploitation, economic marginalization or deprivation of classes or class-like groups (Fraser, 2003). From this perspective, the remedy for injustice is redistribution of material and other goods, including opportunity, power, and access with the goal of establishing a society based on fairness and equality. Canadian philosopher Will Kymlycka (1995), who argues for the rights and status of minority cultures, particularly immigrants, puts it this way: "According to this principle, injustice is a matter of arbitrary exclusion from the dominant institutions of society, and equality is a matter of non-discrimination and equal opportunity to participate" (p. 59). In education, the distributive paradigm has often taken the form of compensatory programs, such as Head Start or transitional bilingual education programs, or add-on curricula, such as adding a unit of study on Native Americans to an otherwise Eurocentric American history curriculum.

Despite the deepening socioeconomic inequalities in contemporary society, most political philosophers now agree that focusing solely on equality and distribution of goods is theoretically inadequate to the task of conceptualizing justice in today's diverse society. As Young (1990) points out, the social movements of the 1960s and 1970s, such as feminism, black liberation, American Indian movements, and gay and lesbian liberation, made it clear that failure to recognize and respect social groups was a central dimension of injustice, and thus the goal of recognition had to be central to justice theories. These social movements tried to "politicize vast areas of institutional, social and cultural life in the face of welfare state liberalism which operates to depoliticize public life" (Young, 1990, p. 10). In doing so, they challenged liberalism's notions of neutrality, the common good, and equality, as did postmodernists' endeavors to "decenter" these and other previously assumed impartial concepts (e.g., Lather, 1991; Popkewitz & Brennan, 1997). From a recognition perspective, efforts to achieve equality are presumptuous in that they presume to know what is good for everybody. In this sense, efforts for equality can work to deny difference and foster the oppression of social groups. From the perspective of recognition, the argument is that justice is not reducible to

distribution, since as Honneth (2003) argues, even distributional injustices reflect “the institutional expression of social disrespect – or unjustified relations of recognition” (p. 114).

In contemporary political philosophy, then, the question really is not whether to theorize justice as a matter of distribution or as one of recognition. Rather the question is how to conceptualize the relationship between the notion of distributive justice that is central to modern liberal democracies, on one hand, and, on the other hand, contemporary struggles for the recognition of social groups based on culture, race, gender, religion, nationality, language, sexual orientation, and ability/disability – in short, in relation to the politics of identity and difference.

To address this question, American critical feminist, Nancy Fraser (2003) posits the notion of “perspectival dualism” wherein distribution and recognition are regarded as “co-fundamental” and “mutually irreducible” (p. 3) aspects of justice. In contrast, feminist political theorist Iris Marion Young (1990) rejects the idea of a unitary theory of justice, emphasizing that although distributive aspects are important, they should be limited to material goods, not things like self-respect or opportunity. She argues that justice is “co-extensive” with the political (p. 9), and that oppression and domination should be the primary terms for conceptualizing justice. Also in contrast to Fraser, German social theorist and philosopher Axel Honneth (2003) sees recognition as the overarching moral category with redistribution a subcategory of the struggle for recognition. British sociologists Sharon Gewirtz and Alan Cribb (2002) make the point that even though most current conceptions of social justice now acknowledge its plural dimensions, few adequately engage with the tensions between multiple facets.

Theories of Justice and Teacher Education

At a general level, these perspectives from political philosophy are instructive for theorizing teacher education for social justice, even though none of them addresses teaching or teacher education directly. There are many people in education and teacher education who have pushed the social justice agenda, such as those whom I list at the beginning of this section on justice. In the interest of space constraints, however, I mention just three additional concepts here, which are directly relevant to teacher education in the USA and are particularly helpful in developing a theory of teacher education for social justice: educational philosopher Kenneth Howe’s (1997) “radical liberal theory of democracy, justice and schooling” (p. x), which offers a political understanding of what equality of educational opportunity requires; political scientist and ethicist Rob Reich’s (2002) articulation of “liberal multiculturalism,” a theory that integrates “the insights of both liberalism and multiculturalism, and takes seriously the history of schooling” (p. 5); and Black Studies scholar and sociologist Joyce King’s (2008) argument for a “blues epistemology” in teacher education that challenges the hegemony of ideologically based knowledge in school and teacher education by drawing on the knowledge traditions and lived experiences of marginalized and oppressed groups.

In his “radical liberal theory of democracy, justice and schooling,” Howe (1997) argues that only liberal-egalitarian theories offer an adequate foundation for the principle of educational opportunity “consistent with the demands of justice in a liberal democracy” (p. 23). Building on both Gutmann’s (1987) “democratic threshold” for equal participation and Young’s (1990) call for recognition of a differentiated humanity, Howe argues for a “participatory paradigm” (p. 130) wherein justice, democracy, and equality are so intertwined, it is impossible to have any of them without all. With a participatory approach, Howe suggests that in many cases, true equality of educational opportunity can be achieved only when historically marginalized groups have a genuine voice in “negotiating what educational opportunities have worth” (p. 27). It is important to note here that Howe does not mean mere recognition of previously unrecognized groups. Rather, following Young (1990), he argues that schooling is obligated to actively eliminate the oppression of social groups, especially cultural imperialism, as manifested in curriculum, educational policies and practices, school structures, and norms.

Reich (2002) posits a “liberal theory of multicultural education” (p. 5) that is respectful of both cultural differences and a democratic society’s need to cultivate “autonomy and common political values” (p. 115). He concedes to multiculturalism that a liberal democratic state cannot be truly neutral (as Rawls’ theory of justice originally suggested) about the ways of life pursued by its citizens, since autonomy itself is a culture-based and privileged way of life. Nevertheless his theory depends on the non-neutral (but necessary) aim of “minimal autonomy” (p. 116) for all persons, which includes the capacity to reflect critically on a variety of ideas and beliefs and thus to benefit from a range of genuine life options. Reich argues that this is not simply about identity politics, which benefit minority groups, but civic society, which benefits everybody. Reich rejects “mainstream multicultural pedagogy,” which he claims essentializes groups and is based on stereotyping. Instead he calls for “hermeneutical pedagogy,” which supports cross-cultural discussion and efforts to understand others’ points of view from their own perspectives, thus building “interpretive capacity” for all participants in society (p. 185).

King (2006) argues that “if justice is our objective” (p. 337) in education, then we must recognize and account for the ways “ideologically distorted knowledge sustains societal *in*justice, particularly academic and school knowledge about black history and culture” (p. 337). King (2008) asserts that there is a “crisis of knowledge” (p. 1095) in teacher education research and in practice caused by the absence of the epistemologies of African Americans and other marginalized groups as a foundation for teacher learning and teaching. Noting that there is no consensus in teacher education about what teachers should know and be able to do with regard to “promot[ing] and safeguard[ing] the cultural well-being, sense of belonging, and agency” of historically marginalized students, King advocates for the epistemological and social perspectives conveyed by “the blues.” She points out that these contrast sharply with the deficit theories of minority life and culture that continue to dominate the schools and much of teacher education. Acknowledging that many white teacher candidates resist ideas related to what she calls “racial-social

justice teaching” (p. 1101) by claiming color blindness or innocence, King calls for research, pedagogy, and practice explicitly intended to challenge these views.

What should teacher education take from these ideas about justice? My argument here is that a theory of justice for teacher education must connect the key ideas of distributive justice, which locates equality and autonomy at the center of democratic societies (Howe, 1997, 1998), with current political struggles for recognition, which challenge the school and knowledge structures that reinforce disrespect and oppression of social groups (King, 2006; Young, 1990). This connection cannot simply be declared or glossed over, however. Both Howe and Reich suggest bridging concepts related to autonomy and civic participation for all members of diverse societies, which require revised curriculum and different instructional goals related to students’ capacity for deliberation, disagreement, and interpretation. However, these concepts must also be connected to strategies for broader participation by all social groups in the discourse about what is fundamental in education in the first place, including those historically marginalized. Otherwise, as King (2006) points out, we are left with the untenable situation in which “equal access to a faulty curriculum” (p. 337) is assumed by some to constitute justice.

Applying these concepts to the day-to-day work of teaching and teacher education is difficult. In this work, there are ongoing and on-the-ground tensions between, for example, the idea of a knowledge and skills base that all new teachers should know, on one hand, and acknowledgment that school knowledge and curricula historically have been constructed in ways that privilege some cultural and racial groups and dismiss the knowledge traditions of other groups, on the other hand; between a curriculum that promotes what some presume to be core civic democratic values, on one hand, and a curriculum that explores a range of cultural positions about participation itself, on the other; and between efforts to provide educational services and modes of instruction that support the learning of individuals and social/cultural/racial groups, on one hand, and efforts to avoid stereotyping and essentializing particular groups, on the other. As Gewirtz and Cribb (2002) argue, most contemporary theorizing about social justice in education has glossed over the inherent tensions at an “a priori level or at a high level of abstraction” (p. 506) rather than understanding and managing them concretely. My intention here is to offer a theory of teacher education for social justice that addresses this problem by weaving together a theory of justice, a theory of teaching and learning practice, and a theory of teacher preparation, and by acknowledging all along the way that there are inherent tensions involved in doing so.

What I want to argue, then, is that a theory of justice for teacher education has three key ideas that are overlapping and integrated with one another:

- (1) *Equity of learning opportunity*: promoting equity in learning opportunities and outcomes for all students, who are regarded as future autonomous participants in a democratic society, and simultaneously challenging classroom (and societal) practices, policies, labels, and assumptions that reinforce inequities;

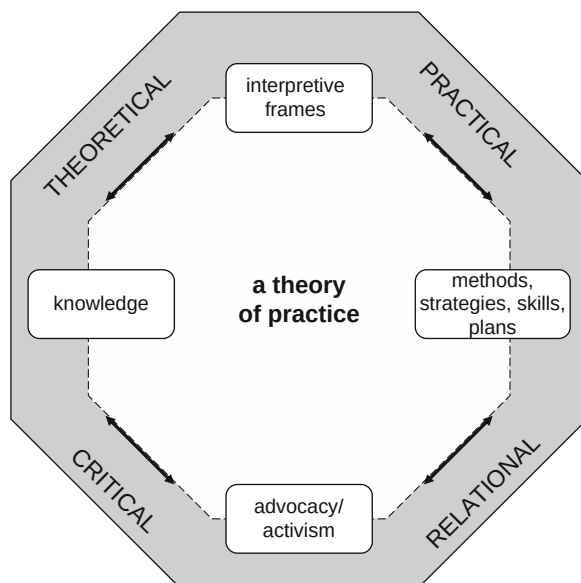
- (2) *Respect for social groups*: recognizing and respecting all social/racial/cultural groups by actively working *against* the assumptions and arrangements of schooling (and society) that reinforce inequities, disrespect, and oppression of these groups and actively working *for* effective use in classrooms and schools of the knowledge traditions and ways of knowing of marginalized groups;
- (3) *Acknowledging and dealing with tensions*: directly acknowledging the tensions and contradictions that emerge from competing ideas about the nature of justice and managing these in knowingly imperfect, but concrete ways.

As noted, Fig. 2 is intended to suggest the multiple aims and aspects of justice, positing these as co-fundamental but also in tension with one another, rather than reducible to a single overarching focus.

A Theory of Practice

The second question in a theory of teacher education for social justice is this: How can we conceptualize teaching and learning practice in a way that enhances justice? The answer to this question is essential because it is the intermediate link that connects teacher preparation and justice. In other words, a theory of teacher education for social justice must have a well-theorized idea about the kind of teaching practice that enhances justice since preparing teachers for practice is the goal of all preparation programs and pathways. My argument here is that in order to support justice, teaching practice must be theorized as an amalgam of the following: knowledge; interpretive frameworks; teaching strategies, methods, and skills; and, advocacy with and for students, parents, colleagues, and communities, all with the larger goal of improving students' learning and enhancing their life chances. The idea of practice as defined by teachers' knowledge, interpretations, methods and advocacy is highlighted in Fig. 3, which also emphasizes that practice is theoretical as well as practical, critical and relational. These ideas are elaborated in the following section.

According to the federal education policy, No Child Left Behind, which was firmly in place in the USA when this chapter was written, teachers need just two things to practice successfully: subject matter knowledge and teaching skills based on scientific research (Cochran-Smith & Lytle, 2006). From this perspective, practice is what teachers *do* in classrooms, which can be prescribed and assessed independent of local communities and cultures. A theory of practice consistent with justice, however, rejects the narrow view that teaching practice is "simply" what, when, or how teachers do things. Rather, from the perspective of justice, teaching practice also involves how teachers think about their work and interpret what is going on in schools and classrooms; how they understand competing agendas, pose questions, and make decisions; how they form relationships with students; and how they work with colleagues, families, communities and social groups. The idea that practice is not a bundle of "proven" techniques is consistent in some ways with the professionalization agenda in teacher education, which stresses that new

Fig. 3 A theory of practice

teachers need certain knowledge and dispositions as well as a repertoire of skills in order to teach well (e.g., Darling-Hammond & Bransford, 2005; NCATE, 2002). But a theory of practice consistent with justice also critiques aspects of the professionalization agenda, especially its tendency toward a universalist perspective on knowledge, which does not adequately account for the knowledge traditions and experiences of marginalized groups (King, 2008), and its lack of attention to preparing new teachers to challenge the “cultural imperialism” of curriculum, educational policies and practices, and school norms (Howe, 1997).

Knowledge

The mainstream professional view in teacher education is that there is a body of knowledge every new teacher should know. *Preparing Teachers for a Changing World* (Darling-Hammond & Bransford, 2005), for example, identifies eight knowledge domains. All of these are important in the theory of practice posited here. However, if practice is to foster justice, teachers also need to critique the very idea of a knowledge base and understand its limitations. They need to deal with the tensions created by traditional school knowledge that privileges the western canon and omits other cultural and linguistic “funds of knowledge” (Moll, 1992), which limits what can be known and who is considered a knower (Cochran-Smith & Lytle, 1990; King & Hollins, 1997; Sleeter, 2001). Along these lines, Michelli (2005) suggests that those committed to teaching for justice and democracy agree with the prevailing belief that the fundamental purpose of schooling is providing access to knowledge,

but at the same time, they question what kinds of knowledge and for whom. Similar questions include who decides what knowledge counts in school, whose interests are served, and whose perspectives are/are not included (Castenell & Pinar, 1993). From the perspective of social justice, then, the knowledge teachers need includes much of the traditional canon of school knowledge, but also includes critiquing the universality of traditional knowledge in the first place (Gore, 1993; King, 2008; Lather, 2004) and teaching students to do the same.

Interpretive Frames

From the perspective of justice, interpretive frames, which emerge from a comingling of knowledge, experience, beliefs, and values, are an essential aspect of practice. As the filters through which teachers make decisions, form relationships, and support learning, they are powerful mediators of practice and thus of students' opportunities and experiences. When the goal of practice is social justice, several interpretive frames are key. An understanding of educators as potential agents of social change (Freire, 1970) means acting on the idea that teachers can influence students' learning and life chances, which depends on the belief that all students can learn academically challenging material (Oakes & Lipton, 1999). This is related to an asset-based (as opposed to deficit-based) view of the cultural, linguistic, and experiential backgrounds of students (Ladson-Billings, 1995; Moll, 1992). "Cultural consciousness" (Gay & Howard, 2000; Villegas & Lucas, 2002) is the understanding that all persons have multiple identities and have life histories structured by race, class, culture, and other aspects of existing societal systems of privilege and oppression. In addition, when teaching practice is aimed at justice, teachers interpret their work through an inquiry stance (Cochran-Smith & Lytle, 1999) by questioning their own and others' assumptions, posing and researching problems, and using curricula, tests, and research as generative rather than prescriptive. Finally, when practice is consistent with the aims of social justice, it is framed by the understanding that teaching practice, whether by design or default, always takes a stand on society's current distribution of resources and current respect/disrespect for social groups (Ginsberg & Lindsay, 1995).

Methods, Skills, Strategies, Techniques

A theory of teaching practice that supports justice is not about specific techniques or best practices, but about guiding principles that play out in a variety of methods and strategies, depending on the particular circumstances, students, content, and communities. Many teacher education scholars have discussed in depth the nature of pedagogy and practice that foster justice (e.g., Cochran-Smith, 1999; Gore, 1993; Ladson-Billings, 1995; Sleeter & McLaren, 1999; Villegas & Lucas, 2001; Zeichner, 1993). Across these, a common theme is developing caring relationships with students (Irvine, 1990; Witherell & Noddings, 1991) and providing rich and relevant learning opportunities for all students (Oakes & Lipton, 1999;

Oakes et al., 2006), including English language learners, students with special needs, students labeled “at risk” by the system, and students unlikely to increase a school’s yearly progress on test scores. Another theme is using the resources and interests students bring to school to generate curriculum and instruction that are culturally, linguistically, and experientially relevant (Ballenger, 1998; Gay, 2000; Ladson-Billings, 1995), but at the same time, challenging the hegemony of the canon (King & Castenell, 2001). This includes providing social supports and scaffolding for students’ learning of new skills and materials, such as explicitly teaching those without knowledge of mainstream language and interactional patterns how to negotiate the system, but also teaching how to critique the system and consider alternatives (Delpit, 1995). A final theme is that teaching practice that fosters justice makes equity/inequity and respect/disrespect for individuals and social groups explicit parts of the curriculum and allowable topics in the classroom. This supports cross-cultural discussion and the development of “interpretive capacity” (Reich, 2002, p. 185) in all students, which are essential skills in a diverse democratic society and an increasingly interdependent global community.

Advocacy and Activism

Central to the discussion of justice in the first section of this chapter is the idea of teachers deliberately claiming the role of advocate and activist based on political consciousness, deep respect for differences, and commitments to diminishing the inequities of American schooling and society. The idea of teachers as activists and advocates is related to Westheimer and Kahne’s (2004) three versions of citizenship education. Their first version is implicit in civic education programs that seek to promote personally responsible, hard-working, and law-abiding citizens. Their second version of citizenship, on the other hand, is related to participatory citizen programs, which promote active participation in civic organizations and social life at all levels. However, Westheimer and Kahne’s third version of citizenship education, or what they call “justice-oriented” citizen programs, “call explicit attention to matters of injustice and to the importance of pursuing social justice goals” (p. 243). My point here is that a notion of teaching practice that fosters justice is consistent with Westheimer and Kahne’s third justice-oriented view of citizenship in that teachers who are advocates and activists call explicit attention to school and classroom injustices and work actively with their students, other teachers, parents, and community groups to pursue justice goals. This means realizing that competing approaches to teaching and schooling are often forwarded in the same name of equity, accountability, and serving the citizenry. This also means critiquing the processes of schooling and asking questions about whose interests are served, whose needs are met, whose knowledge is included, and whose goals are forwarded by different teaching practices. There is no assumption here that teachers alone, whether through individual or group efforts, can substantially fix the schools or alter the life chances of students. But a major assumption is that they can join with others as part of larger social movements for change.

A Theory of Teacher Preparation

The third question that must be answered by a theory of teacher education for social justice is this: How can we conceptualize teacher preparation intended to prepare teachers to engage in practice that enhances justice? Again, the answer to this question is central because it reflects the direct link between teacher preparation and teaching practice. My argument here is that in order to support teaching and learning practices that foster justice, teacher preparation must be theorized in terms of four key issues: who should teach, which is instantiated in practices and policies related to the selection and recruitment of teacher candidates; what teachers and students should learn, which plays out in the curriculum and pedagogy to which teacher candidates are exposed; how and from/with whom teachers learn, which has to do with the intellectual, social, and organizational contexts and structures designed to support candidates' learning; and how all of this is assessed, or how the outcomes of preparation are constructed and measured and what consequences these have for whom. Figure 4 provides a graphic representation of teacher preparation for justice in terms of the interrelationships of decisions regarding selection, curriculum, structures, and outcomes. The figure emphasizes that teacher preparation for social justice is transformative and collaborative, but also involves working within and against the accountability system.

The overarching idea in theorizing teacher preparation for social justice is that it is intended to challenge the educational status quo and be transformative. In sharp contrast to preparation intended to be ever more closely aligned with the accountability system (e.g., Janofksy, 2005), teacher preparation for social justice

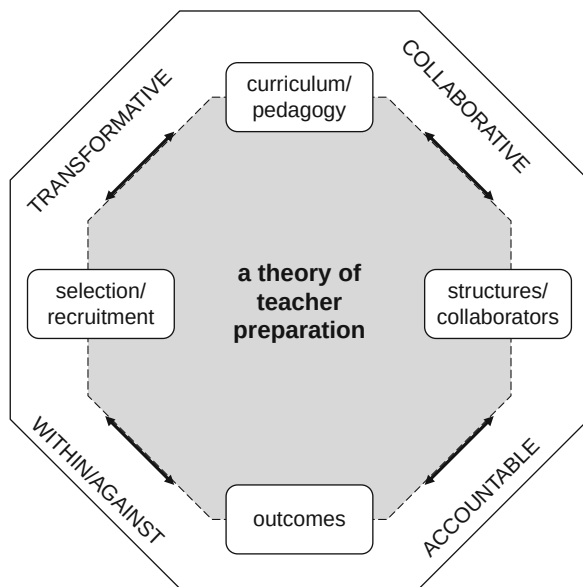


Fig. 4 A theory of teacher preparation

challenges the testing regime and the inequities it reinforces: limited rather than enriched learning opportunities for poor and minority students, increased drop-out rates, narrowed curriculum, and schools less connected and accountable to their local communities than before (Center on Education Policy, 2006; Darling-Hammond, 2004; Meier & Wood, 2004; Orfield, Losen, Wald, 2004). This does not mean that teacher education for justice simply sits outside the accountability system, however. Rather the point is to construct a different kind of accountability by working simultaneously within and against the system, an idea I return to below.

Recruitment/Selection/Retention of Teacher Candidates

In the first section of this chapter, I concluded that challenging inequities and respecting differences were at the heart of a theory of justice for teacher education. Consistent with these goals, the question of which teachers are recruited and selected is critical to a theory of teacher preparation. Two guidelines are important: diversifying the teaching force in terms of cultural, racial, and linguistic backgrounds and recruiting teachers whose beliefs, experiences, and values are consistent with social justice goals. Based on their analysis of demographic trends in the workforce and evidence regarding diversification, Villegas and Lucas (2004) conclude that increasing the diversity of the teaching force provides needed role models for all students and also infuses essential cultural knowledge into the workforce. Other research suggests that the experiences and maturity of minority and non-traditional candidates often make them more likely to succeed in high-need areas than traditional candidates (Clewell & Villegas, 2001; Haberman, 1991, 1996; Villegas et al., 1995), although minority candidates often experience alienation in primarily white institutions (Hollins & Guzman, 2005; Villegas & Davis, 2008). In addition, given that young white women currently make up the vast majority of teacher candidates in collegiate programs, selecting and retaining those whose attitudes, beliefs, and values are consistent with social justice goals must be an essential goal in teacher preparation for social justice.

Curriculum and Pedagogy

In keeping with the perspective on knowledge outlined in the previous section of this chapter, teacher education curriculum that fosters justice must include opportunities for candidates to learn about subject matter, pedagogy, culture, language, the social and cultural contexts of schooling, and the purposes of education. However, teacher education curriculum and pedagogy also need to be theorized and interrogated as “political text” (Castenell & Pinar, 1993), which I have suggested (Cochran-Smith, 2000; Cochran-Smith & Demers, 2007) means attending to more than the sequence of courses or experiences required for credentialing purposes. Rather this means

calling attention to what is left out, implied, or veiled in the curriculum (Ginsburg & Clift, 1990) as well as uncovering what is subtly signaled as the norm or default perspective in discussions about pedagogy, growth, learning, experience, expectations, or family. This also means analyzing the messages about race, class, culture, and language background that are sometimes explicit, but often implicit in inconsistencies between the formal documents describing curriculum and what is actually conveyed to teacher candidates through a program's readings, written assignments, fieldwork placements, student body, and leadership. Along these lines, King (2008) has argued that in teacher education there has been an "absent presence" in teacher education theory and practice generated from the work and lives of people of color, resulting in a curriculum that primarily "meets the needs and dispositions of white teachers." Teacher preparation that fosters justice must deal with the tensions involved in meeting the needs of both white teachers and teachers of color and also focusing in the curriculum on the worldviews of social groups that have been marginalized or oppressed.

Contexts, Structures and Collaborators

At the heart of any theory of teacher preparation is a set of assumptions about how and from/with whom teacher candidates learn as well as the contexts and structures that support that learning. Today most programs assume that teachers need to learn in the context of university partnerships with the schools. With the justice goals of challenging inequities and respecting cultural knowledge and differences, however, the idea behind partnerships is not that candidates are evaluated on how well they imitate the "best practices" of expert teachers. Rather the point is that candidates learn in the company of their more experienced mentors who are also engaged in the life-long processes of teaching "against the grain" (Cochran-Smith, 1991) by working with others in inquiry communities to construct "local knowledge of practice" that enhances equity, access, and participation (Cochran-Smith & Lytle, 1999). From the perspective of social justice, teacher preparation also includes parents, families, and community groups as collaborators, especially those from historically marginalized groups (McDonald & Zeichner, 2009). Murrell (2001) and Murrell and Diez (1997) also argues that urban teaching and teacher education need to emphasize the role of parents and the community in educational reform. What these approaches have in common are organizational structures that make both experienced teachers who are working within and against the system and parents and community activists who are challenging the dominant ideology into collaborators in the enterprise of teacher preparation.

Outcomes

Teacher preparation that generates practice that fosters justice is squarely committed to promoting students' learning and takes accountability for both teachers' and students' learning very seriously. From this perspective, however, the point is to

redefine learning so that it includes a wide range of academic, social, emotional, civic, and life skills, thus rejecting scores on standardized tests as the sole measure of either students' academic success or teacher education programs' effectiveness. Rather, from the perspective of justice, with its goal of challenging inequities, the focus is on ensuring that all students have rich opportunities to learn, not just opportunities to be held accountable to the same high stakes (which Howe, 1997, would call a "bare" rather than a genuine opportunity) and not just an equal slice of a curriculum pie that is, in the first place, faulty (King, 2006). On the other hand, however, if they are working from the perspective of justice, preparation programs must acknowledge that under the current accountability regime, poor performance on tests is often an insurmountable barrier to an array of life options (Michelli, 2005). These goals are contradictory and thus create enormous tensions, of the sort I referred to in the section on justice – preparing teachers whose students pass standardized tests, on one hand, but, on the other hand, simultaneously working to radically recast the whole notion of accountability by challenging both test and curriculum content that omit the knowledge traditions of marginalized groups and the social structures that reinforce educational disparities along the lines of race, class, culture, and language. To address these and other tensions, teacher educators in some places are working within the system by focusing on outcomes and owning accountability, but also working against the system by recasting accountability in terms of rich learning opportunities for all students, preparation for participation in a democratic society, teacher candidates' commitments to social justice goals, and their retention in careers as social justice educators as legitimate and measurable outcomes (e.g., Chou, 2006; Cochran-Smith, Mitescu, Shakman, & the Boston College Evidence Team, in press; Ludlow et al., 2008; Quartz & TEP Research Group, 2003; Villegas, 2007; Villegas & Lucas, 2006).

Conclusion

This chapter has offered ideas toward a contemporary theory of teacher education based on three questions: What is justice? What is teaching and learning practice that fosters justice? What is teacher preparation that generates teaching practice that fosters justice? Clearly these three complex questions – and their equally complex and necessarily partial answers – are not discrete pieces of a larger theory of teacher education for social justice that can simply be layered or piled up on top of each other. Rather these three are overlapping, interdependent, and intertwined with one another. The point of a theory of this kind is to be useful to practitioners, researchers, and policy makers by providing guidelines for curricula and programs, suggesting a framework for understanding outcomes and dilemmas, generating research questions and interpretive frameworks, and guiding recruitment and credentialing policies.

My argument here is that the bottom line of a theory of teacher education for social justice – and the goal that subsumes all other goals and objectives – is promoting students' learning and enhancing their life chances in the world. This goal does

not imply that teacher education should be “un-accountable” for outcomes related to the learning of students and teachers. But it does assume a radically different kind of accountability, infused with the ideas discussed throughout this chapter – challenges to the hegemony of the knowledge base and the curricular canon, rich and real learning opportunities for all students (not just opportunities to be held to the same high stakes tests), outcomes for students that include true preparation for participation in a diverse democratic society, and roles for teachers as activists as well as educators.

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Connecting Learning Communities: Capacity Building for Systemic Change

Louise Stoll

Piecemeal educational reform is yesterday's news. The environment is characterised by increasingly rapid change and complexity. Meanwhile, intractable challenges of quality and equity persist in numbers of jurisdictions, and standards have plateaued in several systems promoting centralised strategies.

Using the same change strategies doesn't make sense, but many systems' models are still based on seventeenth-century scientific theories of simple cause and effect relationships and on trying to improve individual parts of the system. Many of these strategies have reached the limit of their effectiveness. Against a fast-moving backdrop, reformers in some countries have turned to messages from the new sciences that propose a world conception underpinned by webs of relationships with implications for focusing on interconnected systems (e.g., Capra, 1983; Wheatley, 2006). Because each individual part of the system is affected by others and individual actions have rippling effects on their environment, a holistic view is needed of what it will mean to improve any part of the system. In short, we're talking about systemic change.

Bringing about systemic change is a change in itself, and a major one at that. Sustainable change depends on an ongoing process of learning by individuals, singly and collectively. This means both better learning and learning in new ways. But it's not just learning. As parts of the system previously unreachable are now as significant as those traditionally receiving all of the attention, people at all levels of the system need to learn. Different parts of the system must also be aligned to provide a coherent and consistent picture and strategy for change, and this means that people with diverse roles in the system have to connect and learn together. What we're talking about is connecting learning communities. Learning communities are inclusive, reflective, mutually supportive and collaborative groups of people who find ways inside and outside their immediate community to investigate and learn more about their practice in order to improve all students' learning. To have a system where the idea and practices of learning communities are the norm and where

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learning communities connect with other learning communities doesn't just happen, capacity building is necessary.

In this chapter, I first define what I mean by capacity and capacity building, before exploring connected learning communities. I examine who needs to be involved and describe an example illustrating a connected learning community. Finally, I propose sets of learning processes and connecting conditions that appear to underlie capacity building for systemic change that is generated through connected learning communities.

Building Capacity

What makes schools, school systems and the people within them ongoing, capable learners? It requires going beyond identifying a number of different improvement-related capacities. Separating out capacities insufficiently captures the complexity, interconnectedness and potential of different facets of the change process, especially right now. Capacity has to be viewed as a more generic and holistic concept (Stoll, 1999). In relation to systemic educational change, it can be seen as *the power to engage in and sustain learning of people at all levels of the educational system for the collective purpose of enhancing student learning*. Capacity is a quality that allows people, individually and collectively, to routinely learn from the world around them and to apply this learning to new situations so that they can continue on a path towards their goals in an ever-changing context (Stoll & Earl, 2003). It also helps them to continuously improve learning and progress at all levels, but particularly and ultimately that of students such that their collective efficacy is enabling them to “raise the bar and close the gap of student learning for all students” (Fullan, 2006, p. 28). Capacity, therefore, is oriented towards making a difference for all students and in all aspects of learning (Delors et al., 1996). A system with capacity is also able to take charge of change because it is adaptive. In short, capacity lies at the root of success (Fullan, 2006).

Capacity exists at different levels: in individuals – personal capacity; in groups within organisations; and in whole organisations, whether schools, districts or departments/ministries of education. We've known for some time that successful educational reform depends on teachers' individual and collective capacity (e.g., Lieberman, 1995), school capacity (King & Newmann, 2001) and system capacity (Elmore, 2002). But the significance of the *mutually influencing and interdependent* nature of different levels (Mitchell & Sackney, 2000) has only more recently become clearer, and this is what matters most for systemic change. Essentially, capacity building has to attend to all levels simultaneously.

To bring about systemic change, capacity building has to be *multifaceted* (Fullan, 2006, p. 85) which comprises the following:

- creating and maintaining the necessary conditions, culture and structures;
- facilitating learning and skill-oriented experiences and opportunities; and

- ensuring interrelationships and synergy between all the component parts (Stoll & Bolam, 2005).

Connecting learning communities demonstrates the multifaceted nature of capacity building at work. Who do we mean when we refer to connecting learning communities?

Membership of Connecting Learning Communities

We all belong to different communities. They're generally held together by shared beliefs and understandings, interaction and participation, interdependence, concern for individual and minority views, and meaningful relationships through personal connections (Westheimer, 1999). Increasingly, communities aren't just face to face but also virtual, with soaring numbers of people connecting through social networking sites. Those involved tend to view the group as a collective enterprise and, as shared memory develops, it's passed on to newcomers. Collaboration is a norm for most communities. But communities don't have to be concerned with learning, so in considering capacity building for systemic change in education, those of particular interest are ones with learning at their core, as defined above. These communities focus on the learning of all of their members and, most especially, on enhancing learning for and of all children and young people.

Learning communities can be found at all levels of the educational system. Within schools there are classroom learning communities (Watkins, 2005), including those between students networked by technology (Brown & Campione, 1998; Scardamalia & Bereiter, 1994) that also provide opportunities for international online student learning conferences; communities among groups of teachers sharing and analysing their work (Little, 2002; McLaughlin & Talbert, 2006; Thompson & Wiliam, 2007), sometimes referred to as communities of practice (cf. Lave & Wenger, 1991); and communities operating at whole school level (e.g., Bolam, Stoll, & Greenwood, 2007; Louis, Kruse, & Associates, 1995), frequently known as professional learning communities, and sometimes including support staff (e.g., Bolam et al., 2007). Personnel in school districts also collaborate as enquiry and learning communities (e.g., Stoll & Temperley, 2009).

At the policy level, while knowledge is viewed as social, growing from previous ideas and relationships (Levin, 2007), the concept of policy learning communities is little articulated (Stoll, 2008). Scanning government websites, however, highlights cases of such activity. For example, the Ontario Ministry of Education's research coordination team, a Ministry-wide committee, has a specific remit to identify and respond to Ministry staff's own capacity-building needs by creating new opportunities for sharing knowledge and effective practices across the ministry as well as offering learning sessions for colleagues. Other communities exist within the educational system, for example, research communities, although the emphasis in university education departments has historically often been focused on individual achievement, tending to inhibit the kind of collaborative learning of interest here.

If each of these groups or organisations is viewed as a system, developing a thriving and challenging learning community offers the potential for positive change within any of these systems. However, it is when learning communities cross the boundaries of particular organisations or interest groups that systemic change on a broad scale is most likely. Any one group of stakeholders is likely to be insufficient to serve the needs of *all* students in diverse contexts, as well as bring about the changes required in a complex and fast-changing world. This suggests that a more divergent approach to the concept of professional learning communities is needed, one that includes systemic extensions with broader membership and involving divergent knowledge bases (Stoll & Louis, 2007). The term *professional learning communities* itself may come across as exclusive, even though it is intended to be inclusive.

From a social capital perspective, this means that *bonding* social capital – building trust and networks with people of similar demographic characteristics – is insufficient. *Bridging* social capital, while still horizontal in nature, extends links to others who don't share many of the same characteristics, whereas *linking* social capital (e.g., Grootaert, Narayan, Jones, & Woolcock, 2004) sees connections that are vertical in nature, operating across power differentials.

There are increasing numbers of examples of *bridging social capital*: through learning networks of teachers in different schools (Lieberman & Wood, 2001); between leaders of schools, both nationally and internationally (Stoll, Robertson, Butler-Kisber, Sklar & Whittingham, 2007); and between whole schools (Earl & Katz, 2006; Veugelers & O'Hair, 2005;), as well as many other collaborative arrangements established for a range of educational and financial reasons. Networking connections also exist between superintendents of different school districts, extending opportunities for members to co-construct new knowledge as they learn from experience and practice of peers elsewhere.

In many ways, learning networks, or networked learning communities, as they are sometimes known (e.g., Jackson & Temperley, 2007), are professional learning communities operating across a broader landscape. They share many commonalities with school-based professional learning communities and some similar goals. But their additional purposes include enlarging individual schools' repertoire of choices and moving ideas and good practice around the system in order to help transform the whole system, not just individual schools, thus improving education for *all* students. This lateral capacity building (Fullan, 2006) is a collective responsibility and moral purpose is writ large. Teacher learning benefits are well documented (e.g., Lieberman & Wood, 2001), but evidence is also emerging of links with student outcomes (e.g., Earl & Katz, 2006; Kaser & Halbert, 2005). The potential of learning networks' positive influence on the development of leadership capacity is also appealing at a time when succession planning is an issue in many countries due to impending retirements of large numbers of school principals (Pont, Nusche, & Moorman, 2008). While networked learning is seen to support sustainability (Hargreaves & Fink, 2006a), a strong internal professional learning community is still necessary because most new knowledge and learning gained through network

experience is channelled back into schools where changed practice has its main impact (Earl & Katz, 2006).

Where *linking social capital* is concerned, a long research tradition has generally concentrated on what parents and the wider community can do for schools, although recent research presents a multidirectional perspective (Mulford, 2007). As greater numbers of multiagency communities are formed to address the social, health and well-being challenges that teachers clearly can't address alone (e.g., Cummings et al., 2007; Mitchell & Sackney, 2007), power issues need to be tackled head on, as people ask, "Whose community is this?" This suggests that a more fruitful approach might be to see this as bridging diverse partners of equal status. The relationship between learning and community becomes multifaceted (Stoll, Earl, & Fink, 2003) as well as multidirectional. Taking parents as an example, it's possible to see *learning of* community, where the school helps the parents support their children's learning and may help promote community development; *learning from* community, as they share their knowledge with the school; *learning with* community, as exemplified in schools that involve students, their parents and teachers in intergenerational dialogue; *learning for* community, to enhance relationships; and *learning as* community, that is, *deeply inclusive and broadly connected* and based on deep respect, collective responsibility, appreciation of diversity, a problem-solving orientation and positive role modelling (Mitchell & Sackney, 2007).

How can this multidirectional learning community relationship be applied to relationships between different stakeholder communities? The following example of the Austrian Leadership Academy (LEA, 2007) illustrates an attempt to build a connected learning community to build systemic capacity. It was selected as a case study during the OECD's Improving School Leadership activity (Pont et al., 2008) to illustrate innovative practice in leadership development. In 2004, the Austrian Minister of Education, Science, and Culture founded the academy, in association with the Universities of Innsbruck and Zurich. Its initial intent was to prepare school head teachers – who possessed newly acquired autonomy but had little experience in operating outside a hierarchical, bureaucratic structure – with the capacity to act more independently, take greater initiative and manage their schools through changes entailed by a stream of government reforms. Quickly, the benefits of involving a wider group of participants became apparent, and the Leadership Academy (LEA) began including district inspectors, staff of teacher training institutes and executives from the Ministry of Education and provincial education authorities. These participants learn together in four forums, where they are introduced through a range of creative pedagogical techniques to research on leadership for learning, school development and personal capacity, which they are invited to reflect on and explore. They also select and work with a learning partner and a collegial coaching team (3 pairs of learning partners) in and between the forums, focusing on a development problem that each person brings to the group. The change in relationships, attitudes and orientation to leadership for the vast majority of LEA participants has produced a groundswell at the various levels of the system where people have been involved – schools, districts, regions, teacher training institutes and parts of

the Ministry. Ministry leaders who have participated for the most part find the programme and experience as powerful as their peers, some particularly valuing the connections they make with school and inspector colleagues (Stoll, Moorman, & Rahm, 2007). Involvement of the head of one Ministry Directorate had a particularly powerful effect on the system when he followed up his participation by replicating LEA learning processes with all of his Directorate staff.

This example represents an effort to build systemic capacity by developing learning and leadership connections across community boundaries. These communities – school leaders, district and regional leaders, Ministry leaders and leaders from teacher training institutes – are learning together and making the connections. So what kinds of learning processes and activities are developed in such connecting communities?

Learning Processes and Activities in Connecting Learning Communities

Learning communities engage in many joint activities. The focus here is on processes and activities oriented towards community learning. Individuals and groups need access to multiple sources of learning, but in connecting learning communities the social component of learning processes takes centre stage. Learning communities deconstruct knowledge through joint reflection and analysis, reconstructing it through collaborative action, and co-constructing it through collective learning from their experiences. Processes and activities involved are interconnected and can be construed in different ways. In this chapter, I have chosen to describe them as supported practice, collaborative inquiry, knowledge animation, joint planning and review, and meta-learning. At the heart of all of this activity are dialogue and learning conversations (see Fig. 1).



Fig. 1 Learning processes and activities

Dialogue and Learning Conversations

Dialogue is the key mechanism by which members of communities connect, not discussion or debate. Debate depends on the dominance of one position over another, while discussion avoids *undiscussables*, blocking true and honest communication (Bohm, 1985). Dialogue is a critical community process, although difficult to achieve, because all participants play equal roles, suspending their individual assumptions as they enter into a genuine *thinking together* (Senge, 1990). In connecting learning communities, dialogic processes are oriented towards articulating and exploring members' tacit knowledge (Nonaka & Takeuchi, 1995). Through dialogue, presuppositions, ideas and beliefs are brought to the surface, examined and challenged. Collective intelligence is harnessed, and new ideas and practices are created as initial knowledge is enhanced or transformed.

Learning conversations involve dialogue, but the learning goal is more overt. A learning conversation in connecting learning communities can be seen as a planned and systematic approach to professional dialogue that supports community members to reflect on their practice. As a result, they gain new knowledge, which they use to improve their practice (definition adapted from GTC, 2004). Reflection on process is intentionally built in. Learning conversations typically feature questioning and active listening.

Both dialogue and learning conversations are fundamental to the process of connecting learning communities. When operating at their optimum level, the following learning processes and activities all feature genuine dialogue and actively promote learning conversations.

Supported Practice

New ways of learning don't come easily: learning means coming to terms with different ideas and ways of doing things. This usually necessitates trying something out again and again, tinkering (Huberman, 1983), working at it, feeling uncomfortable for a while, and experiencing new responses. A systematic review of evidence on the effect of sustained, collaborative continuing professional development on teaching and learning highlights benefits of peer support to teachers' practice (Cordingley, Bell, Rundell, & Evans, 2003). Learning and teaching are strengthened when teachers support each other in examining new methods, questioning ineffective practices and supporting each other's growth (Little, 2005), for example, through focused peer observation and feedback across communities, coaching and mentoring. In connecting learning communities, particularly those involving stakeholders with diverse knowledge bases and skills, supported practice is likely to be enhanced by different partners bringing an open mind to the process, acting as critical friends (Costa & Kallick, 1993) and asking challenging but supportive questions that lead their partner to reflect deeply on their practice.

Collaborative Inquiry

Collaborative inquiry is a key learning process, where learning and inquiry are facilitated, encouraged, challenged and co-constructed (Jackson & Street, 2005). Inquiry can be the means by which teachers identify important issues related to learning, become self-regulated drivers for acquiring the necessary knowledge to solve the issues, monitor the impact and adjust practice as necessary (Timperley, Wilson, Barrar, & Fung, 2008). As a basis for professional learning, inquiry builds teachers' knowledge of their own practice (Cochran-Smith & Lytle, 2001). Here, colleagues from different schools, agencies or other stakeholder groups throughout the system decide on a common issue as an inquiry focus and commit to exploring this together using common methodology. Sometimes, they gather data in their own site, while, at other times, they collect data from each other's sites before analysing the data jointly. Collaborative review activities, such as moderating samples of students' work across sites, or reviewing support for students and their families across a whole community partnership, also provide data for such analysis.

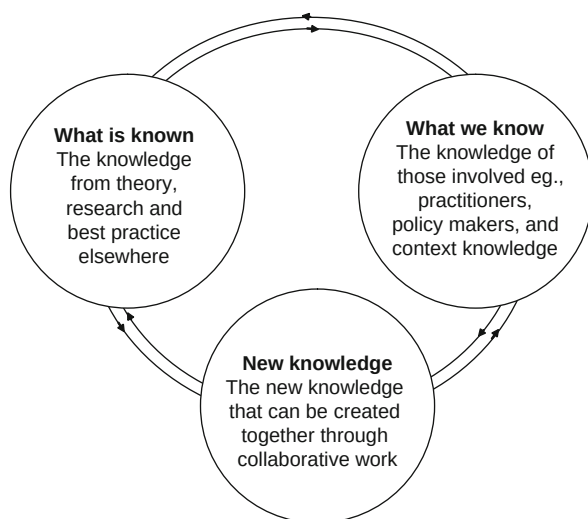
Evidence-based dialogue carried out in a spirit of inquiry has the potential to promote powerful professional learning, because as people engage in conversations about what evidence means new knowledge can emerge as they come across new ideas or discover that ideas that they believe to be true don't hold up when under scrutiny; this recognition is used as an opportunity to rethink what they know and do (Earl & Timperley, 2008). Such collaborative inquiry skills are new for many educators, which means investing time and expert support in their development (Earl & Katz, 2006).

Knowledge Animation

Sharing knowledge between different communities – including learning experiences, the findings of collaborative inquiry and other research – can be challenging. What makes sense to and works well for one community may not easily translate, and yet a core activity of connecting learning communities is sharing knowledge that might help enhance others' practice. Ways are needed to bring knowledge to life such that others can engage with the ideas, locate them within their context and in relation to prior experiences and learning, make meaning and construct new knowledge from them that can be used to develop their practice. This learning is social as learners test the veracity of their beliefs and knowledge by comparing them to the beliefs and knowledge of others, and together they relate this to other external knowledge, processing it jointly and thereby creating new knowledge. A model of three fields of knowledge from England's National College for School Leadership's networked learning communities (NCSL, 2006) programme captures this relationship (see Fig. 2).

I describe this process of connections as *knowledge animation*. The word *animate* comes from the Latin word *anima*, which means breath, life or soul. Animate

Fig. 2 Three fields of knowledge



means to bring to life, put in motion. It suggests action and movement, dynamism and vibrancy, and invigoration and innovation. The focus of knowledge animation is helping people learn and use knowledge generated elsewhere and, through it, create valuable new knowledge (Stoll, 2008). It is more than just dissemination. Knowledge animation can be seen as ways of making knowledge accessible and mobile to help people make the necessary learning connections that enable them to put knowledge to use in their contexts. As learning communities generate knowledge, they want to share; they need to be thinking of knowledge animation strategies that will help others make the necessary *learning connections*, also ensuring that they engage in quality assurance processes so they do not share mediocre practice. Knowledge animation is also a way that the research community can connect with practitioner and policy communities.

Meta-Learning with Peers

Members of learning communities need to understand their own learning and internalise learning as a *habit of mind*. Meta-learning (Watkins, Carnell, Lodge, Wagner, & Whalley, 1998) not only means each member of a community demonstrating that they are a learner, but also engaging in in-depth learning about their own learning: their goals, strategies, feelings, effects and contexts of learning. In particular, in connecting learning communities, it means taking time to focus together on what all of the diverse members understand about their collective learning and knowledge creation, the conditions that support these and what these mean for the way they collaborate.

Conditions Supporting Learning Community Connections

Processes and activities that connecting learning communities engage in depend on the right supporting conditions to motivate and sustain them. Here, I focus on three key conditions – a common culture, trusting and respectful relationships and supportive structures – and a fourth overarching one, leadership (see Fig. 3).

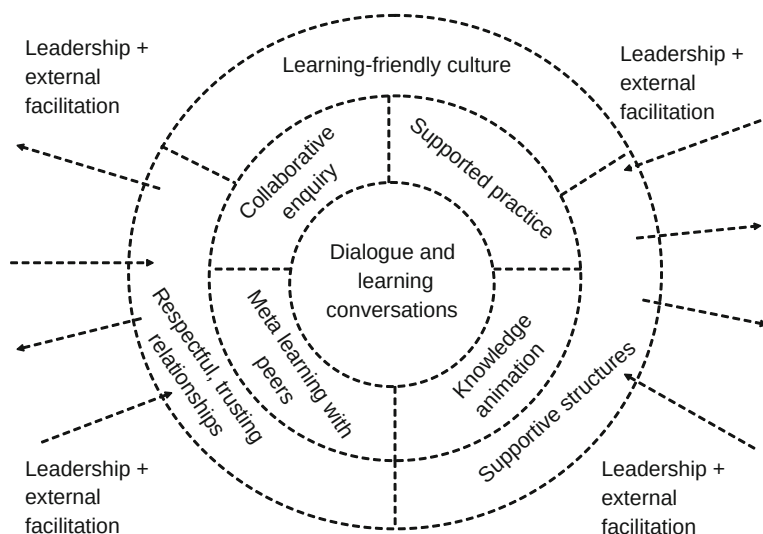


Fig. 3 Conditions supporting learning processes and activities

A Common Culture

Communities' values and beliefs play a major role in how they see themselves and operate, the norms of acceptable behaviour and practice and even the language they use to express themselves. Lave and Wenger (1991) propose that when learning in communities of practice, participants gradually absorb and are absorbed in a *culture of practice*, giving them exemplars that lead to shared meanings, a sense of belonging and increased understanding. The kind of deep learning processes on which learning communities depend are best supported and nurtured in a culture that values such processes and creates opportunities for them to occur. This requires two shifts in mindset and expectation at all levels of the system: first, that engaging in collaborative learning is not just other people's business – everyone must keep learning, and second, that whenever people are learning, they are not only learning for themselves but also on behalf of others (NCSL, 2006) – this is the commitment to a wider moral purpose that characterises a systemic approach.

A challenging issue when different learning communities connect is coming to common understandings because the communities often use different language. So, while educators tend to see a child as a *learner*, for parents he or she is *my child*,

whilst social workers may see an *abused child* and health workers tend to see a *patient*. This creates opportunities for misunderstanding and conflict as learning communities consider the purposes for and focus of their collaboration and when they are implementing plans. Openness to learning about other communities is therefore essential; unless people make the effort to understand where others are coming from, the potential of connecting learning communities is unlikely to be realised.

Trusting, Respectful and Equal Relationships

Connecting learning communities is a human and emotional enterprise with the associated complexity of bringing about change. Developing social capital depends on positive relationships (Field, 2003), and working together productively requires collegiality and interdependence between people that allows serious challenge and adjustment of practice. Earl and Katz (2006) have described learning networks as “rigorous and challenging joint work”. While personal friendships aren’t necessary, dysfunctional relationships clearly have a negative effect. Each person needs to feel that they are a valued participant with something to offer (Mitchell & Sackney, 2007). Without a climate of trust and respect, people don’t feel safe to take the risks associated with collaboration, open dialogue and opening up their practice to potential scrutiny by others. Equality is also important in the orientation to learning processes; for example, how coaching group members involved in the Austrian Leadership Academy rotated roles such that no one person became the sole expert. Coaching therefore becomes an equal partnership where both parties learn (Robertson, 2008).

Social trust among members of staff has been found to be the strongest facilitator of professional community within schools (Bryk, Camburn, & Louis, 1999). A base level of such trust seems necessary for learning communities to emerge. In networks and online communities, collaborative relationships appear to build trust and respect, essential for willingness to collaborate, risk taking and the exchange and development of ideas (Kahne, O’Brien, Brown, & Quinn, 2001). This becomes particularly important in contexts where schools have been used to a climate of competition and also seems to be predicated on networks involving voluntary participation and collaboration. Building trust across diverse communities can be even more challenging where hostile perceptions of other groups may have previously prevailed. Trusting relationships are insufficient on their own, but the evidence appears overwhelming that they are essential to connect learning communities if there is to be any chance of success.

Supportive Structures

Structures shape organisations’ capacity to develop learning communities. At their best, structures enable better and deeper communication between members of

learning communities. While coordination, communication mechanisms, joint governance structures and collaborative plans are all important, I have chosen here to focus on two particular structures, time and space.

Time is a critical resource for any meaningful learning (Stoll et al., 2003). Talk, exchange about and joint reflection on professional issues are key elements of the collaborative activity necessary to develop and connect learning communities. These require time, which doesn't only mean being able to cover staff who engage in network activities, including visiting other schools or attending meetings in the local community, but how any of the organisations involved plan and organise their time such that learning with and from communities beyond them can be fed back into their internal learning community and reconstructed to create new knowledge appropriate to their context and needs. The challenge is to find creative ways to deal with the perennial challenges of time, or else learning community activities just become an *add on* to an already overloaded agenda. In the Austrian example, time was allocated for the learning and networking sessions, although some participants talked of challenges of finding time and efforts to structure in time to follow up outside these sessions.

Space can also be a facilitating condition, and one with interesting shifts in meaning. In schools, professional exchange is facilitated by physical proximity (e.g., Louis et al., 1995), for example, teachers in a department having neighbouring classrooms and interdependent teaching roles, such as team teaching and joint planning. In learning networks, the need for equality and equal access between partners suggests that meetings and school and classroom visits should be rotated around schools, whilst similar concerns in extended learning communities implies that meetings should either be rotated around the different community partner locations, for example, schools, health centres or police stations, or held within neutral community locations such as community centres or coffee shops. Coffee houses were known in the eighteenth century as locations for stimulating and sociable conversations, offering a combination of both intimate and private spaces as well as ones that were public and open to speakers of all status, wealth or power (Ellis, 2004). In the coffee house, everyone's contributions were treated as equal.

Community space now includes the virtual space through which networks of users of the internet connect and communicate. In this world of mass collaboration through *wikinomics*, democratic networks of individuals are sharing, adapting and updating knowledge (Tapscott & Williams, 2008). The internet also provides a connecting communication mechanism when time to meet is hard to find. Essentially, connecting learning communities means rethinking the meaning of *location* and *space*.

Leadership and External Facilitation

Leadership provides the energy source; it is the umbrella within which all other conditions and processes of connecting learning communities fit. Communities depend

on key individuals' involvement to keep processes going and facilitate enabling conditions. In learning communities within, between and beyond schools, leadership isn't just the realm of senior leaders in organisations, although their commitment is important (e.g., Bolam et al., 2005; Earl & Katz, 2006). Rather, the evidence points to the importance of distributed leadership, reciprocal leadership actions of people at different levels and from various stakeholders. Distributed leadership and empowerment, important for professional learning communities within schools (Hargreaves & Fink, 2006b), also contribute to success of learning networks (Hopkins, 2003; Wohlstetter, Malloy, Chau, & Polhemus, 2003), with decisions being taken at the place of greatest action. Taking distributed leadership seriously means being committed to collective responsibility.

Leadership is a facilitator, but external facilitation and support for connecting learning communities can also make a difference, as the example highlights. External agents may bring specialist expertise as mediators of community dialogue, or supporting networks' inquiry efforts, for example, by helping members interpret and use data (Lee, 2008). Facilitation takes on a particularly significant role in networks and networked learning communities and can be key to success (Wohlstetter et al., 2003).

Conclusion

Systemic capacity building depends on harnessing and channelling collective energy. It means paying attention to developing deep and positive learning relationships within and across different levels of the system and connecting educators with communities and agencies whose interests or remits go beyond education but who, fundamentally, share a common interest in the present and future well-being and success of children and young people. Such collaborative, connected learning can be extremely powerful, as common understandings and shared knowledge are co-constructed, but this depends on serious and equal participation of members of diverse communities. Such collective commitment and openness takes time and effort to develop, but is essential if learning communities are to connect meaningfully and achieve systemic change.

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International Comparisons of Student Learning Outcomes

Andreas Schleicher

Parents, students and those who teach and run education systems seek good information on how well their education systems prepare students for life. Most countries monitor students' learning in order to provide answers to this question. Comparative international assessments can extend and enrich the national picture by providing a larger context within which to interpret national performance. They have gained prominence, over recent years, since the benchmarks for public policy in education are no longer solely national goals or standards, but increasingly the performance of the most successful education systems internationally. International assessments can provide countries with information that allows them to identify areas of relative strengths and weaknesses and monitor the pace of progress of their education system. They can also stimulate countries to raise aspirations by showing what is possible in education, in terms of the quality, equity and efficiency of educational services provided elsewhere, and they can foster better understanding of how different education systems address similar problems.

Following a brief introduction to the history of international assessments, the chapter sets out the potential that international assessments offer for educational policy and practice as well as some of the challenges they face in providing valid, comparable and reliable evidence.

International Assessments

History

While efforts to compare education systems internationally can be traced back to the early-nineteenth century (e.g. Jullien, 1817), the discourse on international comparisons of learning outcomes started to emerge during the 1950s and 1960s. In 1958, an expert group led by William Douglas Wall and including prominent

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researchers such as Benjamin Bloom, Robert Thorndike, Arthur Wellesley Foshay, Arnold Anderson, Gaston Mialaret and Torsten Husen met under the auspices of UNESCO's International Institute of Education in Hamburg to launch a feasibility study to compare student performance internationally. The feasibility study involved 12,000 13-year-olds in 12 countries and its results were published in 1962 (Foshay, Thorndike, Hotyat, Pidgeon, & Walker, 1962). The International Association for the Evaluation of Educational Achievement (IEA) emerged out of this collaboration which then conducted a series of international assessments (see Table 3). The most prominent regular surveys conducted by the IEA are now the 4-yearly Trends in Mathematics and Science Study (TIMSS) and the 5-yearly Progress in Reading Literacy Study (PIRLS).

In 1988 the Education Testing Service in the United States conducted the International Assessment of Educational Progress (IAEP) (Lapointe, Mead, & Phillips, 1989) and a follow-up study in 1991 (Lapointe, Mead, & Askew, 1992).

The latest generation of international assessments has been developed by the Organisation for Economic Co-operation and Development (OECD) as part of the Programme for International Student Assessment (PISA). PISA surveys have been conducted every 3 years since 2000 in key content areas such as reading, mathematics and science, but they also cover cross-curricular domains such as problem-solving as well as a range of non-cognitive outcomes. PISA is one of the most rigorous and comprehensive assessments, not least in terms of its geographic coverage, with the latest survey in 2006 testing over 400,000 students who represented more than 20 million 15-year-olds in 60 countries that made up close to 90% of the world economy.

Research Frameworks of International Assessments

OECD and IEA assessments seek to contextualise measures of student learning outcomes with background information collected from students, school principals and sometimes teachers and parents in order to interpret the observed variation in learning outcomes between students, classrooms, schools and education systems. To facilitate this, they operate with research frameworks that provide data at up to four levels of the education system, namely

- (i) the education system as a whole;
- (ii) the educational institutions and providers of educational services;
- (iii) the classrooms or instructional setting and
- (iv) the learners themselves (see Table 1).

The research frameworks address different classes of research areas:

- (1) A first class relates to comparing learning outcomes at each of the four levels.
- (2) The second class provides information on the policy levers or circumstances which shape the outputs and outcomes at each level of the education system.

Table 1 Research frameworks for international assessments

	(1) Education and learning outputs and outcomes	(2) Policy levers and contexts shaping educational outcomes	(3) Antecedents or constraints that contextualise policy
(I) Individual participants in education and learning	(1.I) The quality and distribution of individual educational outcomes	(2.I) Individual attitudes, engagement and behaviour	(3.I) Background characteristics of the individual learners
(II) Instructional settings	(1.II) The quality of instructional delivery	(2.II) Curriculum, pedagogy and learning practices and classroom climate	(3.II) Student learning conditions and teacher working conditions
(III) Providers of educational services	(1.III) The output of educational institutions and institutional performance	(2.III) School environment and organisation	(3.III) Characteristics of the service providers and their communities
(IV) The education system as a whole	(1.IV) The overall performance of the education system	(2.IV) System-wide institutional settings, resource allocations and policies	(3.IV) The national educational, social, economic and demographic contexts

This includes, for example, measures of attitudes and behaviours at the level of students, measures of student learning and teacher working conditions and human and material resources at the level of instructional settings and institutions and measures of structures and resource allocation policies and practices at the level of the education system. These policy levers and contexts typically have antecedents – factors that define or constrain policy, and which are represented in a third class of research areas.

- (3) This third class which, for example, provides information on the socio-economic context of students, schools or systems is particularly important in an international comparative context, as it allows to ensure “like with like” comparisons, that is comparisons of schools that have a similar socio-economic intake or countries that operate under similar socio-economic conditions.

Each of the cells resulting from cross-classifying the above two dimensions can then be used to address a variety of research issues from different perspectives relating, for example, to the quality of educational outcomes and educational provision; to issues of equality of educational outcomes and equity in educational opportunities; or to the adequacy, effectiveness and efficiency of resource management. Subsequent sections of this chapter will illustrate the application of this framework.

The Potential of International Assessments for Policy and Practice

The design and conduct of international assessments was originally motivated by research objectives. More recently, governments too have begun to attribute growing importance to international assessments and have invested considerable resources into their development and implementation. This interest derives from several considerations:

- By revealing what is possible in education in terms of the performance levels demonstrated in the best performing countries, international assessments can enhance the quality of existing policies but also create a debate about the paradigms and beliefs underlying policies.
- While international assessments alone cannot identify cause-and-effect relationships between inputs, processes and educational outcomes, they can shed light on key features in which education systems show similarities and differences, and make those key features visible for educators, policy makers and the general public.
- International assessments can also help to set policy targets in terms of measurable goals achieved by other systems and help to identify policy levers and establish trajectories as well as delivery chains for reform.
- International assessments can assist with gauging the pace of educational progress and help reviewing the reality of educational delivery at the frontline.
- Last but not least, international assessments can support the political economy of educational reform, which is a major issue in education where any pay-off to reform almost inevitably accrues to successive governments if not generations.

Some of these issues are examined more closely in the remainder of this section.

Revealing What Is Possible in Education and Identifying Factors that Contribute to Educational Success

International assessments seem to impact more on countries whose performance is comparatively low (Hopkins, Pennock, & Ritzen, 2008). Although it is sometimes argued that weighing the pig does not make it fatter, diagnosing underweight can be an important first step towards therapy. Also, the level of public awareness rose by international comparisons, has in some countries created an important political momentum and engaged educational stakeholders, including teacher or/and employer organisations, in support of policy reform.

Equally important, international assessments have had a significant impact in some countries that did not do poorly in absolute terms, but that found themselves confronted with results that differed from how educational performance was generally perceived. In Germany, for example, equity in learning opportunities across schools had often been taken for granted, as significant efforts were devoted to

ensuring that schools are adequately and equitably resourced. The PISA 2000 results, however, revealed large socio-economic disparities in educational outcomes between schools. Further analyses that separated equity-related issues between those that relate to the socio-economic heterogeneity within schools and those that relate to socio-economic segregation through the school system suggested that German students from more privileged social backgrounds are directed into the more prestigious academic schools which yield superior educational outcomes while students from less privileged social backgrounds are directed into less prestigious vocational schools which yield poorer educational outcomes, even where their performance on the PISA assessment was similar. This raised the spectre that the German education system was reinforcing rather than moderating socio-economic background factors. Such results, and the ensuing public debate, inspired a wide range of equity-related reform efforts in Germany, some of which have been transformational in nature. These include giving early-childhood education, which had hitherto been considered largely an aspect of social welfare, an educational orientation and better institutionalising early-childhood provision; establishing national educational standards for schools in a country where regional and local autonomy had long been the overriding paradigm; or enhancing the support for disadvantaged students, such as students with a migration background.

For many educators and experts in Germany, the socio-economic disparities that PISA revealed were unsurprising. However, it was often taken for granted and outside the scope of public policy that disadvantaged children would fare less well in school. The fact that PISA revealed that the impact which socio-economic background has on students and school performance varied considerably across countries, and that other countries appeared to moderate socio-economic disparities much more effectively, showed that improvement was possible and provided the momentum for policy change.

Showing that strong educational performance and improvement are possible seems to be two of the most important aspects of international assessments. Whether in Asia (like in Japan, Korea or Singapore), in Europe (like in Finland or in the Netherlands) or in North America (like in Canada), many countries display strong overall performance in international assessments and, equally important, some of these countries also show that poor performance in school does not automatically follow from a disadvantaged socio-economic background. Last but not least, some countries show that success can become a consistent and predictable educational outcome: In Finland for example, the country with the strongest overall results in PISA, the performance variation between schools amounted in 2006 to only 5% of students' overall performance variation. So parents could rely on high and consistent performance standards in whatever school they choose to enrol their children. Considerable research has been invested into the features of these education systems. In some countries, governments have used knowledge provided by PISA as a starting point for a peer review to study policies and practices in countries operating under similar context that achieve better results (Döbert, Klieme, & Sroka, 2004). Such peer reviews, each resulting in a set of specific policy recommendations for educational improvement, are also being carried out by the OECD, the results

of which have been published so far for Denmark and Scotland (OECD, 2004, 2007).

As a result, the benchmarks for public policy in education are no longer national goals or standards alone, but increasingly the performance of the most successful education systems internationally. International assessments have at times raised awareness which led to a public debate about education, with citizens recognising that their countries' educational performance will not simply need to match average performance, but that they will need to do better if their children want to justify above-average wages.

Putting National Targets into a Broader Perspective

International assessments can also play an important role in putting national performance targets into perspective. Educators are often faced with the following dilemma: If, at the national level, the percentage of students achieving good exam scores in school increases, some will claim that the school system has improved. Others will claim that standards must have been lowered, and behind the suspicion that better results reflect lowered standards is often a belief that overall performance in education cannot be raised. International assessments allow those perceptions to be related to a wider reference framework, by allowing schools and education systems to compare themselves with schools and education systems in other countries. Some countries have actively embraced this perspective and systematically related national performance to international assessments, for example, by embedding components of the PISA or TIMSS assessments into their national assessments.

Assessing the Pace of Change in Educational Improvement

A third important aspect is that international comparisons provide a frame of reference to assess the pace of change in educational development. While a national framework allows progress to be assessed in absolute terms, an internationally comparative perspective allows an assessment of whether that progress matches the pace of change observed elsewhere. Indeed, while all education systems in the OECD area have seen quantitative growth over past decades, international comparisons reveal that the pace of change in educational output has varied markedly. For example, among 55–64-year-olds, the United States is well ahead of all other OECD countries in terms of the proportion of individuals with both school and university qualifications. However, international comparisons show that this advantage is largely a result of the “first-mover advantage” which the United States had gained after Word War II by massively increasing enrolments. It has eroded over last decades as more and more countries have reached and surpassed qualification levels in the United States in more recent cohorts. While many countries are now close

to ensuring that virtually all young adults leave schools with at least a high school qualification, which the OECD benchmarks highlight as the baseline qualification for reasonable earnings and employment prospects, the United States stood still on this measure and among OECD countries only New Zealand, Spain, Turkey and Mexico now have lower secondary school completion rates than the United States (OECD, 2008). By contrast, two generations ago, South Korea had the economic output equivalent to that of Afghanistan today and was at rank 24 in terms of schooling performance among today's OECD countries. Today it is the top performer in terms of the proportion of successful school leavers, with 96% of an age cohort obtaining a high school degree. In college education, the pace of change has been even more dramatic, and so has been its impact on the relative standing of countries: Within less than a decade, the United States has slipped from first to 15th rank in terms of the proportion of the relevant age cohort graduating from college. While progress in a national perspective matters, in a global framework, an internationally comparative perspective is having a growing impact not just on public policy but on institutional behaviour too. International assessments of learning outcomes are beginning to show similar trends.

A Tool for the Political Economy of Reform

International assessments can also support the political economy of reform. For example, in the 2007 Mexican national survey of parents 77% of parents interviewed reported that the quality of educational services provided by their children's school was good or very good. However, in OECD's PISA 2006 assessment, roughly half of the Mexican 15-year-olds who are enrolled in school performed at or below the lowest level of proficiency established by PISA (IFIE-ALDUCIN, 2007; OECD, 2007). There may be many reasons for such a discrepancy between perceived educational quality and performance on international assessments. For example, in part this may be due to the fact that the educational services which Mexican children receive are significantly enhanced over the quality of schooling that their parents experienced. However, the point here is that justifying the investment of public resources into areas for which there seems no public demand poses difficult challenges for the political economy of reform. One recent response by the Mexican presidential office has been to include a "PISA performance target" into the new Mexican reform plan. This performance target that is based on the outcome of an international assessments and that is to be achieved by 2012 will serve to highlight the gap between national performance and international standards and monitor how educational improvement feeds into closing this gap. It is associated with a reform trajectory and delivery chain of support systems, incentive structures as well as with improved access to professional development to assist school leaders and teachers in meeting the target. Such reforms draw on the experience of other countries. Brazil has taken a similar route, providing each secondary school with information on the level of progress that is needed to perform at the OECD average performance level on PISA in 2021.

Japan is one of the best performing education systems on the various international assessments. However, PISA revealed that while students tended to do very well on tasks that require reproducing subject matter content, they did much less well on open-ended constructed tasks requiring them to demonstrate their capacity to extrapolate from what they know and apply their knowledge in novel settings. Conveying that to parents and a general public who are used to certain types of tests poses a challenge for the political economy of reform too. The policy response in Japan has been to incorporate “PISA-type” open-constructed tasks into the national assessment, with the aim that skills that are considered important become valued in the education system. Similarly, Korea has recently incorporated advanced PISA-type literacy tasks in its university entrance examinations, in order to enhance excellence in the capacity of its students to access, manage, integrate and evaluate written material. In both countries, these changes represent transformational change that would have been much harder to imagine without the challenges revealed by PISA.

Design Issues and Challenges for International Assessments

The design of international assessments of learning outcomes needs to fulfil different, and sometimes competing, demands:

- First, international assessments need to ensure that their outcomes are valid across cultural, national and linguistic boundaries and that the target populations from which the samples in the participating countries are drawn are comparable.
- Second, they need to offer added value to what can be accomplished through national analysis.
- Third, while international assessments need to be as comparable as possible, they also need to be country-specific so as to adequately capture historical, systemic and cultural variation among countries.
- Fourth, the resultant measures need to be as simple as possible to be widely understood, while remaining as complex as necessary to reflect multi-faceted educational realities.
- Fifth, while there is a general desire to keep any set performance measures as small as possible, it needs to be large enough to be useful for research and policy across countries that face different educational challenges. Some of the design issues involved in meeting and balancing these various demands are laid out in the remainder of this section.

Cross-Country Validity and Comparability in the Assessment Instruments

International assessments necessarily are limited in their scope. This is because

- there is no overarching agreement on what fundamental competencies students in a particular grade or at a particular age should possess,

- an international assessment can only capture a selection of competencies and
- various methodological constraints limit the nature of competencies that are currently amenable to large-scale assessment (international assessments necessarily are limited in their scope).

International assessments have made considerable progress towards assessing knowledge and skills in content areas such as mathematics, reading, science and problem-solving. However, they have not yet been able to evaluate, for example, interpersonal dimensions of competencies which are of increasing importance, such as the capacity of students to relate well to others, to manage and resolve conflicts or to respect and appreciate different values, beliefs or cultures. Similarly, they provide only very crude self-reported measures of intrapersonal dimensions of competencies, which are of increasing importance as individuals need to be able to constantly adjust to their right place in an increasingly complex world.

Even in established content areas, internationally comparative measurement poses major challenges. Countries vary widely in their intended, implemented and achieved curricula. Inevitably, international assessments need to strike a balance between narrowing the focus to what is common across the different curricula of school systems, on the one hand, and capturing a wide-enough range of competencies to reflect the content domains to be assessed adequately, on the other. Leaning towards the former, as has been the tendency for the assessments of the IEA, ensures that what is being tested internationally reflects what being taught nationally. This is an important aspect of fairness, but it risks that the assessment reflects just the lowest common denominator of national curricula and lacks important aspects of curricula that are not taught in all countries as well as the content validity that is required to faithfully represent the relevant subject area. Leaning towards the latter, as is the case for the assessments of the OECD with their focus on the capacity of students not merely to reproduce what they have learned but to extrapolate from what they have learned and apply their knowledge and skills in novel settings, enhances content validity but risks that students are being confronted with assessment material they may not have been taught.

In whatever way the various international assessments have struck these balances, they have tried to build them through a carefully designed interactive process between the agencies developing the assessment instruments, various international expert groups working under the auspices of the respective organisations and national experts charged with the development and implementation of the surveys in their countries. Often, a panel of international experts led, in close consultation with participating countries, the identification of the range of knowledge and skills in the respective assessment domains that were considered to be crucial for student's capacity to fully participate in and contribute to a successful modern society. A description of the assessment domains – the assessment framework – was then used by participating countries, and other test development professionals, as they contributed assessment materials, which typically involved

- the development of a working definition for the assessment area and description of the assumptions that underlay that definition;

- an evaluation of how to organise the set of tasks constructed in order to report to policy makers and researchers on performance in each assessment area among 15-year-old students in participating countries;
- the identification of a set of key characteristics to be taken into account when assessment tasks were constructed for international use;
- the operationalisation of the set of key characteristics to be used in test construction, with definitions based on existing literature and the experience of other large-scale assessments;
- the validation of the variables, and assessment of the contribution which each made to the understanding of task difficulty in participating countries and
- the preparation of an interpretative scheme for the results.

In the case of PISA, for example, the assessment is defined through three inter-related dimensions, namely the knowledge or structure of knowledge that students need to acquire (e.g. familiarity with scientific concepts); competencies that students need to apply (e.g. carrying out a particular scientific process); and the contexts in which students encounter scientific problems and relevant knowledge and skills are applied (e.g. making decisions in relation to personal life, understanding world affairs) (see Table 2).

Once the assessment framework is established and agreed, which tends to be the most challenging aspect of an international assessment, assessment items are developed to reflect the intentions of the frameworks and they need to be carefully piloted before final assessment instruments can be established. To some extent, the question to what extent the tasks in international assessments are comparable across countries can be answered empirically. Analyses to this end were first undertaken for the IEA TIMSS (Beaton et al., 1996). The authors compared the percentage of correct answers in each country according to the international assessment as a whole with the percentage correct in each country on the items said by the country to address its curriculum in mathematics. Singapore, for example, had 144 out of 162 items that were said to be covered by the Singaporean curriculum. The percentage of items correct on the whole test and on the items covered in the curriculum was 79 in both cases. Singapore also scored between 79 and 81% correct on the items that other countries considered as covered in their own curricula. These ranged from 76 items in Greece to 162 items in the United States. For most countries, the results were similarly consistent, suggesting that the composition of the tests had no major impact on the relative standing of countries in the international comparisons. Such analyses have also been conducted for PISA, which yielded similar results.

International assessments pay close attention to reflecting the national, cultural and linguistic variety among participating countries. OECD's PISA assessments employ the most sophisticated and rigorous process to this end. The agency charged with the development of the instruments uses professional test item development teams in several different countries. In addition to the items developed by these teams, assessment material is contributed by participating countries that is carefully evaluated and matched against the framework. Furthermore, each item included in the assessment pool is rated by each country:

Table 2 Defining an assessment domain – an example from PISA

Definition and its distinctive features	Science	Reading	Mathematics
	The extent to which an individual: – Possesses scientific knowledge and uses that knowledge to identify questions, acquire new knowledge, explain scientific phenomena and draw evidence-based conclusions about science-related issues – Understands the characteristic features of science as a form of human knowledge and enquiry – Shows awareness of how science and technology shape our material, intellectual and cultural environments – Engages in science-related issues and with the ideas of science, as a reflective citizen <i>Scientific literacy</i> requires an understanding of scientific concepts, as well as the ability to apply a scientific perspective and to think scientifically about evidence	The capacity of an individual to understand, use and reflect on written texts in order to achieve one's goals, to develop one's knowledge and potential and to participate in society In addition to decoding and literal comprehension, <i>reading literacy</i> also involves interpretation and reflection and the ability to use reading to fulfil one's goals in life The focus of PISA is on reading to learn rather than learning to read, and hence students are not assessed on the most basic reading skills	The capacity of an individual to identify and understand the role that mathematics plays in the world, to make well-founded judgements and to use and engage with mathematics in ways that meet the needs of that individual's life as a constructive, concerned and reflective citizen <i>Mathematical literacy</i> is related to wider, functional use of mathematics; engagement includes the ability to recognise and formulate mathematical problems in various situations

Table 2 (continued)

	Science	Reading	Mathematics
Knowledge domain	<i>Knowledge of science, such as</i> • “Physical systems” • “Living systems” • “Earth and space systems” • “Technology systems” <i>Knowledge about science, such as</i> • “Scientific enquiry” • “Scientific explanations”	The form of reading materials: • <i>Continuous texts</i>: including different kinds of prose such as narration, exposition, argumentation • <i>Non-continuous texts</i>: including graphs, forms and lists	Clusters of relevant mathematical areas and concepts: • <i>Quantity</i> • <i>Space and shape</i> • <i>Change and relationships</i> • <i>Uncertainty</i>
Competencies involved	Type of scientific task or process: • <i>Identifying scientific issues</i> • <i>Explaining scientific phenomena</i> • <i>Using scientific evidence</i>	Type of reading task or process: • Retrieving information • Interpreting texts • Reflecting and evaluating of texts	Competency clusters define skills needed for mathematics: • <i>Reproduction</i> (simple mathematical operations) • <i>Connections</i> (bringing together ideas to solve straightforward problems) • <i>Reflection</i> (wider mathematical thinking)
Context and situation	The area of application of science, focusing on uses in relation to personal, social and global settings such as • “Health” • “Natural resources” • “Environment” • “Hazard” • “Frontiers of science and technology”	The use for which the text is constructed: • <i>Private</i> (e.g. a personal letter) • <i>Public</i> (e.g. an official document) • <i>Occupational</i> (e.g. a report) • <i>Educational</i> (e.g. school-related reading)	The area of application of mathematics, focusing on uses in relation to personal, social and global settings such as: • <i>Personal</i> • <i>Educational and occupational</i> • <i>Public</i> • <i>Scientific</i>

- (i) for potential cultural, gender or other bias;
- (ii) for relevance to the students to be assessed in school and non-school contexts and
- (iii) for familiarity and level of interest.

Another important aspect concerns the nature and form of the assessment, as reflected in the task and item types. While multiple-choice tasks are the most cost-effective way to assess knowledge and skills, and have therefore dominated earlier international assessments, they have important limitations in assessing more complex skills, particularly ones that require students not just to recall but to produce knowledge. Moreover, since the nature of assessment tasks, and in particular student familiarity with multiple-choice tasks, varies considerably across countries, heavy reliance on any single item type such as multiple-choice tasks can be an important source of response bias. The PISA assessments have tried to address this through employing a broad range of assessment tasks, with about 40% of the questions requiring students to construct their own responses. Another way to improve the nature of the assessments task is by either providing a brief answer (short-response questions) or by constructing a longer response (open-constructed response questions), allowing for the possibility of divergent individual responses and an assessment of students' justification of their viewpoints. Partial credit is given for partly correct or less complex answers, with questions assessed by trained specialists using detailed scoring guides which gave direction on the codes to assign to various responses. Open-ended assessment tasks, however, raise other challenges, in particular the need to ensure inter-rater reliability in the results. For PISA, sub-samples of the assessment booklets are coded independently by four coders and examined by the international contractor. In order to examine the consistency of this coding process in more detail within each country and to estimate the magnitude of the variance components associated with the use of coders, an inter-coder reliability study on the sub-sample of assessment booklets is being applied and homogeneity analysis is applied to the national sets of multiple coding. Similarly, at the between-country level, an international coding review is implemented to check on the consistency of application of response-coding standards across all participating countries, with the objective to estimate potential bias (either leniency or harshness) in the coding standards applied in participating countries.

In order to cover the intended broad range of content while meeting the limits of individual assessment time, most modern international assessments are now using multiple forms which are spiralled among students.

Ensuring that international assessments are comparable across countries is one thing, but the more important challenges actually relate to their external validity, which involves verifying that the assessments measure what they set out to measure. An important question is whether the knowledge and skills that are being assessed are predictive for the future success of students. In the case of PISA, the Canadian Youth in Transition Survey (YITS), a longitudinal survey which investigates patterns of and influences on major educational, training and work transitions in young people's lives, provided a way to examine this empirically. In 2000, 29,330

15-year-old students in Canada participated both in YITS and PISA. Four years later, the educational outcomes of the same students, then aged 19, were assessed and the association of these outcomes with PISA reading performance at age 15 was investigated (Knighton & Bussiere, 2006). The results showed that students who had mastered PISA performance Level 2 on the PISA reading test at age 15 were twice as likely to participate in post-secondary education at age 19 than those who performed at Level 1 or below, even after accounting for school engagement, gender, mother tongue, place of residence, parental, education and family income. The odds increased to eight-fold for those students who had mastered PISA Level 4 and to sixteen-fold for those who had mastered PISA Level 5. A similar study undertaken in Denmark led to similar results, in that the percentage of youth who had completed post-compulsory, general or vocational upper-secondary education by 19 increased significantly with their reading ability assessed at age 15 (see <http://www.sfi.dk/sw19649.asp>). Last but not least, the International Adult Literacy Study allowed reading and numeracy skills (defined in similar ways to those measured by PISA) to be related to earnings and employment outcomes in the adult population. The analyses showed that such competencies were generally a better predictor for individual earnings and employment status than the level of formal qualification individuals had attained (OECD and Statistics Canada, 2000).

Comparability of the Target Populations

Even if the assessment instruments are valid and reliable, meaningful comparisons can only be made if the target populations being assessed are also comparable. International assessments therefore need to use great care when

- (i) defining comparable target populations;
- (ii) ensuring that they are exhaustively covered with minimal and well-defined population exclusions and
- (iii) ensuring that the sampled students do participate in the assessment.

As regards defining target populations, important trade-offs need to be made between international comparability, on the one hand, and relating the target populations to national institutional structures, on the other. Differences between countries in the nature and extent of pre-primary education and care, the age of entry to formal schooling and the institutional structure of educational systems do not allow the establishment of internationally comparable grade levels of schooling. Consequently, international comparisons of educational performance typically define their populations with reference to a target age group. International assessments of the IEA have defined these target groups on the basis of the grade level that provides maximum coverage of a particular age cohort (such as the grade in which most 13-year-olds are enrolled). The advantage of this is that a grade level can be easily interpreted within the national institutional structure and provides a

cost-effective way towards assessment, with minimal disruption of the school day. However, a disadvantage is that slight variations in the age distribution of students across grade levels often lead to the selection of different target grades in different countries, or between education systems within countries, raising serious questions about the comparability of results across, and at times within, countries. In addition, because not all students of the desired age are usually represented in grade-based samples, there may be a more serious potential bias in the results if the unrepresented students are typically enrolled in the next higher grade in some countries and the next lower grade in others. This excludes students with potentially higher levels of performance in the former countries and students with potentially lower levels of performance in the latter. To address these problems, the assessments of the OECD use an age-based definition for their target populations, i.e. a definition that is not tied to the institutional structures of national education systems. For example, PISA assesses students who were aged between 15 years and 3 (complete) months and 16 years and 2 (complete) months at the beginning of the assessment period and who were enrolled in an educational institution, regardless of the grade levels or type of institution in which they were enrolled, and regardless of whether they were in full-time or part-time education. The disadvantage of this age-based approach is that this is costly and that the assessment process becomes more disruptive and it is more difficult to relate the results of individual students to teachers and classrooms.

The accuracy of any survey results also depends on the quality of the information on which national samples are based as well as on the sampling procedures. For the latest international assessments, advanced quality standards, procedures, instruments and verification mechanisms have been developed that ensure that national samples yielded comparable data and that the results could be compared with confidence.

Comparability in Survey Implementation

Last but not least, well-designed international assessment needs to be well implemented to yield reliable results. The process begins with ensuring consistent quality and linguistic equivalence of the assessment instruments across countries. PISA, which provides the most advanced procedures to this end, seeks to achieve this through providing countries with equivalent source versions of the assessment instruments in English and French and requiring countries (other than those assessing students in English and French) to prepare and consolidate two independent translations using both source versions. Precise translation and adaptation guidelines are supplied, also including instructions for the selection and training of the translators. For each country, the translation and format of the assessment instruments (including test materials, marking guides, questionnaires and manuals) are verified by expert translators appointed by agency charged with the development of the assessment instruments (whose mother tongue was the language of instruction in the country concerned and who were knowledgeable about education systems) before they are used.

The assessments are then implemented through standardised procedures. Comprehensive manuals typically explain the implementation of the survey, including precise instructions for the work of school co-ordinators and scripts for test administrators for use during the assessment sessions. Proposed adaptations to survey procedures, or proposed modifications to the assessment session script, are reviewed internationally before they are employed at a national level. In the case of PISA, specially designated quality monitors visited all national centres to review data-collection procedures and school quality. Monitors from the international agency visited a sample of 15 schools during the assessment. Marking procedures are designed to ensure consistent and accurate application of the internationally agreed marking guides.

Conclusions

In a globalised world, the benchmarks for public policy in education are no longer national goals or standards alone, but increasingly the performance of the most successful education systems internationally. International assessments can be powerful instruments for educational research, policy and practice by allowing education systems to look at themselves in the light of intended, implemented and achieved policies elsewhere. They can show what is possible in education, in terms of quality, equity and efficiency in educational services, and they can foster better understanding of how different education systems address similar problems. Most importantly, by providing an opportunity for policy makers and practitioners to look beyond the experiences evident in their own systems and thus to reflect on some of the paradigms and beliefs underlying these, they hold out the promise to facilitate educational improvement. As the chapter has shown, designing and implementing valid and reliable international assessments poses major challenges, including defining the criteria for success in ways that are comparable across countries while remaining meaningful at national levels, establishing comparable target populations and carrying the surveys out under strictly standardised conditions. However, more recently, international assessments such as PISA have made significant strides towards this end.

Some contend that international benchmarking encourages an undesirable process of degrading cultural and educational diversity among institutions and education systems, but the opposite can be argued as well: In the dark, all institutions and education systems look the same and it is comparative benchmarking that can shed light on differences on which reform efforts can then capitalise. Who took notice of how Finland, Canada or Japan run their education systems before PISA revealed the success of these education systems, in terms of the quality, equity and coherence of learning outcomes?

Of course, international assessments have their pitfalls too: Policy makers tend to use them selectively, often rather in support of existing policies than as an instrument to challenge them and to explore alternatives. Moreover, highlighting specific

features of educational performance may detract attention from other features that are equally important, thus potentially influencing individual, institutional or systemic behaviour in ineffective or even undesirable ways. This can be like the drunken driver who looks for his car key under a street lantern and, when questioned whether he lost it there, responds no, but that it was the only place where he could see. This risk of undesirable consequences of inadequately defined performance benchmarks is very real, as teachers and policy makers are led to focus their work on those issues which performance benchmarks value and put into the spotlight of the public debate.

While the development of international assessments is fraught with difficulties and their comparability remains open to challenges, cultural differences among individuals, institutions and systems should not suffice as a justification to reject their use, given that the success of individuals and nations increasingly depends on their global competitiveness. The world is indifferent to tradition and past reputations, unforgiving of frailty and ignorant of custom or practice. Success will go to those individuals, institutions and countries which are swift to adapt, slow to complain and open to change. The task for governments will be to ensure that their citizens, institutions and education systems rise to this challenge and international benchmarks can provide useful instruments to this end.

Annex

Table 3 International assessments conducted by the IEA

Study	Data collection	Target population	Coverage
1960			
Pilot study	1960	13 years	Mathematics, science, reading, geography, non-verbal abilities
First International Mathematics Study – FIMS	1964	13 years and last year of upper secondary education	Mathematics
1970			
The six subject survey	1970–1971	10, 14 years and last year of upper secondary education	Reading comprehension Literature First international science study English as a foreign language French as a foreign language Civic education
1980			
Second International Mathematics Study – SIMS	1980–1982	13 years and last year of upper secondary education	
Classroom environment study	1982–1983	9 and 15 years	Instructional methods in mathematics, science and history
Second International Science Study – SISS	1983–1984	10, 14 years and last year of upper secondary education	Science
Written composition	1985	10, 14–16 years and last year of upper secondary education	Writing
Computers in education – COMPED	1989 e 1992	10 and 13 years	Availability and use of computers and technology
Pre-primary project	1986–1994 1989–2003 1993–2003	Longitudinal study following children from 4 to 7 years	Quality of early-childhood provision

Table 3 (continued)

Study	Data collection	Target population	Coverage
1990	Reading Literacy Study – RLS Third International Mathematics and Science Study – TIMSS 1995 Civic education study – CIVED	9 and 14 years 9 and 13 years and last year of upper secondary education 14 years and 16–18 years	Reading comprehension Mathematics and science Civic education
2000	Second Information Technology in Education Study Module 1 – SITES-M1	1990–1991 1994–1995 1996–1997 1999–2000 1998–1999	Availability and use of technology
	Third International Mathematics and Science Study Repeat – TIMSS-R 1999	1998–1999	Mathematics and science
	Study	Data collection 2001	Coverage Reading comprehension
	Progress in International Reading Literacy Study 2001 – PIRLS	2002–2003	Mathematics and science
	Trends in Mathematics and Science Study 2003 – TIMSS 2003	2005–2006	Reading comprehension
	(In progress) Progress in International Reading Literacy Study 2006 – PIRLS 2006	2006	Availability and use of technology
	(In progress) Second Information on Technology in Education Study 2006 – SITES 2006	2007–2008	Teacher training
	(In progress) Teacher Education and Development Study–Mathematics – TEDS-M 2008	2006–2007	Mathematics and science
	(In progress) Trends in International Mathematics and Science Study 2007 – TIMSS 2007	2007–2008	Mathematics and physics
	(In progress) TIMSS advanced 2008	2008–2009	Civic education
	(In progress) International Civic and Citizenship Education Study – ICCS 2009		

Source: Simiscalco (2007).

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Teaching and Educational Transformation

Linda Darling-Hammond

As they entered the twenty-first century, most nations around the world undertook major transformations of their governmental and education systems to respond to changing economic, demographic, political, and social imperatives. Nearly all countries are engaged in serious discussion of school reform to address demands for much higher levels of education for much greater numbers of citizens – demands created by a new information age, major economic shifts, and a resurgence and redefinition of democracy around the world. These demands are being imposed upon educational institutions designed a century ago for a different time. In the United States as elsewhere, the need to prepare future citizens and workers who can cope with complexity, use new technologies, and work cooperatively to frame and solve novel problems – and the need to do this for a much more diverse and inclusive group of learners – has stimulated efforts to rethink school goals and curriculum, to better prepare teachers, and to redesign school organizations.

This rapidly changing economic base has stimulated political concerns as well as rapid job changes, industrial restructuring, and the need for many workers to learn new occupations and new roles. Manufacturing industries can no longer pay high wages for low-skilled work. High wages and corporate growth characterize industries that rely on high levels of skill, complex technologies, and new knowledge and information. “An economy in which knowledge is becoming the true capital and the premier wealth-producing resource” means that “once again we will have to think through what an educated person is” (Drucker, 1989, p. 232). The changes demanded of workers and of educational institutions are striking:

The great majority of the new jobs require qualifications the industrial worker does not possess and is poorly equipped to acquire. They require a good deal of formal education and the ability to acquire and to apply theoretical and analytical knowledge. They require a different approach to work and a different mind-set. Above all, they require a habit of continuous learning. Displaced industrial workers thus cannot simply move into knowledge

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This chapter draws in part on Darling-Hammond (2000a)

work or services the way displaced farmers and domestic workers moved into industrial work (at the turn of the last century). At the very least, they have to change their basic attitudes, values, and beliefs (Drucker, 1994, p. 62).

Furthermore, the nature of work will continue to change ever more rapidly. Whereas during much of the twentieth century, most workers held 2 or 3 jobs during their lifetimes, the US Department of Labor (2006) estimates that today's workers hold more than 10 jobs before they reach the age of 40. The top ten in-demand jobs projected for 2010 did not exist in 2004 (Gunderson, Jones, & Scanland, 2004). Thus, we are currently preparing many students for jobs that do not yet exist using technologies that have not yet been invented to solve problems that we don't even know are problems yet.

Meanwhile, knowledge is expanding at a breathtaking pace. It is estimated that 5 exabytes of new information (about 500,000 times the volume of the Library of Congress print collection) was generated in 2002, more than three times as much as in 1999. Indeed in the 4 years from 1999 to 2003, the amount of new information produced approximately equaled the amount produced in the entire history of the world previously (Varian & Lyman, 2003). The amount of new technical information is doubling every 2 years, and it is predicted to double every 72 h by 2010 (Jukes & McCain, 2002). As a consequence, effective education can no longer be focused on the transmission of pieces of information that, once memorized, comprise a stable storehouse of knowledge. Education must help students learn how to learn in powerful ways, so that they can manage the demands of changing information, technologies, jobs, and social conditions.

Factory Model Schools Confront New Demands

In the United States and many other countries, reaching these new goals will require fundamental transformation of existing school organizations and ways of managing teaching. At the turn of the twentieth century during the last major era of system reform, the prevailing model of school organization that took hold in the United States mimicked the then-popular factory line managed by centralized bureaucracy. Automated means for mass producing goods created specialized divisions of labor and a proliferation of routinized, semiskilled jobs requiring limited knowledge. The "Taylor system," widely adopted in the decade after 1910, provided techniques for using rules and routines to manage the work of people assigned to simplified, discrete tasks. "Scientific management" brought with it a distinct division of responsibility between a new class of managers, who did all the thinking, and the workers, who followed procedures developed by the managers (Callahan, 1962, pp. 37–38).

This approach was carried over from manufacturing industries to schools, which sought to develop standardized procedures engineered to yield standard products. Teachers, like factory workers, were viewed as unskilled laborers who would implement the schemes developed by others, rather than developing lessons tailored to the

needs of their students. For both teachers and students, schools stressed compliance and the capacity for repetitive, rote tasks in response to the demands from industry (Tyack, 1974). Based on faith in the power of rules to direct human behavior, and in the ability of administrators to discover and implement the common procedures that would produce desired outcomes, twentieth-century education policy assumed that continually improving the design specifications for schoolwork – required courses, textbooks, testing instruments, and management systems – would lead to student learning.

The twentieth-century search for a bureaucratic route to the “one best system” of education (Tyack, 1974) was based on the assumptions that students are standardized and that educational treatments can be prescribed. Because most major teaching decisions were to be handed down through administrative channels and encapsulated in packaged teaching materials, teachers were viewed as needing little knowledge or expertise (Darling-Hammond, 1990). In the factory model conception, if it is possible to fix teaching by developing better regulations, there is no incentive to develop better teachers. Because decisions are made at the top of the educational hierarchy, there is no rationale in this kind of organization for substantial teacher preparation or professional development, aside from “in-servicing” designed to ensure more exact implementation of prescribed teaching procedures. The presumption of regularity means that schools are designed to function without major investments in teachers’ professional knowledge and without time for collegial consultation and planning. It is this logic that has allowed policymakers to avoid investing substantial resources in teacher preparation or teacher salaries.

This kind of schooling system may have worked reasonably well many decades ago for helping most students acquire minimal basic skills and prepare for routine work, and for enabling a few to develop higher-order thinking and performance skills. However, it has proved increasingly inadequate to the new mission of schools: teaching large numbers of very diverse learners to think critically, solve complex problems, and master ambitious subject matter content – a task that requires a different, more sophisticated kind of teaching than merely covering the curriculum or “getting through the book” (Darling-Hammond et al., 2008).

In contrast to the assumptions underlying the factory model, a growing body of research suggests that highly skilled teachers are essential to this task, and that perhaps the greatest school influence on student learning is the quality of the teacher. Students lucky enough to have teachers who know their content and how to teach it well achieve substantially more (for reviews, see Darling-Hammond, 2000b; Wilson, Floden, & Ferrini-Mundy, 2002). And the effects of a very good (or very poor) teacher last beyond a single year, influencing their students’ learning for years to come (Sanders & Rivers, 1996). Indeed, expert teachers are the most fundamental resource for improving education.

However, in the United States, teachers are the most inequitably distributed resource. On any measure of qualifications – extent of preparation, level of experience, certification, content background in the field taught, advanced degrees, or scores on college admissions and teacher licensure tests – studies show that students of color, and low-income and low-performing students, particularly in

urban and poor rural areas, are disproportionately taught by less qualified teachers (Darling-Hammond, 2004a; Lankford, Loeb, & Wyckoff, 2002). In many high-minority schools, the most vulnerable students are taught by a revolving door of inexperienced and untrained teachers (NCTAF, 1996).

These disparities are largely a function of the nation's inequitable funding of education, which translates into lower salaries and poorer working conditions for teachers in districts serving the neediest students. The tradition in the United States has been to lower standards rather than to increase incentives when there are too few teachers willing to work under suboptimal conditions. Unfortunately, in these places, especially, the factory model is held in place while other parts of the system strive to create a more productive approach to change.

Cross-Currents in Policy

Over the last 20 years, an alternative vision for education – based on a professional conception of teaching and a more intellectually ambitious conception of learning – has begun to emerge. The profession has engaged in serious standard setting that reflects a growing knowledge base about what teachers should know and be able to do to help all students learn in ways that develop higher-order thinking and performance skills. Some states have successfully launched efforts to restructure schools and to invest in greater teacher knowledge (Lieberman, 1995). New, more effective models of teacher preparation have been created in partnership with schools (Darling-Hammond, 2007; Fullan, 2007). Grassroots networks like the National Writing Project and the Coalition of Essential Schools have helped to support teacher development, reorient curriculum and teaching toward more thoughtful educational goals, and rethink schools. These efforts to build the capacity of teachers differ from past educational change strategies in their concern for building capacity rather than tightening controls over education. In some places, new initiatives are seeking to invest more in the front lines of education – well-prepared and well-supported teachers – rather than in regulations to direct what they do.

Several professionalizing reforms have provided critical linchpins for transforming teaching. The National Board for Professional Teaching Standards (NBPTS) was established in 1987 to certify accomplished veteran teachers through standards and assessments that respect the complex demands of teaching and place student learning at the heart of the enterprise. The board's efforts paved the way for major changes in teacher education, professional development, evaluation, recognition and reward systems, and retention. The prospects for extending these breakthroughs to all teachers are enhanced by the work of more than 30 states and major professional organizations involved in the Interstate New Teacher Assessment and Support Consortium (INTASC). This consortium has established a set of model standards for beginning teacher licensing that are based on the National Board's standards, and is beginning to develop prototype assessments for teacher licensing modeled after those of the board. At least 40 states have adopted these standards

and have begun to invest in stronger teacher education, induction, and professional development systems that could assure learning opportunities for teachers throughout their careers.

Reforms of teacher education have included the creation of hundreds of professional development school (PDS) partnerships between schools and universities, designed to focus on professional preparation for novices and veteran teachers, school-based research linking theory and practice, the improvement of teaching, and the redesign of schooling. The importance of the PDS idea is that it can institutionalize the process of ensuring that entering teachers are supported in learning how to apply complex knowledge in practice in settings that allow for the development of high levels of competence rather than encouraging counterproductive teaching and coping strategies. Such partnership schools also address the age-old problem of educational change: If teacher educators prepare teachers for schools as they are, they will be unable to teach more effectively or help schools become more effective than the status quo permits. PDSs create a means to prepare teachers for schools that do not currently exist in large numbers by combining the work of preservice education, staff development, and school restructuring (Fullan, 1993).

In many of these and other forward-looking schools, pedagogy has become more student centered, and curriculum is aimed at deeper understanding, buttressed by performance assessments of learning that require students to show what they know through applications to authentic problems. Evidence suggests that this kind of teaching – which demands higher-order thinking, consideration of alternatives, and development of intellectual products – develops stronger and more equitable learning on both conventional measures and more complex performance tasks (Darling-Hammond et al., 2008; Lee, Smith, & Croninger, 1995; Newmann et al., 1996). Such teaching is, of course, grounded in a deep understanding of both the demands of disciplined thinking and the learning processes of students.

These promising new initiatives, however, must contend with deeply entrenched barriers. While some states and districts have redefined teaching, learning, and schooling, with strong results for students (see, e.g., Darling-Hammond, 2000b, 2004b; Lieberman, 1995), these efforts have been piecemeal and nonsystematic. Despite recent improvements in some places, teaching as an occupation is still characterized by extremely uneven preparation – some excellent and some very poor; vague and haphazardly enforced standards; submarket wages; chronic shortages in key fields like mathematics and science; high levels of turnover for beginners; and vast differences in resources and performance across classrooms, schools, and communities.

While extraordinary teachers grace many classrooms, others struggle without assistance to learn to teach in ways they themselves have never encountered. The systems responsible for recruiting, preparing, and supporting teachers are generally disconnected from one another and frequently unaware of advances in knowledge that should inform what they do. Teachers in many communities still work in isolation from one another in settings that provide them with little time for collaboration and learning.

Meanwhile, the factory model view of teaching is alive and well, especially in states and districts that have invested the least in high-quality teaching. The view that students are raw materials to be “processed” by schools according to standard specifications has led to a resurgence of policies in many states that seek to drive teaching through standardized tests that are externally developed and scored and tied to tightly scripted teaching materials. In some states and in some of the nation’s largest city school districts, like Chicago, Los Angeles, and Philadelphia, particularly in schools serving the least advantaged students where large numbers of untrained teachers are hired, teacher-proof curriculum attempts have recurred with regularity, despite their lack of success in previous iterations. In the most extreme cases, teachers are supplied with a standardized curriculum outlining the scope and sequence for instruction in each subject in each grade, complete with a pacing schedule showing how much time teachers should spend on each topic and lesson plans for each day of the school year. Grading standards are also prescribed, showing how much weight teachers should give to each type of assignment (also prescribed), and how they should calculate grades. Promotion standards are determined by standardized tests developed to match the curriculum. The assumption is that marching the students through these procedures is all that is necessary to ensure learning. Unfortunately, this kind of teaching cannot address the higher-order thinking and problem-solving skills needed for success in the twenty-first century.

Contrasting Approaches

This lesson has been well learned by societies that top the international rankings in education on such measures as the Program in International Student Assessment (PISA). A study of twenty-five of the world’s school systems, including ten of the top performers, found that investments in teachers and teaching are central to improving student outcomes. These focus on purposeful recruitment; preparation and development; and systemic supports for instruction (Barber & Mourshed, 2007). The highest-achieving countries around the world routinely prepare their teachers extensively, pay them well in relation to competing occupations, and provide them with lots of time for professional learning. They also distribute well-trained teachers to all students – rather than allowing some to be taught by untrained novices – by offering equitable salaries, sometimes adding incentives for harder-to-staff locations.

Supports for High-Quality Teaching

In Scandinavian countries like Finland, Sweden, Norway, and the Netherlands, all teachers now receive 2–3 years of graduate-level preparation for teaching, completely at government expense, including a living stipend. Typically, programs include at least a full year of training in a school connected to the university, like

the professional development school partnerships created by some US programs, along with extensive coursework in pedagogy and a thesis researching an educational problem in the schools. Unlike the United States, where teachers either go into debt to prepare for a profession that will pay them poorly or enter with little or no training, these countries made the decision to invest in a uniformly well-prepared teaching force by recruiting top candidates and paying them to go to school. Slots in teacher training programs are highly coveted and shortages are rare.

Finland has been a poster child for school improvement since it rapidly climbed to the top of the international rankings after it emerged from the Soviet Union's shadow. Leaders in Finland attribute these gains to their intensive investments in teacher education. Over 10 years the country overhauled preparation to focus more on teaching for higher-order skills like problem solving and critical thinking. Teachers learn how to create challenging curriculum and how to develop and evaluate local performance assessments that engage students in research and inquiry on a regular basis. Teacher training emphasizes learning how to teach students who learn in different ways – including those with special needs. The egalitarian Finns reasoned that if teachers learn to help students who struggle, they will be able to teach all students more effectively (Buchberger & Buchberger, 2004).

Policymakers also decided that if they invested in very skillful teachers, they could allow local schools more autonomy to make decisions about what and how to teach – a reaction against the oppressive, centralized system they sought to overhaul. This bet seems to have paid off. Teachers are sophisticated diagnosticians, and they work together collegially to design instruction that meets the demands of the subject matter as well as the needs of their students. Finnish schools are not governed by standardized tests, but by teachers' strong knowledge about how students learn (Laukkanen, 2008).

Top-ranked Singapore, by contrast, is highly centralized, but it treats teaching similarly. Singapore's Institute of Education – the tiny nation's only teacher training institution – is investing in teachers' abilities to teach a curriculum focused on critical thinking and inquiry – the twenty-first-century skills needed in a technologically oriented economy. To get the best teachers, students from the top one-third of each graduating high school class are recruited into a fully paid 4-year teacher education program (or, if they enter after they have already completed college, a 1- to 2-year graduate program) and immediately put on the Ministry's payroll. When they enter the profession, teachers' salaries are higher than those of beginning doctors.

As in other high-ranked countries, novices are not left to sink or swim. Expert teachers are given release time to serve as mentors to help beginners learn their craft. The government pays for 100 h of professional development each year for all teachers in addition to the 20 h a week they have to work with other teachers and visit each others' classrooms to study teaching. Currently teachers are being trained to undertake action research projects in the classroom so that they can examine teaching and learning problems, and find solutions that can be disseminated to others.

And teachers continue to advance throughout the career. With help from the government, Singapore teachers can pursue three separate career ladders that help them become curriculum specialists, mentors for other teachers, or school principals.

These opportunities bring recognition, extra compensation, and new challenges that keep teaching exciting.

In these and other high-achieving countries, schools are organized to support teacher success. Typically, teachers have 15–20 h a week to work with colleagues on developing lessons, participating in research and study groups, and engaging in seminars and visits to other classrooms and schools. Meanwhile, most US teachers have no time to work with colleagues during the school day: They plan by themselves and get a few “hit-and-run” workshops after school, with little opportunity to share knowledge or improve their practice. In their study of mathematics teaching and learning in Japan, Taiwan, and the United States, Jim Stigler and Harold Stevenson (1991) noted that “Asian class lessons are so well crafted [because] there is a very systematic effort to pass on the accumulated wisdom of teaching practice to each new generation of teachers and to keep perfecting that practice by providing teachers the opportunities to continually learn from each other.”

A Focus on Higher-Order Learning

Having well-prepared teachers who focus on continually improving instruction is only part of building an educational system that can respond to twenty-first-century needs. Teachers need to work with students on critical skills that will allow them to transfer and apply their knowledge to new situations, and enable them to learn how to learn. The transmission curriculum that dominated schools for the last 100 years – which assumed a stable body of knowledge could be codified in textbooks and passed onto students who could “learn” it by remembering all the facts – is counter-productive today. Rigid approaches to defining knowledge cannot accomplish what is currently needed. Today’s students need an education that will help them learn how to learn in powerful ways, so that they can manage the demands of changing information, knowledge bases, technologies, and social conditions.

Unfortunately, in the United States, curriculum is still too often defined by standards and textbooks that are, in many states, a mile wide and an inch deep, and by tests that focus on recall and recognition, rather than production and application of knowledge. By contrast, most high-achieving countries teach (and test) fewer topics each year and teach them more thoroughly so students build a stronger foundation for their learning. Their assessments focus on critical thinking and problem solving, whether they are developed nationally (as in the small countries of Japan and Singapore), at the state or provincial level (as in larger countries like Australia, Canada, and China, where Hong Kong and Macao score well on assessments like PISA) or locally (as in top-ranking Finland).

In most cases, these assessment systems combine centralized (state or national) assessments that use mostly open-ended and essay questions with local assessments given by teachers, which are factored into the final examination scores. These local assessments – which include research projects, science investigations, mathematical and computer models, and other products – are mapped to the syllabus and the

standards for the subject and are selected because they represent critical skills, topics, and concepts. They are generally designed, administered, and scored locally. In the United States, by comparison, multiple-choice tests – which focus the curriculum on low-level skills – direct attention to modes of learning that are increasingly out of date. Whereas students in most parts of the United States are typically asked simply to recognize a single fact they have memorized from a list of answers, students in high-achieving countries are asked to apply their knowledge in the ways that writers, mathematicians, historians, and scientists do.

The Road Ahead

These distinctive realities describe a crossroads for American education. There are two futures at hand. One maintains the current features of teaching in the face of major demographic and economic changes and expanding expectations of schools. In the year 2013, 30 years after the issuance of the *Nation at Risk* report, it looks something like this:

Following a brief and familiar flurry of education reform activity in the early 1990s, schools settled back down to business as usual. The education governors had come and gone; educational leaders were relieved to have the proliferation of commission reports shelved and out of the way. A period of teacher shortages was addressed by modest salary increases and increased use of emergency and alternative certification, which brought teachers into classrooms with little initial preparation. Although teacher salaries climbed by 2005 to match the peak levels they had reached in the early 1970s (following the previous teacher shortage), they remained significantly below the salaries of other occupations requiring similar education and training. Many schools of education had substantially improved their programs, producing teachers who were more expert than ever before, but lack of attention to recruitment in high-need fields and locations coupled with continued inequalities in salaries and teaching conditions across states and districts made it difficult to recruit and retain staff in underfunded urban and rural communities.

In rapidly growing, high-immigration states like California that had disinvested in education over many years, tens of thousands of individuals entered teaching on emergency permits, working almost exclusively with low-income and minority students in central city and poor rural school districts. Another 20 states joined the 25 who by then had initiated quick routes into teaching through alternative certification. Many of these programs offered minimal training focused on classroom management and teaching formulas and then assigned recruits as teachers of record, hoping for mentoring that only sometimes materialized. Thus, classrooms, especially in the cities, were staffed. Students' access to highly capable teachers became increasingly inequitable, expanding the already large achievement gap.

Throughout the decade, students in the public education system changed, but schools did not. Great waves of immigration boosted the numbers of poor, minority, and non-English speaking children to more than 40% of public school enrollments.

The vast majority of children in large urban districts were low-income students of color. This made it easier for the broader public to write off these school districts, allowing a steady downward slide in their funding levels while resources were directed to affluent suburbs and private schools.

Because a majority of the teaching staff in city districts had retired, and the large numbers of vacancies were hard to fill at the low salaries offered, shortages led to larger classes and emergency hiring. The many teachers whose formal pedagogical preparation consisted of only a 5-week summer course desperately wanted to address the learning needs of their students, but their knowledge of child development, language acquisition, learning styles, and teaching methods was too skimpy to provide them with adequate ammunition for the job. As schools were increasingly filled with teachers who had never had the opportunity to practice under the guidance of an expert veteran or to study how children learn or how to teach effectively, the quality of practice deteriorated. Because these teachers had so little knowledge about teaching and barely knew how to plan from one day to the next, teacher-proof curriculum packages that had been rejected for their ineffectiveness in the 1980s returned once again to city school systems.

This exacerbated the flight of bright, well-prepared teachers from these systems as they refused to teach according to scripts that they found undermined their ability to teach creatively or to meet individual students' needs. Coupled with the high attrition rates of underprepared teachers, this produced chaotic conditions in many schools, with continuous turnover resulting in the most vulnerable students being taught by a parade of short-term substitutes and untrained, inexperienced teachers for their entire school careers.

The public's periodic concern for low student performance was answered by the enactment of "stiffer" requirements: more frequently administered tests for students to determine promotion, placement, and graduation; more carefully specified grade level objectives and curricular requirements matched to the standardized tests; more rigid procedures for tightening school management; more record keeping requirements for keeping tabs on administration, instruction, and student progress; and more frequent testing of teachers. Accountability systems offered greater sanctions for the growing share of public schools that failed to raise test scores.

Teaching in public schools was increasingly determined by these regulatory requirements rather than by knowledge about teaching and the needs of learners. Teachers taught for the required multiple-choice tests from mandated texts and curriculum packages aligned with the tests. Except in specially segregated programs for the "gifted and talented," affluent public schools, or private schools exempted from state testing requirements, students no longer read books, wrote papers, conducted experiments, or completed projects in class; their learning was structured by worksheets, practice tests, packaged instructional modules, and more practice tests. Businesses looking for high-skilled labor for the growing number of technology jobs increasingly turned to workers educated overseas to fill these positions.

Test-based accountability systems resulted in more students being held back and dropping out. Schools responded to the pressure to raise their test scores by pushing out, holding back, or refusing to admit students who did poorly on the

standardized tests. For many, this increased the appearance of their scores without actually improving the quality of education they provided. Schools that served highly transient students, those with severe learning disabilities, or new immigrants lacking English language skills were increasingly labeled failures in systems that looked at average test scores, rather than the quality of teaching or longitudinal measures of student learning over time. This caused them to lose funding in states that tied dollars to test scores and further undermined their ability to recruit or retain capable teachers. Their students, increasingly treated as society's throwaways, were also unwanted by public schools of choice or the few private schools willing to accept vouchers.

Graduation rates, which had reached nearly 80% by the mid-1990s, began to reverse in the late 1990s and fell to 69% by 2005 and only 60% by 2013. The students who left school were disproportionately African American, Latino, and recent immigrant students who found themselves with few employment opportunities. With less than a high school education, their odds of finding work were less than 1 out of 4 while their odds of being imprisoned were greater than 50%. States with diverse populations and unequal school spending like California, Florida, Georgia, New York, and Texas, where test-based accountability policies were not accompanied by increased school investments, found that their prison populations more than tripled over the decade, further reducing available resources for education. A growing number of states found themselves spending as much on prisons as they spent on higher education. Scores on basic skills tests climbed slowly while scores on tests of higher-order thinking continued to decline. US students continued to perform ever more poorly relative to students in other countries on international assessments; colleges continued to decline in the production of math, science, engineering, and technology graduates; and corporations imported more workers for high-tech jobs, while moving other jobs overseas.

Earlier enthusiasm for reforms gave way to disillusionment and lower school budgets, as middle class parents fled to private schools and the general population, comprised largely of older citizens without children in schools, voted down tax levies for education. Just as the progressive education initiatives of the 1960s had been replaced in the 1970s by a movement to cap taxes for school support and go "back to the basics," so the restructuring rhetoric of the early 1990s gave way to a movement to fund private school vouchers and standardize education in public schools. By the year 2013, public frustration with the schools resurfaced with cries from the business community for employees who could function in an information-based and technological economy. New commissions were born to declare the nation, once again, at risk.

Another future – one that envisions different resolutions of these dilemmas – is possible. In this future, teaching continues its progress toward becoming a profession focused on the needs of students and informed by a growing knowledge base about effective teaching. Efforts to redesign schools to make them more supportive of in-depth learning and strong teacher–student relationships are advanced through public charter initiatives, a small schools movement in big cities, and district-initiated redesign of faltering schools. And strategies to equalize educational

opportunity through litigation and legislation are successful in allocating a fair share of resources to all schools. In the year 2013, a different public education system has emerged. It looks something like this:

Much had changed since the last “crisis” in education during the 1980s. A second wave of reform impelled new coalitions between teachers, school administrators, and teacher educators, all of whom began thinking of themselves as members of the same profession with common goals. They articulated the first professional definition of teaching knowledge through the National Board for Professional Teaching Standards. As more and more teachers undertook the challenge of passing the board’s rigorous assessments and the standards were infused into beginning licensing standards, new assessments for beginning teachers, and teacher education, the board’s vision began to create a consensus about the features of accomplished teaching.

A growing number of teacher education programs, professional development programs, and teacher evaluation strategies began to focus on helping teachers understand and support student learning, rather than marching lockstep through textbooks or implementing routines that were ultimately often ineffective. Over time, teacher educators, teaching mentors, and principals were chosen from among the ranks of board-certified teachers, creating a stronger base of shared knowledge and expertise across the profession as a whole. By returning the role of school leadership to that of the “principal teacher,” it became possible to base decisions in many schools on professional knowledge rather than idiosyncratic beliefs.

The National Board also helped to support the creation of analogous state boards which built upon its standards and assessments to establish more effective systems of teacher preparation and licensure in the states. Universities established 5-year teacher education programs that supported more intense and integrated study of both subject matter content and pedagogy, along with year-long student teaching experiences in professional development schools. Most also created high-quality post-baccalaureate programs of preparation for mid-career entrants into teaching to assure more streamlined coursework and well-mentored entry into teaching for talented individuals who wanted to learn how to make their expertise accessible to young people. Districts created well-supported internships for new teachers, with expert mentors who could continue to guide their on-the-job learning after they had completed their master’s degree in teaching. Many states followed the lead of Connecticut, Vermont, Wisconsin, and California to establish beginning teacher programs that coupled mentoring with portfolio assessments that both boosted teachers’ effectiveness and reduced the early attrition that had long plagued teaching. The new cohort of teachers – over a million of them – was better prepared than any that had preceded them.

Teacher shortages were met with higher salaries and differentiated staffing arrangements. These responses also began to change the shape of school organizations and the allocations of school resources. As bureaucratization had taken hold in American schools after 1950, classroom teachers comprised an ever smaller share of school employees (just over 40% by the mid-1990s, as compared to 60–80% in other industrialized countries), and teachers’ salaries had dipped to only 36% of the total education budget. This trend was reversed as salaries climbed to a level

comparable with other occupations for college-educated workers, and schools began to invest in quality teaching rather than futile efforts at teacher-proofing.

As the supply of prospective teachers willing and able to undergo rigorous preparation programs grew and the qualifications of teachers increased, the perceived need to spend large portions of education budgets on massive control and inspection systems diminished. Long hierarchies that had grown to design, regulate, and monitor teaching flattened out. The plethora of special categorical programs and pullout approaches which had pulled resources to the periphery of the classroom and fragmented the lives of students and schools were replaced by investments in the front lines of the classroom: more and better-trained teachers supported by new technologies and more time with the students they sought to teach. Teachers took on more professional responsibilities for mentoring, curriculum development, school improvement, and assessment design and scoring, and schools took on new shapes conducive to professional teaching.

As in other professions, differentiated roles and responsibilities emerged as a means for balancing the requirements of supply and qualifications. Most practitioners worked in teams which jointly assumed responsibility for groups of students. This supported both collaborative planning, which improved the quality and coherence of instruction across classrooms, and greater accountability for the overall welfare and progress of students. Those less extensively trained practiced under the direct supervision of career professionals, performing more routine tasks for which they had been prepared. Many of these were in teachers-in-training working in the classrooms of expert teachers. In settings where, for example, three professional teachers and two instructors were responsible for 100 students over 2–3 years, many possibilities emerged for developing collegial learning, for assuring effective supervision, for organizing large- and small-group instruction, for consulting about teaching plans and decisions, and for developing strategies to meet individual children's needs. Not incidentally, such structures promoted the kinds of consultation and peer review of practice that are central to a professional role.

Teachers began to insist on selecting and inducting their peers, and on collective decision making in schools over the best uses of knowledge and resources to meet students' needs. Professional knowledge and effectiveness grew as serious induction, sustained professional development, and collaboration in problem-solving replaced the sink-or-swim, closed door ethos of an earlier era.

Instructional practices changed, too. As schools became more learning centered and teachers more skilled, the conveyor belt approach to processing students gave way to more varied and appropriate methods of teaching and learning. All adults in schools served as advisors to small numbers of students for whom they became family liaisons and in-school advocates to assure personalized attention to students' progress and needs. Lectures, text questions, and worksheets were no longer the preponderant school activities: though still used when appropriate, these strategies were augmented by cooperative and experiential learning opportunities, projects, research activities, debates, essays, and exhibitions that encouraged students to construct and solve intellectual problems, engaged students of varied learning styles, and created more meaningful and useful ways by which to assess students' progress.

With the help of their teachers and advisors, students worked intensely on exhibitions of their learning, including graduation portfolios that demonstrated their abilities to conduct scientific inquiries, evaluate and produce works of literature and art, research and understand social science concerns, frame and solve mathematical problems, and contribute responsibly to their communities. Some of these pieces of work were evaluated as part of district and state assessment systems, which also included common tasks that asked students to demonstrate their reading, writing, and mathematical skills in the more authentic ways pioneered by Vermont, Maryland, Kentucky, and Connecticut during the 1990s.

A wide variety of more productive approaches to organizing the school day and the school year and to grouping students gave individual teachers and students more time together, reducing the pull-outs, pass-throughs, start-ups, and wind-downs that had stolen teaching time and decreased teachers' capacity to come to know students well. Like schools in other high-achieving countries, American schools enabled teachers to stay with the same students for longer blocks of time over more than 1 year, structured collaborative planning within and across disciplines, and reduced the total number of teachers students were expected to encounter. Schools became smaller and more personalized. Fewer students fell through the cracks.

Incentives to attract the most expert teachers to the profession's greatest needs and challenges also emerged. Following the lead of the successful new schools movements in New York, Chicago, Cincinnati, San Antonio, and Oakland, master teachers redesigned inner-city schools as smaller, more communal places where partnerships with parents and communities were joined with expert professional practice. In a set of these schools that served as professional development schools, school- and university-based faculties coached new teachers, put research into practice – and practice into research – and put state-of-the-art knowledge to work for children. Equity and excellence became joined with professionalism.

By the year 2013, a renaissance had occurred in American education. The best American students performed as well as students anywhere in the world. The vast majority of students graduated with not only minimal basic skills, but with the capacity to write, reason, and think analytically. Complaints from the business community about the quality of graduates subsided for the first time since World War II. And for the first time since the beginning of the twentieth century, a decade was launched without a chorus of commission reports crying crisis in the American public schools. The road taken, as it turned out, was the one that finally made a difference.

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Part III

Levels of Change

The Legacy of the School Effectiveness Research Tradition

Charles Teddlie

Writing about the “legacy” of any field of research is a daunting task. This is especially the case for “school effectiveness research,” which has a complex (and sometimes controversial) history. What does “legacy” in this context mean? A legacy is something that is handed down from a previous generation or time to the current generation or time. In academic research, a legacy may be defined as that which is handed down from a preceding group of scholars, including the existing body of knowledge that is relevant and continues to be used.

My version of the legacy of the school effectiveness research tradition focuses not only on the past, but also the future. While the field itself is almost 40 years old, I believe that it will continue to evolve in the twenty-first century because the subject matter it addresses is as relevant today as it was in the early 1970s. In fact, the actual “subject matter” that school effectiveness research encompasses has often been disputed, so that is as good a place as any to start the discussion.

In the following chapter, I (1) define school effectiveness research (SER) and other related fields, (2) list and define eight aspects of the legacy of SER, (3) discuss a future research agenda for SER, and (4) briefly discuss criticisms of SER.

What Is School Effectiveness Research?

There are several overlapping areas of study associated with school effectiveness and school improvement, including SER, school improvement research, school effectiveness and improvement, educational change research, educational effectiveness research,¹ and teacher effectiveness research. It is sometimes difficult to distinguish among the issues addressed or the contributions made by researchers

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¹“Educational effectiveness research” is an inclusive term that combines the simultaneous study of school and teacher effectiveness processes (e.g., Creemers & Scheerens, 1994; Scheerens & Bosker, 1997). I use that term instead of school effectiveness occasionally in this chapter.

from these different fields. The specific names used to describe the area of research often depends on the particular orientation of the researchers involved, while many of the research results across the areas are similar to one another.

In order to define SER for this chapter, I use a description by Reynolds, Teddlie, Creemers, Scheerens, and Townsend (2000, p. 3) from the *International Handbook of School Effectiveness Research*. They indicated that SER was composed of three related areas of study: effective schools research, school effects research, and school improvement research.

For the purposes of the current discussion, I limit the definition of SER to effective schools research and school effects research, which may be defined as follows (Teddlie & Stringfield, 2007, p. 137, italics added):

- *Effective schools research*. This research is concerned with the processes of effective schooling and, in its initial phases, involved the generation of case studies of outlier schools that produced high achievement scores for students living in poverty. Cumulative results from effective school research have resulted in detailed descriptions of effective school characteristics across a variety of contexts. The best known findings from SER come from these studies.
- *School effects research*. This research involves the study of the scientific (or foundational) properties of school effects (e.g., the existence and magnitude of school effects, the consistency and stability of school effects). The initial studies in this area involved the estimation of the impact of schooling on achievement through regression-based input–output studies in economics and sociology. This branch of SER has always placed an emphasis on methodological issues, which has become a hallmark of the tradition.

School improvement research (SIR) *is not included* as a component in the definition of SER in this chapter, because (1) the definition of SIR found in the broadly defined school improvement literature (e.g., Harris & Chrispeels, 2006) is much more wide-ranging than that provided by Reynolds et al. (2000) and (2) discussion about the relative interdependence of SER and SIR adds an element of complexity that cannot be adequately addressed in this chapter.

Reynolds et al. (2000, p. 3, italics added) defined the school improvement component of SER as “... examining the processes whereby schools can be changed *utilizing increasingly sophisticated models* that have gone beyond simple applications of school effectiveness knowledge to sophisticated ‘multiple lever’ models.” Harris and Chrispeels (2006, p. 7) have identified Improving the Quality of Education for All (Hopkins, West, & Ainscow, 1996), High Reliability Schools (Reynolds, Stringfield, & Schaffer, 2006), and the Manitoba School Improvement Program (Earl, Torrance, & Sutherland, 2006) as examples of school improvement models that “draw upon . . . robust evidence . . . to produce interventions that were solidly based on tried and tested practices.” It is the testing of such models that Reynolds et al. (2000) were referring to when they included school improvement as the third component of SER.

The larger field of SIR, on the other hand, is much more broadly defined than the research-oriented testing of well-established models for improvement. For example, Harris and Chrispeels (2006), building on the earlier work of Hopkins and

Reynolds (2001), concluded that there have been five distinct phases of SIR since the 1980s, with recent phases concentrating on the “scaling up” of reforms, the role of districts and local education agencies in educational reform, networked learning communities, and so forth.

The issue of the relationship between school effectiveness and school improvement has been further complicated by country or regional differences in describing it. After a period of productive collaboration during the 1980s, the two fields of SER and SIR appear to have gone down separate paths in the USA, although some researchers (e.g., Chrispeels, 1992; Datnow, Lasky, Stringfield, & Teddlie, 2006) have produced works that successfully integrate both areas. Over the past 15–20 years, a large number of reformers and scholars in the USA have participated in SIR through successive waves of reform, including the restructuring movement and comprehensive school reform. A much smaller number of researchers have continued to work in the various subfields that have emerged within SER.

This split also occurred in other countries, such as the UK where there has been an intellectually stimulating debate on the linking of SER and SIR since the 1990s (e.g., Hopkins & Reynolds, 2001; Reynolds, Hopkins, & Stoll, 1993).² Stoll and Sammons (2007, p. 211) examined how the two areas are “growing together” when they discussed “. . . efforts to explore specific aspects of effectiveness and improvement and how effectiveness and improvement play themselves out differently in diverse situations, requiring differentiated strategies.” On the other hand, Creemers (2007, pp. 229, 236), writing about the rest of Europe outside the UK, concluded that “the research and improvement processes are not related to one another” although their integration “is still an important (and so far unresolved) problem.”

Given the complicated relationship between SER and SIR, the content of this chapter is limited to the legacies of effective schools research and school effects research. Nevertheless, it is assumed that SER (particularly effective schools research) has influenced, and continues to have an effect upon, SIR.³ This influence is alluded to throughout this chapter.

Eight Aspects of the Legacy of the School Effectiveness Research Tradition

A number of scholars have written about the overall contributions of the SER literature in terms of scholarship and practice (e.g., Hopkins, 2001; Mortimore, 2001; Murphy, 1992; Reynolds, 2007; Sammons, 1999; Scheerens & Bosker, 1997; Teddlie & Reynolds, 2000; Teddlie & Stringfield, 2007). These contributions have come from both effective schools research and school effects research, although

²Hopkins and Reynolds (2001) and Reynolds (2007) noted three areas where SER and SIR are united: focusing upon student outcomes, building capacity among practitioners to act on the contents of knowledge bases, and ensuring that attempts to help schools are “reliable” in that they are true to the designs of the implementers.

³Townsend (2007) edited a two-volume handbook that attempted to tie together the school effectiveness and improvement fields across seven broadly defined areas.

input from the former is more immediately recognizable. The following section presents eight aspects of the SER legacy that these scholars have portrayed in their writings.

Aspect #1 of the SER Legacy: The Volume of Research that Has Emerged from It over the Past 35–40 Years

Perhaps the most important aspect of the SER legacy is the existing body of both effective schools studies and school effects research. This international literature includes a handful of major studies, hundreds of smaller studies, several insightful reviews, and a body of critical reactions. The collective results from the field of SER can be applied to a broad array of educational issues and problems.

For example, Cawelti (2003) declared Edmonds' (1979) effective schools research to be one of the eleven studies that has had "the greatest impact on education" in the USA over the past 50 years. The impact of Edmonds' research was due largely to its replicability and ability to inspire educators working in difficult circumstances: "... several investigators replicated the research by using these findings, and the study influenced thousands of educators working in schools in which students from low-income families tended to achieve less well than others" (Cawelti, 2003, p. 19).

Effective schools research can be subdivided into the separate literatures associated with nine effective schools processes, which are summarized in Table 1. This table demonstrates the evolution of the effective schools research database by comparing

- Column #1, which lists the original five effective schools "correlates" from a publication by Edmonds (1979) based on research that he and others conducted in the 1970s
- Column #2, which lists an expanded set of nine effective schools "processes" and their "sub-processes" (Reynolds & Teddlie, 2000b) that summarized around 30 years (1970–2000) of effective schools research in both the UK and the USA
- Column #3, which lists five school-level factors used in Marzano's (2003, 2007) contemporary research synthesis entitled *What Works in Schools: Translating Research into Action*. These factors represent the essence of effective schools research, as it is contemporaneously presented by organizations such as the Association for Supervision and Curriculum Development in the USA.

School effects research can also be subdivided into the separate literatures associated with seven different types of "scientific properties" that are summarized in Box 1. Some of these literatures (e.g., those associated with the existence, magnitude, and context of school effects) have been very important in the evolution of SER.

Table 1 Correlates, factors, and/or processes associated with effective schools

Original correlates Edmonds (1979)	Effective schools processes and sub-components Reynolds and Teddlie (2000b)	School-level factors Marzano (2003, 2007)
1. Strong administrative leadership	1. The processes of effective leadership - Being firm and purposeful - Involving others in the process - Exhibiting instructional leadership - Frequent, personal monitoring - Selecting and replacing staff	1. Collegiality and professionalism - Leadership - Cooperation
2. Emphasis on student acquisition of basic skills	2. Developing and maintaining a pervasive focus on learning - Focusing on academics - Maximizing school learning time	2. Guaranteed and viable curriculum - Opportunity to learn - Time
3. Orderly climate conducive to learning	3. Producing a positive school culture - Creating a shared vision - Creating an orderly environment - Emphasizing positive reinforcement	3. Safe and orderly environment
4. High expectations for students	4. Creating high (and appropriate) expectations for all - For students - For staff	4. Challenging goals and effective feedback - Pressure to achieve - Monitoring
5. Frequent monitoring of student progress	5. Monitoring progress at all levels - At the school level - At the classroom level - At the student level	Marzano's (2003, 2007) teacher-level factors include instructional strategies, classroom management
	6. Involving parents in productive and appropriate ways - Buffering negative influences - Encouraging productive interactions with parents	
	7. The processes of effective teaching - Maximizing classtime - Successful grouping and organization - Exhibiting best teaching practices - Adapting practice to particulars of classroom	
	8. Developing staff skills at the school site - Site based - Integrated with ongoing professional development	
	9. Emphasizing student responsibilities and rights - Responsibilities - Rights	

The five original correlates were taken from Edmonds (1979). The processes of effective schooling were adapted from Reynolds and Teddlie (2000, p. 144), which was developed by extracting the common elements from two other reviews: (a) Levine and Lezotte (1990) and (b) Sammons, Hillman, and Mortimore (1995). The column labeled "school-level factors" was adapted from Marzano (2003, p. 19).

Box 1 The “Scientific or Foundational Properties” of School Effects and the Questions They Pose (Adapted from Teddlie, Reynolds, & Sammons, 2000, p. 56)

- *Existence of school effects*: What are school effects (i.e. are we measuring what we intended to measure)? Did something actually occur as a result of schooling?
- *Magnitude of school effects*: How large are school effects? (With student or school as unit of analysis.)
- *Context effects (between schools)*: Are effect sizes consistent across schools that vary by socioeconomic status of students, community types, governance structures, phases of schooling, country, etc.?
- *Consistency of school effectiveness indices at one point in time*: Do we have consistent multiple measures of school effectiveness (e.g. across achievement, behaviors, attitudes)?
- *Stability of school effectiveness indices across time (school as unit of analysis)*: Are our measures reliable across time? Do schools stay consistently effective (or ineffective) across time?
- *Differential effects (within schools)*: Are schools differentially effective for groups of students within schools? Are school effects generalizable within schools? Are schools differentially effective across subject areas?
- *Continuity of school effects (student as unit of analysis)*: Do school effects at earlier phases of schooling for students persist into later phases?

Aspect #2 of the SER Legacy: The Understanding that Schools Matter in the Education of Students (or, that Different Schools Have Different Effects on the Education of Their Students)

When SER began in the 1970s, the prevailing belief was that schools could not alleviate the effects of social problems such as poverty on students' learning. Mortimore (2001, p. 86) concluded that this belief came from two sources: (1) academic influences such as the sociology of education, which was prominent in the UK from the late 1950s, and the “discovery” of the importance of poverty in the USA in the 1960s (Silver, 1994) and (2) the results from the Coleman Report (1966) and similar research by Jencks et al. (1972),⁴ which reinforced the belief that “. . . schooling

⁴Jencks et al. (1972) concluded that reducing cognitive inequality (through better schooling and other mechanisms) would not do much to reduce economic inequality. Jencks and Philips (1998, p. 4) recanted that conclusion because (according to them) “the world has changed.” For example, these authors concluded that eliminating the black–white test score gap in the USA would also reduce the black–white earnings gap considerably based on evidence accumulated since the 1970s.

could play only a minor role in countering the influence of social class and family background” (Mortimore, 2001, p. 86).

The results from SER beginning in 1970s led Reynolds et al. (2000, p. 3, italics added) to conclude that

From the position thirty years ago that ‘schools make no difference’ that was assumed to be the conclusions of the Coleman et al. (1966) and Jencks et al. (1972) studies, there is now a widespread assumption internationally that schools affect children’s development, that there are observable regularities in the schools that ‘add value’ and that the task of educational policies is to improve all schools in general, and *the more ineffective schools in particular*, by transmission of this knowledge to educational practitioners.

The research studies that demonstrated that “schools make a difference” included school effects research examining the existence and magnitude of the school effect (see Box 1), case studies conducted in the effective schools tradition, and more complex mixed-methods SER, typically involving longitudinal designs. Several literature reviews summarizing evidence regarding the size of school effects were in basic agreement on the following points by the end of the 1990s (e.g., Bosker & Witziers, 1996; Scheerens & Bosker, 1997; Teddlie, Reynolds, & Sammons, 2000):

- the size of school effects was estimated at between 8 and 16% of the variance in student achievement, depending on factors such as the country where the study occurred and the grade level of schooling (with effects in elementary schools being larger than those in secondary schools)
- the magnitude of school effects appears to be larger in longitudinal studies as opposed to cross-sectional studies (e.g., Raudenbush, 1989)
- the magnitude of school effects appears to be somewhat higher in studies conducted in the USA than in Europe; in general, the size of the school effect is considerably larger in less-developed countries than in more-developed countries (e.g., Bosker & Witziers, 1996; Heyneman & Loxley, 1983),⁵ which is known as the Heyneman-Loxley effect
- the magnitude of teacher effects is larger than that of school effects when both are entered into multilevel models (e.g., Scheerens & Bosker, 1997; Teddlie et al., 2000); together they explain a sizeable amount of the variance in student achievement.

These existence and magnitude studies are examples of research concerned with the scientific (or foundational) properties of school effects.

The initial effective schools case studies were conducted in urban, low-socioeconomic (SES), elementary schools because researchers believed that success stories in those environments would dispel the belief that schools made little or no difference. Weber (1971), in a classic study from this period, conducted extensive

⁵Heyneman and Loxley (1983) conducted an international study of twenty-nine countries and concluded that “. . . the lower the income of the country, the weaker the influence of pupils’ social status on achievement. Conversely, in low-income countries the effect of school and teacher quality on academic achievement in primary schools is comparatively greater.” (p. 1162)

case studies of four low-SES, inner-city schools characterized by high achievement at the third grade level. His research emphasized the importance of the actual educational processes ongoing at those schools. The characteristics (correlates) which described more effective schools in these case studies were later codified by Edmonds and others.

The more complex mixed-methods SER studies, typically involving longitudinal designs, include the Inner London Educational Authority studies conducted first in secondary schools (Rutter, Maughan, Mortimore, & Ouston, 1979) and later in elementary schools (Mortimore, Sammons, Stoll, Lewis, & Ecob, 1988); an elementary school study in Michigan (Brookover, Beady, Flood, Schweitzer, & Wisenbaker, 1979); and an elementary school study conducted in Louisiana (Teddlie & Stringfield, 1993). The titles, or sub-titles, from the books based on these studies demonstrate the importance of Aspect #2 of the SER Legacy: *Schools can make a difference* (Brookover and colleagues), *School matters* (Mortimore and colleagues), *Secondary schools and their effects on children* (Rutter and colleagues), and *Schools make a difference* (Teddlie and Stringfield).

Aspect #3 of the SER Legacy: School Effectiveness Research Assumes that Schools (Faculty, Administration) Should Take More Responsibility for the Education of Their Students

If “schools matter in the education of students” (Aspect #2 of the SER legacy), then it follows that faculty and administrators should take responsibility for the education of their students. This position of SER, of course, directly contradicts the belief that schooling plays at most a minor role in mitigating the influence of family background and SES, as British sociologists of education believed and as other critics have continued to assert.

Several authors have commented upon this aspect of the SER legacy, including Hopkins (2001, p. 48) who stated that “The movement has been insistent that the school community takes a fair share of the responsibility for what happens to the youth in its care.” Similarly, Reynolds (2007, p. 474) stated that SER encourages “... a focus upon factors within the educational system, rather than the broader social and environmental factors, that can affect pupils.”

There continues to be a disagreement between SER researchers and their contemporary critics (e.g., Thrupp, 1999, 2001) with regard to the importance of schools’ potential influence on the success of their students. The critics contend that SER researchers are misleading their readers by exaggerating the influence of the school and downplaying the importance of student SES, as discussed in the last section of this chapter.

While SER researchers agree that social class has a large impact on achievement, they conclude that this makes the efforts of teachers and administrators to improve lower-SES schools (and instruction in their classrooms) even more important (e.g., Teddlie & Reynolds, 2001). It is the continuing belief that teachers and schools can,

and should, take more responsibility for their students' achievement that constitutes this part of the legacy of SER.

Aspect #4 of the SER Legacy: The Understanding that the School Is the Major Unit of Change in Educational Reform

Murphy (1992, p. 101) concluded that “To the effective schools movement goes much of the credit for recognizing the school as the major unit of change.” The idea of the school as an “organic whole” (e.g., Murphy, 1992; Purkey & Smith, 1983) indicates that improvement efforts should be aimed toward changing the totality of the school. Furthermore, since “schools are differentially effective . . . This leads to the conclusion that schools at different levels of effectiveness require different school improvement plans” (Hopkins, 2001, p. 162).

Given the layered or “nested” nature of educational systems, other proximal units to schools include classrooms and districts. Marzano (2003, p. 10) concluded that “the school (as opposed to the district) is the proper focus for reform” echoing “a consistent conclusion in the research literature” (e.g., Scheerens & Bosker, 1997; Reynolds & Teddlie, 2000b; Wang, Haertel, & Walberg, 1993). While districts⁶ can play an important supporting (and buffering) role in school improvement (e.g., Hopkins, 2001; Harris & Chrispeels, 2006), the school is the level at which true changes in the “teaching–learning core” (Fullan, 1991) are generated. The school is the unit that guides most of the essential organizational and developmental activities of students.

Staff development for teachers is often coordinated by the district, but a true understanding of the overall strengths and weakness of the teachers at a particular school is best generated by administrators and master teachers at the school level. Teacher-level change is most effectively coordinated at the school level, where in-depth evaluations of teacher strengths and weakness can be developed, where an appropriate developmental plan for the overall school can be prepared, and where that program can be effectively initiated.

Aspect #5 of the SER Legacy: School Effectiveness Research Has Provided Much of the Foundation (the Underpinnings) for Authentic School Improvement

Hopkins (2001, p. 48) succinctly summarized this aspect of the SER legacy when he stated that “. . . the contribution of the effective school research to authentic school improvement is indeed highly significant.” Hopkins' conclusion came from his review of the international literature, with an emphasis on research from the UK.

⁶Tymms et al. (2008) recently concluded that education authorities (school districts in the UK) have almost no direct effect on student performance in English primary school and pre-schools.

From the perspective of the USA⁷, the importance of SER to SIR can be summarized chronologically across four periods, which are briefly described in this section of the chapter: (1) the “discovery” of the effective schools correlates and their direct application in schools, (2) effective schools research and its impact upon the restructuring movement, (3) effective schools processes and comprehensive school reforms, and (4) contributions of effective schools research to contemporary school improvement.

The discovery of the effective schools correlates and their direct application in schools occurred during the 1970 to late-1980s period. School improvers took Edmonds’ five correlates and translated them into improvement programs in urban districts such as New York (Clark, & McCarthy, 1983) and Milwaukee (McCormack-Larkin, 1985).

Brookover and his colleagues (1982) developed an in-service program for school improvement based on effective schools research and other related research. He integrated findings from SER, teacher effectiveness research, cooperative learning, and other areas (e.g., principles of reinforcement, parental involvement.) Brookover’s eleven-module program (and variants thereof) became the foundation for many research-based school improvement projects throughout the USA.

Taylor (1990) presented a dozen case studies of local schools and school districts that had implemented improvement programs based on effective schools research including projects in Maryland, California, and New York. Lezotte (1990) summarized lessons from these case studies including the important understanding that school improvement programs do not follow a set formula (one size does not fit all).

Effective schools research and the restructuring movement. The era of school improvement associated with school restructuring in the USA is restricted primarily to the decade of the 1990s, beginning in the late 1980s and early 1990s with the publication of several important articles and books (e.g., Elmore, 1991; Lewis, 1989; Murphy, 1991).

The primary message of the school restructuring era was that true educational reform requires “restructuring” of the basic organization of schools. Numerous interventions were associated with restructuring (e.g., Chrispeels, 1992; Murphy & Beck, 1995; Newmann & Wehlege, 1995) including site-based management, interdisciplinary team teaching, transformational leadership, more flexible scheduling, and portfolio assessment.

Effective schools research proved to be important to the restructuring movement, either (1) by providing a research-based foundation for it, or (2) by providing an alternative framework to it for school improvement. Murphy (1992), in an article on SER and school restructuring, described the relationship between effective schools and school improvement:

Educational reform via the effective schools model has established a framework that is quickly becoming a necessary component of any school improvement efforts, especially

⁷I have limited this part of the review to research from the USA, because to consider evidence from other countries would yield a protracted discussion beyond the scope of this chapter.

attempts to improve the education of those students who have been least well served by schooling in the past. In other words, the effective schools movement has contributed essential principles to the larger school improvement literature. (p. 91)

Bickel (1998) writing in the third edition of the *Handbook of School Psychology* commented on the relevance of effective schools research to school restructuring:

As observed, the effective schools work rests on an explicit empirical base. . . the school restructuring reformers have little evidence and few working models of what the future portends. Perhaps the answer lies in the words of Tyack and Cuban (1995): 'Rather than starting from scratch in reinventing schools, it makes most sense to graft thoughtful reforms onto what is healthy in the present system.' (p. 133). If this is so, one of the healthy elements in the current system is the knowledge base provided by the research on effective schools. (pp. 980–981)

While there was some evidence of successful school restructuring (e.g., Newmann & Wehlege, 1995), many reviewers were disappointed with the overall research evidence for a variety of reasons: interventions were often too “scattergun” in nature thus making it difficult to ascertain what intervention caused what effect (e.g., Murphy & Beck, 1995); there was evidence that the restructuring interventions often did not actually deliver the key components of the proposed reform (e.g., Fullan, 1993); and there was evidence that the restructuring reforms often did not penetrate the “teaching–learning core” of the schools and classrooms (e.g., Fullan, 1993; Taylor & Teddlie, 1992; Weiss, 1992). The school restructuring era eventually gave way to comprehensive school reform, which swept the USA following the passage of the federally funded Title I amendments of the late 1990s.

Effective schools research and comprehensive school reform. The decade of the 1990s in the USA also witnessed the emergence of whole school reform, special strategies for school reform, and finally comprehensive school reform (CSR), which is the most commonly used term for school improvement efforts that engage the entire school. The federally funded Title I program, which is earmarked for schools that serve the economically disadvantaged, played a major role in the evolution of CSR as the primary vehicle for SIR in the USA (e.g., Teddlie & Stringfield, 2007).⁸

A publication of the US Department of Education (2002) explicitly describes the relationship between effective school research and CSR:

Comprehensive school reform developed out of the literature on effective schools. While the effective schools research does not prescribe any particular reform effort, it does describe certain components of school reform that appear to lead to improved student academic achievement. These components form the empirical foundation for the comprehensive school reform movement. (U.S. Department of Education, 2002, p. 31)

Therefore, components from the effective schools research summarized in Table 1 have been used, both implicitly and explicitly, in the formulation of

⁸The passage of the Comprehensive School Reform Demonstration amendments to the federal Title I legislation provided additional federal funding to districts, particularly those with Title I schools, to implement comprehensive school reform models.

nationally and locally developed CSR programs. For example, many locally developed programs (which are supposed to be research-tested, research-based, and comprehensive) utilize the well-publicized effective schools model.

Researchers have developed a new CSR named “High Reliability Schools” (Reynolds et al., 2006). A major cornerstone of their school reform involves the “reliability” of schools at multiple levels. This focus on reliability again comes from “school effects” research (e.g., Stringfield & Teddlie, 1991; Teddlie & Stringfield, 1993), which demonstrated that there is less variance in actors’ behaviors in effective schools as opposed to less effective schools. (The importance of the consistency of behavior at all levels of the school is discussed as another one of the aspects of the SER legacy later in this chapter.)

Contributions of effective schools research to contemporary school improvement. SIR in the USA today encompasses a wide variety of initiatives. One commonality across these reform efforts is the contribution (sometimes unrecognized) of SER.

For example, Column #3 from Table 1 presents the school-level factors from Marzano’s (2003, 2007) three-level model for school improvement (school, teacher, student). All five of these factors are cross-listed with well-known effective schools processes in Table 1. Additionally, two of Marzano’s three teacher-level factors (instructional strategies, classroom management) are similar to what Reynolds and Teddlie (2000b) have labeled “Processes of Effective Teaching” (see Column #2 in Row #7 in Table 1). Marzano (2003, p. 1) readily acknowledged that “35 years of research” went into the development of his contemporary model.

On the other hand, the close association between SER and SIR sometimes has the ironic effect that the SER contributions go unrecognized in the SIR literature. Many of the results from SER are so well known and accepted that they have become an unacknowledged part of the “furniture of school reform.” Reynolds et al., (2006) described this as follows:

Paradoxically, the majority of school reform projects now assume the importance of basic school effects dimensions, typically without referencing such areas as ‘instructional leadership’, ‘school culture/climate’ and ‘efficient use of school and classroom time’ to the field. (p. 58)

Aspect #6 of the SER Legacy: The Understanding that Individuals Within More Effective Schools Behave with Greater Consistency than Those in Less Effective Ones, Thereby Eliminating Many of the Negative Behaviors Associated with Ineffectiveness

This is an important understanding that has been acknowledged by researchers and reformers alike (e.g., Hopkins, 2001; Reynolds et al., 2006; Teddlie & Stringfield, 1993). Murphy (1992) described this as a major finding:

One of the most powerful and enduring lessons from all the research on effective schools is that the better schools are more tightly linked – structurally, symbolically, and culturally

– than the less effective ones. They operate more as an organic whole and less a loose collection of disparate subsystems. There is a great deal of consistency within and across the major components of the system . . . (p. 96)

For example, research examining classroom variables (teacher effectiveness indices) within the context of SER have uncovered consistent *mean* and *standard deviation* differences in classroom teaching between schools classified as effective or ineffective (e.g., Crone & Teddlie, 1995; Teddlie & Stringfield, 1993; Virgilio, Teddlie, & Oescher, 1991). Standard deviations reported for teaching behavior were *smaller* in more effective schools than in less effective ones. This result indicates that there are processes occurring at more effective schools that produce more homogeneous or consistent behavior among teachers in which *the lower end of the range of teacher behaviors is eliminated*. There is “intolerance for large negatives” on important behavioral characteristics in more effective schools (Reynolds et al., 2006).

Reynolds (2007) reported that similar results are found in the school improvement literature and that this is especially related to “fidelity of implementation” issues where lack of consistency can be highly problematic. As noted earlier, Reynolds et al. (2006) used the notion of consistency or reliability as the key component of their “High Reliability Schools” CSR.

Aspect #7 of the SER Legacy: School Effectiveness Research Encourages a Focus on the Outcomes of Schooling

Murphy (1992), Hopkins (2001), and many others agree that a focus on outcomes is part of the legacy of SER. This, indeed, is one of the original “effective schools correlates” (frequent monitoring of student progress) that has become a “part of the furniture” of school reform over the past 30 years, especially with the advent of widespread quantitatively oriented accountability systems in many countries (e.g., Fitz-Gibbon & Kochan, 2000).

This legacy has had both positive and negative repercussions. It is important to remember that relatively little attention was paid to educational outcomes, as we conceptualize them today, when SER emerged in the 1970s. According to Murphy (1992), educational quality was historically defined in terms of the wealth of the school (e.g., the extra resources that financial resources could bring) and the SES status of students attending the school. Murphy (1992) concluded that

The effective schools movement was the first collective effort to challenge this prevailing view of assessing quality . . . Effective schools advocates argued persuasively that rigorous assessments of schooling were needed and that one could judge the quality of education only by examining student outcomes, especially indices of learning. (pp. 94–95)

From a research perspective, quantifiable learning outcome variables (rather than reputational indices) were necessary to accurately identify which schools were more effective, and which were less, and to learn from them accordingly. From a

practice perspective, it is valuable to have better indices of which particular elementary/secondary schools are doing more or less well on quantifiable indicators so that strategies and resources for improvement can be marshaled and allocated. These benefits of a focus on educational outcomes are obvious to most educators and parents.

Difficulties arise, however, when schools are ranked on their absolute, unadjusted scores on achievement tests rather than on value-added indices (e.g., Fitz-Gibbon & Kochan, 2000; Fitz-Gibbon & Tymms, 1996).⁹ Since unadjusted scores do not take into account student differences in SES, higher-SES schools will typically do better than lower-SES schools on these achievement measures. Results from such unadjusted scores, such as the well-publicized “schools league tables” in the UK are inherently inaccurate measures of the schools’ true effectiveness levels.

“Teaching to the test” is another example of the negative consequences that accountability systems, particularly those with high-stakes testing (i.e., where passing or failing determines decisions such as promotion or graduation) can generate. Public pressure on schools, teachers, and students to do well on tests can lead teachers to tailor or restrict instruction to only those content areas that will be tested, thereby significantly reducing the breadth of the curriculum presented to the students. Additionally, the excessive pressure applied to students, teachers, and principals in some contexts is another unintended negative consequence of mandatory school accountability systems.¹⁰

While there are many powerful societal and educational factors at work in generating school accountability systems, SER must be identified as one of the early historical reasons for the current emphasis on testing. Researchers examining the processes of effective schools, or the characteristics of school effects, should be more aware in the future of the potential unintended negative consequences of their activities.

Aspect #8 of the SER Legacy: The Understanding that Effective Schools Processes Vary According to Important Context Variables and Change Over Time

An early recognition of the importance of context in both SIR and SER began with the Rand Change Agent Study in the 1970s, which focused on three stages of the change process: initiation, implementation, and incorporation. The study revealed the importance of local contexts particularly in the implementation stage.

⁹Value-added indices measure outcomes of schooling *in terms of the changes brought about during the period of schooling rather than in terms of absolute levels* (Fitz-Gibbon & Kochan, 2000, p. 264, italics in original).

¹⁰The need for multiple outcome measures of effective schooling (besides academic achievement) has also been discussed often in the SER literature (e.g., Levine & Lezotte, 1990; Rutter et al. 1979; Sammons, 1999).

McLaughlin (1990, p. 12) concluded that the study “demonstrated that the nature, amount, and pace of change at the local level was a product of local factors that were largely beyond the control of higher-level policymakers.” Successful implementation of projects in the Rand Change Agent Study required mutual adaptation of the reform parameters and the local context (e.g., Berman & McLaughlin, 1976).

The consideration of context factors in SER began with school effects studies conducted by Murnane (1981) in the USA and Willms (1986) in the UK which demonstrated that the SES of a school’s student body had an effect (positive or negative) on the performance of an individual student after taking into account the SES of that individual student. For example, results from these studies indicated that students of all ability levels tended to benefit in terms of their own academic achievement from attending higher-SES schools. This finding was labeled the “school composition effect” in the UK literature.

Context effects (e.g., Teddlie, 1994), which is one of the scientific properties of school effects defined in Box 1, became an important issue in effective schools research in the late 1980s as indicated by the following quote:

Context was elevated as a critical issue because the conclusions about the nature, behavior, and internal characteristics of the effective (urban elementary) schools either did not fit the intuitive understanding that people had about other schools or were not replicated in the findings of research on secondary and higher SES schools. (Wimpelberg, Teddlie, & Stringfield, 1989, p. 85)

A more methodologically sophisticated era of effective schools research began with studies (e.g., Evans & Teddlie, 1995; Hallinger & Murphy, 1986; Teddlie & Stringfield, 1985, 1993; Virgilio, Teddlie, & Oescher, 1990) which explicitly explored the differences in effective schools processes that occur across different school contexts, instead of focusing upon one particular context (i.e., Edmonds’ research into effective schools in urban, low-SES, elementary environments).

Context factors examined in SER have included (1) the SES of students attending schools, (2) the community type of school, (3) the grade phases of schooling, (4) the governance structure of schools, and (5) the countries in which schooling occurred. Studies examining differences in effective schooling practices at sites serving students with different SES backgrounds (e.g., Hallinger & Murphy, 1986; Teddlie & Stringfield, 1985, 1993) found important disparities between the lower-SES and higher-SES schools in terms of curriculum, student expectations, principal leadership style, and parental involvement.

Our understanding of the same phenomenon may also differ across time, which is another context variable. For example, Murphy (1992, p. 93) concluded that “. . . the correlates are likely to undergo significant alterations . . . correlates such as leadership and monitoring will change as the organizational and governance structures of schools are altered and as our knowledge of the teaching–learning process evolves.”

For example, change in the definition of a school effectiveness process (i.e., instructional focus) across time is presented in information located in the row labeled #2 in Table 1 which

- starts with the Edmonds (1979) correlate which “emphasized student acquisition of basic skills” that was based on research conducted primarily in low-SES, urban, elementary schools (Column #1 in Row #2)
- was expanded to a “pervasive and broadly understood instructional focus” in a US General Accounting Office publication (1989) that included a large number of research studies some 10 years after Edmonds’ publication (this source was *not* included in Table 1)
- was delineated further into “developing and maintaining a pervasive focus on learning,” which was then broken into two distinct components (“focusing on academics” and “maximizing school learning time”) based on a synthesis of over 30 years of research in the USA and the UK (Reynolds & Teddlie, 2000b) (Column #2 in Row #2)
- with a final, contemporary articulation of a “guaranteed and viable curriculum” was broken down into “opportunity to learn” and “time” (Marzano, 2003, 2007) (Column #3 in Row #2)

The evolution of the “instructional focus” effective schools process is a good example of the power of a context variable (time) to alter our understanding of a basic educational phenomenon.

A Brief Research Agenda for Future School Effectiveness Research

General Considerations About the Future of School Effectiveness Research

There are a number of other aspects of the legacy of SER that space limitations do not allow for inclusion here, including methodological advances in both school effects research and effective schools research over the past 40 years.¹¹ Instead of listing other legacies, I briefly present some considerations of a future research agenda for SER.

For each process and sub-process in Table 1 and for each scientific property of school effects in Box 1, there is a legacy of research and there is more research to be done. Each of the 16 areas found in those two graphics (nine effective schools processes and seven scientific properties) represents a topic area that could be researched further.

Even well-researched areas, such as the magnitude of school effects, can be examined further by utilizing context-specific research. For instance, we do not

¹¹These methodological advances in SER include the inclusion of more sensitive measures of classroom input; the development of social psychological scales to measure school processes; the utilization of more sensitive outcome measures; multilevel statistical modeling; longitudinal designs; and mixed methods designs. See Teddlie and Stringfield (2007) for more details.

know much about the overall magnitude of the school effect in the People's Republic of China (a specific country context), or more specifically about the magnitude of school effects in the urban and rural areas in that country (specific "community type" contexts).

Specific Considerations About the Future of School Effectiveness Research

In the remainder of this section, I briefly discuss potentially fruitful areas of research in contemporary SER. There are other ones, but these appear to be among the most salient at this point in time.

(1) *Further research into context effects in SER.* As described above (Aspect #8 of the SER Legacy), context effects have been important variables within SER for the past 20 years (e.g., Teddlie, Stringfield, & Reynolds, 2000). Thrupp, Lupton, and Brown (2007) have argued for the further study of context variables (which they call the "contextualization agenda") in school effectiveness and improvement and have further recommended expansion of the number of context variables studied beyond those listed earlier in this chapter.

I briefly discuss a future research agenda for two context variables (the SES of students attending schools and the countries in which schooling occurs), because there has been recent research activity in each of these areas. While I focus on these two areas here, the reader should be aware that research in the other specified context areas is also ongoing.

Representative twenty-first century research related to the SES of student body includes the following:

- Nash (2003) tested the existence of the school composition effect using secondary data from the UK
- Harker and Tymms (2004) examined the school composition effect on student outcomes using secondary school data from New Zealand and primary school data from England
- Peetsma, van der Veen, Kopman, and van Schooten (2006) examined the effect of class composition on primary school students' cognitive development in the Netherlands
- Thrupp et al. (2007) reviewed the results from two qualitative studies of the impact of school composition conducted in New Zealand and England

These studies demonstrate the continued heuristic value of the "school (and class) compositional effect" on indices of academic achievement and other outcomes some 20–25 years after these studies first appeared (e.g., Murnane, 1981; Willms, 1986). This is an area of research which will continue to expand as better conceptualizations of what truly constitutes a school composition effect emerge and as mixed-methods techniques are developed to more thoroughly examine the phenomenon.

The study of country as a context variable in SER occurs in international studies involving comparisons among two or more countries. The International School Effectiveness Research Project is an example of an international study aimed at examining school (and teacher) effectiveness practices across multiple (i.e., nine) countries (Reynolds, Creemers, Stringfield, Teddlie, & Schaffer, 2002). While these studies yield information that can potentially transform SER, they are difficult to conduct and require a level of funding that is largely unavailable now. Bilateral SER is much easier to conduct and will likely become more prevalent in the future.

There has been a long-term trend in SER toward the internationalization of the field. Numerous authors have described different aspects of this movement toward the “globalization” of SER (e.g., Mortimore, 1991, 2001; Teddlie & Reynolds, 2000). For example, the journal *School Effectiveness and School Improvement* has published articles about SER from a wide variety of international settings, especially since calendar year 2000.¹²

Despite this trend toward internationalization,¹³ most of the existing empirical research in SER is still the product of only a handful of countries (e.g., the USA, the UK, the Netherlands, Australia, Canada, Belgium). Several large areas of the world are under-represented in the production of data-based SER, and conducting SER in countries without a tradition of that kind of research is extremely important now. Each time a new country “comes on line” our understanding of what constitutes school (and teacher) effectiveness internationally increases.

China is an important case in point. While there has been ongoing research and theoretical development in SER in Hong Kong and Taiwan over the past 15 years, few empirical studies of school effectiveness have been conducted on mainland China, which is probably the most important country to have emerged on the world scene over the past two decades. Chinese scholars need to become more familiar with the methodological techniques used by researchers in the international school and teacher effectiveness fields in order to make further advances.

A study (Liu, 2006; Teddlie & Liu, 2008) is an example of SER conducted in a unique country (and regional) context (northeastern mainland China) where local researchers learned a new methodology as they conducted the research. The results from this study enables us to compare many of the traditional school effectiveness and teacher effectiveness variables in a new environment (mainland China) to see which ones “travel” well, which ones do not, and what new variables emerge from the different context.

¹²These include Asia (e.g., China, Indonesia, Pakistan, Thailand); Latin America; East and South Africa; Israel, Cyprus, and other countries in that region; developing countries in general; and several European countries that are developing their own SER literatures (e.g., Portugal).

¹³Other examples include (1) the Townsend review of the school effectiveness and improvement fields, which included contributions from over 20 countries and (2) the Teddlie, Creemers, Kyriakides, Muijs, and Yu (2006) ISTOF study that involved 20 country teams in the development of an internationally valid teacher observation system.

Hopefully, SER will be conducted in other geographically diverse areas of the world with greater frequency in the future. This is a major venue for the continued evolution of the legacy of SER.

(2) *More theoretically oriented studies in SER (and educational effectiveness research)*. One of the frequent criticisms leveled at SER (and educational effectiveness research) is that it is under-theorized (e.g., Bogotch, Miron, & Biesta, 2007; Coe & Fitz-Gibbon, 1998; Luyten, Visscher, & Witziers, 2005; Thrupp, 2001). For example, Luyten et al. (2005) concluded that

With some exceptions, we feel that the theoretical basis for selecting and operationalising the variables studied in SER is often quite weak; it seldom constitutes an elaborated theory. The concepts investigated are often too vague, and the operationalisations vary greatly across studies. (p. 258)

Creemers and his colleagues have addressed this criticism directly by (1) testing Creemers' comprehensive model of educational effectiveness (e.g., De Jong, Westerhof, & Kruiter, 2004; Kyriakides, 2005); and (2) developing a new model, the dynamic model of educational effectiveness (Creemers & Kyriakides, 2006, 2008; Kyriakides, 2008). Creemers' comprehensive model of educational effectiveness was an extension of Carroll's model of school learning (Carroll, 1963), so this theoretical strand has had a lengthy history in education. The heuristic value of the new dynamic model of educational effectiveness will be assessed over the next few years, but the significance of the attempt to make SER more theoretically orientated cannot be denied.

Creemers and Kyriakides' (2008) dynamic model of educational effectiveness research is a "grand theory" (e.g., Skinner, 1985) in the sense that it attempts to provide an overall explanation of phenomena within a particular area of study (i.e., educational effectiveness). Other authors have called for the development of middle range school effectiveness theories (e.g., Reynolds, 1992; Teddlie & Stringfield, 1993) that would link sets of findings that would structure the field in a gradual, cumulative manner (e.g., Merton, 1968).

Another example of the use of theory in SER/SIR is Muijs, Harris, Chapman, Stoll, and Russ' (2004) employment of three theoretical frameworks (contingency theory, compensation hypothesis, additivity hypothesis) in organizing their review of the literature on "improving schools in socioeconomically disadvantaged areas." Similarly, Van de Grift and Houtveen (2006) used the same three theoretical frameworks in interpreting the data they gathered in a study of underperformance in elementary schools in the Netherlands.

Thus, it appears that researchers in the areas of SER, SIR, educational effectiveness, and so forth have taken the criticism of their areas being "atheoretical" seriously and have started to address the issue, using existing and new theoretical frameworks. Ultimately, this should result in more theoretically driven research in SER, which will hopefully increase the overall volume of research in the area.

(3) *The study of the long-term ineffectiveness of schooling, or of schools improving from long-term ineffectiveness*. There has been an ongoing interest in SER in understanding why some schools appear to be stuck in long-term cycles of

ineffectiveness. These failing schools have been called a variety of names such as “stuck” schools (Rosenholtz, 1989); “stable ineffective” schools (Teddlie & Stringfield, 1993); “struggling” or “sinking” schools (Stoll & Fink, 1996); “dysfunctional” schools (Reynolds, 1996); and “underperforming” schools (Van de Grift & Houtveen, 2006). Outlier studies conducted in the SER tradition (e.g., Stringfield & Teddlie, 1991) have examined these “stable ineffective” schools to determine their defining characteristics, which are as important to understanding why schools succeed and fail as the well-known effective schools processes listed in Table 1.

Reynolds and Teddlie (2000a) discussed these schools in terms of their “dysfunctionality” and suggested conducting intensive longitudinal case studies of samples of these low-performing schools to better understand the complex relationship between ineffectiveness and effectiveness. While Luyten et al. (2005) initially called the suggestion to focus on dysfunctional schools a “radical recommendation” (p. 265), they later indicated that they supported the call “to pay more attention to clearly ineffective schools as a starting point for expanding the school improvement knowledge base” (p. 267).

There is recent interest in SIR in studying the processes whereby (typically lower-SES) schools improve from long-term ineffectiveness. This area of research has several slightly different names including

- school improvement for schools facing challenging circumstances (Reynolds, Hopkins, Potter, & Chapman, 2001)
- improving schools in socioeconomically disadvantaged areas (Muijs et al., 2004)
- improving schools in challenging contexts (Harris, Chapman, Muijs, Russ, & Stoll, 2006)
- making a difference in challenging, high-poverty schools (Ylimaki, Jacobsen, & Drysdale, 2007)
- school success in challenging circumstances (Jang, McDougall, Pollon, Herbert, & Russell, 2008)

This new research area obviously falls within the SIR tradition, but also intersects with effective schools research from SER. This illustrates the complex relationship between SER and SIR that was discussed in the first section of this chapter. Muijs et al. (2004) expresses the relationship among these related areas of research:

This review of the literature can be situated within the school improvement strand of the field of school effectiveness and school improvement, being concerned with what processes can lead to change in schools in socioeconomically deprived areas. The review also utilizes elements from effective schools research, on which many school improvement efforts are based (Muijs et al., 2004, p. 151)

Regardless of what it is called, or where it is situated in the literature, the Muijs’ et al. (2004) review of the literature on improving schools in socioeconomically disadvantaged areas generated a list of variables quite similar to the processes of effective schools presented in Table 1 (Reynolds & Teddlie, 2000b). This is not surprising since (1) the effective schools research base constituted a large part of

the literature that was reviewed and discussed in the Muijs et al. (2004) review, and (2) much of the effective schools research base comes from studies conducted in low-SES areas.

Six of the nine areas discussed by Muijs et al. (2004) overlap considerably with the effective schools processes from Table 1. There were three areas that did not: building a learning community, external support, and resources. More research into the transformations of improving schools in socioeconomically disadvantaged areas in the twenty-first century will undoubtedly yield other processes at work that have not been previously discovered. This is one of the more vital areas of contemporary joint SIR/SER interest.

(4) *The effect of school leadership on school effectiveness and student achievement.* An area of continued importance in SER is the impact that school leadership has on school effectiveness and related variables. Within SER, this is studied both as a scientific property, under the magnitude of the school effect, and as a process of effective schooling.

Hallinger and Heck (1996) made a significant contribution to the SER literature by examining the conceptual and methodological issues related to this issue, especially as it concerns the magnitude of the impact of school leadership. These authors presented a conceptual scheme for classifying non-experimental studies of school leadership effects by presenting three competing models: Model A (direct effects with or without antecedents), Model B (mediated effects with or without antecedents), and Model C (reciprocal effects). Hallinger and Heck (1996) then reviewed a group of studies that had examined the effect of school leadership on student achievement and concluded that the relationship might best be modeled by examining *the mediated or indirect effect* of principal behavior through other individual and organizational factors (e.g., teacher behaviors, school climate) and then onto student achievement.

Contemporary research in this area has yielded interesting, yet inconsistent, results. For example, Witziers, Bosker, and Kruger (2004) presented a quantitative meta-analysis of research studies that looked at the direct relationship between educational leadership and student achievement. Results included some evidence for the direct effects of school leadership on student achievement, but that effect was small; some evidence for an indirect effect, but this was based on a small number of studies; and comparisons of direct and indirect effects all favor the idea of mediated effects.

Kruger, Witziers, and Slegers (2007) utilized path analysis to assess the impact of school leadership on school-level factors. Results included the discovery of a reciprocal relationship between strategic leadership and student commitment. Principal's vision also had a substantial effect on his/her school leadership behaviors. The authors concluded that "a contingency model of leadership could be helpful to understand the pathways through which principals influence school effectiveness and school improvement" (Kruger et al., 2007, p. 18).

Examination of the effect of school leadership on student achievement and other aspects of school effectiveness is an under-researched area of study within

SER where the conceptual and methodological (e.g., structural equation modeling, multilevel modeling, path analysis) underpinnings are apparently in place.

(5) *The interface between the school and classroom.* Researchers working within SER need to more closely examine the relationships between factors operating at the school level and those at the teacher or classroom level. As noted earlier, the addition of teacher effectiveness variables to SER revealed consistent mean and standard deviation differences in classroom teaching behaviors between differentially effective schools in several studies (Teddlie & Meza, 1998). The lower end (or trailing edge) of the range of teacher behaviors was eliminated in more effective schools in these studies.

These quantitative findings lead to some interesting qualitatively oriented questions regarding the classroom/school interface including

- How are decisions made at the school level to select specific teachers to hire?
- What mechanisms does the school leadership use to encourage homogeneity of the teachers' behaviors and goal orientations?
- How do principals and others at the school level effectively monitor teachers' performance at the classroom level?
- How is performance data used to detect "unusual" or "outlier" teacher performance?

Mixed-methods research looking into the interface between school and classroom behaviors that lead to more effective teaching and schooling is needed at this time. This research area partially overlaps research area #4 above.

(6) *In general, there needs to be more mixed-methods research in the study of school effectiveness (and educational effectiveness).* Much of contemporary SER is quantitative in nature (as reflected in recent content of the journal *School Effectiveness and School Improvement*)¹⁴ and focuses on examining *school effects* (see Box 1), yet many of the well-known findings from the field came from qualitatively oriented case studies typical of the effective schools literature (see Table 1). Combining quantitative and qualitative methods may be the best way to comprehensively answer important SER questions regarding both causal mechanisms and processes and allowing the development of better theoretical models.

Teddlie and Tashakkori (2009) list the following advantages of mixed-methods research:

- Mixed-methods research can simultaneously address a range of both confirmatory and exploratory questions using both the qualitative and quantitative approaches.
- Mixed-methods research provides better (stronger) inferences due to the use of different types of data sources.

¹⁴A new journal, *Journal of Research on Educational Effectiveness*, first appeared in 2008. Its orientation is highly quantitative, featuring experimental and quasi-experimental studies designed to assess the effectiveness of interventions or programs.

- Mixed-methods research provides the opportunity for a greater assortment of divergent views.

As noted above, several of the best known SER studies have employed mixed methods (e.g., Mortimore et al., 1988; Teddlie & Stringfield, 1993). Several recent effectiveness studies (e.g., Day, Sammons, & Gu, 2008; Jang et al., 2008) have innovatively integrated qualitative and quantitative methods. In describing this mixed approach, Day et al. (2008, p. 331) stated that

Our intention here is to demonstrate how conceptual and methodological integration led to synergistic understandings that enabled the discovery and delineation of key findings that were both more enlightening and more robust than would have been the case if one method or another had dominated.

(7) What are the relationship patterns among teachers at more effective as opposed to less effective schools? Another area for development in contemporary SER is the study of relationship patterns in schools through Social Network Analysis. This third dimension of schooling (in addition to the organizational and cultural dimensions) can be explored among faculty members within a school, among students within a class, and across the school and class levels with multiple actors (Reynolds & Teddlie, 2000a).

For example, Durland and Teddlie (1996) explored the relationships among teachers in both more effective and less effective schools. They concluded that the network diagrams (sociograms) of less effective schools were “stringy” (not many reciprocal relationships and several isolates), while network diagrams of more effective schools were “well webbed” (lots of reciprocal relationships centering on the principal and teacher leaders in the school).

Kochan and Teddlie (2005) presented network diagrams of the interpersonal relationships among the members of a highly ineffective high school, which also exhibited a “stringy” relationship pattern with several isolates. Reynolds (1996) characterized “grossly dysfunctional relationships” in such schools as including

The presence of numerous personality clashes, feuds, personal agendas and fractured interpersonal relationships within the staff group, which operate ... to make rational decision-making a very difficult process. (p. 154)

Of course, this research area overlaps with research area #3 above.

Criticisms of School Effectiveness Research

SER has been frequently criticized over the past 30–35 years, and quite often these critiques have resulted in subsequent advances in the field. While the volume of this criticism precludes any in-depth coverage in this chapter, this final section highlights some of the common themes and their impact on SER.

Criticisms of SER may be broken out into three types: conceptual/theoretical, political/ideological, and methodological. There have been successive waves of these criticisms including

- Early criticisms based on the assumption that schools cannot alleviate the effects of societal influences on students' learning. This assumption emanated from academic sources (e.g., sociology of education in the UK) and results from research reports (Coleman et al., 1966; Jencks et al., 1972), which were discussed earlier in this chapter (e.g., Mortimore, 2001).
- Criticisms of the Rutter et al. (1979) research, which focused on both theoretical (e.g., the lack of a theoretical orientation) and methodological (e.g., small sample size) issues associated with that influential study (e.g., Cuttance, 1982). These criticisms presaged much of the analytical commentary on SER for the next 25 years.
- Methodological criticisms from the USA in the 1980s concerning the quality of the effective schools research, which was based predominantly on qualitative case studies of outlier schools. Inadequate sampling and analysis procedures led to critical responses from the educational research community (e.g. Cuban, 1983; Good & Brophy, 1986; Purkey & Smith, 1983), which then led to more sophisticated SER in the USA.
- Criticisms from the late 1990s, which emphasized the influence of social factors on student learning and also synthesized other criticisms of SER (e.g., Slee, Weiner, & Tomlinson, 1998; Thrupp, 1999; Wilmott, 1999).
- Twenty-first century criticisms that echoed the earlier ones and added a few more (e.g., Bogotch et al., 2007; Wrigley, 2004).

The debate between SER advocates and critics resulted in a special issue of the journal *School Effectiveness and School Improvement* (Reynolds & Teddlie, 2001; Slee & Weiner, 2001; Teddlie & Reynolds, 2001; Thrupp, 2001; Townsend, 2001). Table 2 summarizes fifteen specific criticisms of SER that were identified by the advocates during that debate and from other sources (Teddlie & Reynolds, 2001). These criticisms are broken down by the categories noted above: conceptual/theoretical, political/ideological, and methodological.

While SER advocates have taken detailed exception¹⁵ to several of these criticisms, there have also been proactive, innovative responses to some of them. For instance, all of the methodological issues listed in Table 2 have been thoroughly discussed and incorporated within contemporary SER and are now assumed to be part of “a set of generally agreed upon prescriptions for conducting methodologically correct studies” (Reynolds & Teddlie, 2000, p. 323). Also, objections to the lack of theory in SER have been at least partially addressed by the activities described in future research agenda #2 above entitled “more theoretically oriented studies in SER.”

Many of the remaining conceptual/theoretical and political/ideological issues revolve around (1) the relative importance of social class and the school in

¹⁵Details regarding the position of SER critics and advocates for many of these issues in a point/counterpoint format may be found in Teddlie and Reynolds (2001) and in other commentaries (e.g., Stringfield, 2002).

Table 2 School effectiveness research criticisms broken down by type

Type of criticism	Specific criticism
Conceptual/theoretical	(1) SER has downplayed the impact of social class and overstated the importance of schools on student achievement (2) SER researchers have failed to appropriately study the impact of SES (and other context variables) in their research. SER researchers “control” for context variables and then ignore them (3) A better model for SER to follow is the “contextual model,” which emphasizes the relationship of the school and the community, plus other social and political factors (4) SER literature has too much of a positivist/post-positivist orientation; instead it should adopt more of a critical theory orientation (5) Literature reviews in SER are inadequate. For example, they should include more references from the status attainment literature (Sociology)
Political/ideological	(6) The field of SER is homogeneous, with a well-defined political agenda (7) SER has had a pervasive (and negative) impact on educational policy making. SER researchers have been unable (or unwilling) to “control” opportunistic uses of their findings by policy makers (8) Reformers proposing school improvement models make unrealistic claims for their plans, often ignoring the importance of social class (9) Low-SES schools will never be improved without “redistributive” policies of various kinds (10) There is little or no need for reform at middle-class schools
Methodological	(11) Data on teachers’ perceptions of the class/school should be included (12) The range of student outcomes in SER is too limited (13) SER would benefit from more qualitative (and mixed methods) research (14) SER should be longitudinal (15) SER should be conducted using multilevel models

These criticisms were taken from Teddlie and Reynolds (2001) and other sources. They were rearranged (and slightly rewritten) from the original to fit the typology of criticisms in this chapter.

affecting achievement and other student outcomes and (2) different philosophical/paradigmatic orientations toward conducting and interpreting research. Further understanding or reconciliation can be made on these issues if extreme positions are replaced by more balanced ones.

For example, let’s consider criticisms #1 (SER has downplayed the impact of social class and overstated the importance of schools) and #7 (SER researchers have been unable, or unwilling, to “control” opportunistic interpretations of their findings by policy makers). Peter Mortimore (1999) in his presidential address to the British Educational Research Association concluded that his (Mortimore & Whitty, 1997) “research showed that schools could indeed make a difference but that there were limits to how much and that it was not sensible to try to run an entire system on the basis of what exceptional schools managed to achieve” (Mortimore, 1999, p. 6). Mortimore’s balanced interpretation of SER findings – that they can be used

to affect change in some schools, but they could not be used to affect wholesale change in school systems – seems a reasonable response to criticisms #1 and #7 (see Table 2) from the SER critics (and an explanation to which most SER researchers could subscribe). A balance between nomothetic (time- and context-free) and ideographic (time- and context-bound) statements in SER would be beneficial.

A promising area of SER for communication between traditional SER researchers and their critics involves the study of context variables, which goes by a variety of names: the study of context in SER (Teddlie, 1994), the Contextual Model (Lauder, Jamieson, & Wikeley, 1998), the contextualization agenda (Thrupp et al., 2007), and so forth. Both traditional SER researchers and critics are interested in this area of study, referred to above as future research agenda #1: “further research into context effects in SER.” If genuine communication and cooperation were established between the advocates and the critics, this area of SER could yield interesting mixed-methods results, with multiple interpretations.

Other promising responses to analyses of SER and its criticisms include

- Luyten and his colleagues’ (2005) construction of five avenues for the further development of SER based on specific criticisms aimed at the field.
- Sandoval-Hernandez’s (2008, p. 31) development of a “critical realist approach” to SER and an “Abductive Theory of Scientific Method” that could lead to sounder theory in the area.¹⁶

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¹⁶Abduction is a third type of logic (in addition to induction and deduction) developed by the pragmatist theorist Charles Peirce that has been specifically associated with the use of mixed methods research.

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Professional Learning Communities at the Crossroads: How Systems Hinder or Engender Change

Joan E. Talbert

Introduction

Education systems across the United States and in other nations are trying to create professional learning communities (PLCs) as a core part of teachers' work:

Professional learning communities (PLCs) are, at this time, undoubtedly in the ascendant in educational policy and practice. Efforts to convert schools into PLCs (the abbreviation, like a nickname, itself being an indicator of increasing acceptance) are spreading rapidly throughout the English-speaking world. Drawing on emerging evidence that professional learning communities have a systematic and positive effect on student learning outcomes (Louis & Marks, 1998; McLaughlin & Talbert, 2001; Anderson & Togneri, 2002; Bodam et al., 2005), schools and systems are investing considerable energy in developing themselves as professional learning communities (Hargreaves, 2007, p. 181).

In this chapter, I present a sobering assessment of the challenges facing the PLC movement. We are beginning to see that enthusiastic efforts to "scale up" PLCs often backfire. Rather than assessing student performance and collaborating to improve teaching and learning, many teacher groups formed through mandates simply comply with the letter of the law and fail to realize improved student achievement. This is because school administrators and leaders of change either fail to understand the deep principles that anchor PLC work or try to create them in ways that alienate teachers. I conclude the chapter by suggesting six principles for changing a school system in ways that will stimulate and sustain PLCs as described in the literature.

My observations stem from 10 years of research in the Center for Research on the Context of Teaching (CRC) at Stanford University.¹ Scholars at CRC have been

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¹The Stanford University Center for Research on the Context of Teaching (CRC) has documented the Bay Area School Reform Collaborative's work with several districts (2001–2006), the University of California Santa Cruz New Teacher Center's work with Ravenswood City School District (2005–ongoing); the University of Pittsburgh Institute for Learning's work with the Austin Independent School District (2006–ongoing), the New Visions for Public Schools and Baruch College partnership work with schools in several regions of NYC (2006–ongoing). Collaborators

studying initiatives to create teacher PLCs in schools and to change school districts into learning organizations. All are struggling to get it right – to achieve the vision of teachers collaborating to continually improve student achievement. Even when administrators and their initiative partners are well versed in the literature on PLCs and have a good handle on system conditions that support and sustain them (Kruse & Louis, 2007; McLaughlin & Talbert, 2006), they lack guidance on ways of *changing the professional culture of a system*. We find that system conditions that support the work of PLCs – such as a comprehensive education plan, integrated learning resources, local knowledge resources, robust data and accountability system, extended time for teacher collaboration, and leaders committed to PLCs – are not sufficient to engender change in professional culture and teachers’ work lives. The literature points to goals for system change, but offers little guidance on the change process or warning of pitfalls and challenges entailed in changing professional culture from the top.

With all good intentions and research-based knowledge, district and school administrators sometimes create policies and routines that interfere with progress, and they wonder why teachers respond in unanticipated ways. Instead of jumping into collaboration with their colleagues, teachers sometimes organize to oppose new designs for their work or enact them in a routine fashion.

This chapter addresses the question of why teachers respond negatively to PLC initiatives that aim to increase their professional judgment and accountability. First, I discuss core principles of a PLC and how they challenge typical school culture. Then I describe two paradigmatic approaches to PLC development and how participants typically respond to each approach. And finally, I draw lessons from school district experience with PLCs and identify the obstacles that must be overcome if this approach to improved student learning outcomes is to be successful.

PLC Principles and Challenges for School Culture Change

School system leaders who promote a PLC initiative are familiar with the literature and more or less deeply knowledgeable about PLC principles and practices. The change strategies and policies they develop target these outcomes. How well they craft these strategies, and how teachers respond to them, depends on their understanding of the problems of changing professional cultures.

on these projects include Jane David of the Bay Area Research Group (Ravenswood and Austin project), Amy Gerstein of Gerstein and Associates (Ravenswood project), and Nell Scharff of Baruch College (the NYC project). We also draw on 3 years of research in a midwestern district involved in a national “learning system” initiative, on which Cynthia Coburn of University of California at Berkeley collaborated, and on case studies of Long Beach Unified School District written by a researchers in Harvard University’s Public Education Leadership Program (Austin, Grossman, Schwartz, & Suesse, 2006a, 2006b; Honan, Schwartz, & Seusse, 2004).

Literature on professional learning communities documents the social, technical, and organization conditions that enable them to grow and flourish in schools. Key conditions are as follows:

- Norms of collaboration
- Focus on students and their academic performance
- Access to a wide range of learning resources for individuals and the group
- Mutual accountability for student growth and success

These PLC features have been documented repeatedly in studies of teaching and coincide with conclusions from research on how people learn and environments that support learning.² Creating these conditions is the core challenge facing system initiatives that aim to develop PLCs.

Yet, school and district leaders do not instinctually know how to promote these conditions of teachers' work. In fact, common administrative practices and patterns of inequality across district schools often undermine them. Urban school systems serving poor students of color often fall short on the human, social, political, and material resources needed to develop these conditions of teachers' work. Let's take the PLC conditions one by one and consider what they look like and what kind of challenges they present for system change.

Norms of Collaboration

Teachers in a well-functioning PLC work together to improve teaching and learning for students. Whether in grade-level groups in elementary schools, in subject areas in middle and high schools, or in small learning communities of restructured high schools, teachers collaborate to improve the performance of all students. The forms and depth that their collaborative work takes vary (Little & Horn, 2007; Hipp & Huffman, 2007), and the depth of PLC work develops gradually with leadership and organizational supports (McLaughlin & Talbert, 2006).

The challenges of developing teacher collaboration are many. One stems from a tradition of autonomy in teaching that works against the formation of PLCs (Lortie, 1975; Little, 1982; Smylie, 1994). When instruction is considered private practice, teachers resist the idea of collaborating with colleagues on instruction. They resist even more the opening of classrooms to peer observation and subsequent feedback. Most teachers shy away from discussing the link between teaching and student learning. When PLCs operate as intended – as sites for improving instruction and student outcomes – they are in conflict with the norms of collegial relations in US schools.

²Bransford, Brown, and Cocking (1999). In the NRC report's language, effective learning environments are community-centered, content-centered, learner-centered, and assessment-centered.

Local career systems can also operate against PLCs. The most senior and effective teachers often bid for openings in high-achieving schools, creating a “revolving door” labor force in the least desirable, lowest-performing schools. Teacher turnover undermines social cohesion and sustained teacher collaboration in the schools most challenged in improving student achievement.³

There are often limited opportunities for teacher collaboration in a normal school schedule. Even when more time is arranged for teachers to work together, the issue shifts to *how* the time is used. In many instances, and especially in lowest performing schools, external pressures to raise test scores pull teachers away from peer collaboration toward after-school tutoring and test preparation. Collaboration time is trumped by work designed to shore up student test scores in the short run.

Focus on Improving Student's Success

Teachers' collective focus on student learning is central to the vision of a PLC. In the best cases, teachers use student achievement data from a wide variety of assessments to continually evaluate and adjust their instruction. When teachers jointly assess the performance of their students – using disaggregated test data, formative assessments, student work, and low-inference classroom observations – they are able to more effectively craft interventions to meet all students' learning needs. They learn from their interventions what works and what needs to be changed.

This focus for PLC work comes up against a competing conception of effective teaching practice. Federal and state accountability systems enforce a view of teaching as implementing a set curriculum according to a pacing guide. Districts are forced to adopt “best curricular programs,” and low-performing districts place pressure on teachers to implement them with “fidelity” in their classrooms. This silver-bullet approach detracts from a view of teaching as involving judgments and a vision of PLCs as analyzing student learning and crafting ways to address performance gaps. Ironically, accountability systems push in both directions, and school districts find themselves in the position of having to resolve competing paradigms and pressures for improvement. System leaders who place priority on nurturing PLCs – developing their capacity to make sound collective judgments to address student learning needs – are challenged to take a stand against the curriculum implementation model of change.

School systems also face technical challenges of building a culture focused on student learning. Many lack data systems and formative assessments that meet teachers' needs for fine-grained information on student skills and knowledge. Change thus entails investments in data infrastructure, including high-quality formative assessments for multiple subjects and grade levels. Yet teachers often lack

³In a 100-school district we studied, statistical analysis showed a strong positive effect of mean teacher experience on teacher community strength (.40), with student poverty level controlled; student poverty was correlated (–.66) with teacher experience.

skills and experience in using data well. So districts are challenged also to developing teachers' skills in using a wide range of data to assess student performance gaps and to evaluate instructional interventions on an ongoing basis. This core condition of PLC success develops over time and involves a steep learning curve for most teacher groups.

Exploitation of Diverse Knowledge Resources

The vibrant PLCs that continually learn how to improve student achievement are networked with colleagues in local universities and professional networks within and outside their school system. They tap the expertise of these colleagues as they grapple with instructional problems – through email exchanges, and formal and informal meetings (Mitchell & Sackney, 2007; Jackson & Temperley, 2007; Stoll, Roberston, Butler-Kisber, Slar, & Whittingham, 2007). PLCs build their knowledge and skills through experimentation, as well as through boundary exchanges. They develop and share tools and materials effective in their classrooms, circulate and discuss readings, and use protocols to learn together from the work of their students. In short, PLCs seek and develop rich and extensive knowledge resources to support their learning for improved instruction.

Schools with high proportions of beginning teachers, commonplace in urban school systems, are handicapped in their knowledge resources. This is because accomplished and well-networked teachers are pivotal to a PLC's learning and capacity to support new teacher induction (McLaughlin & Talbert, 2001). Not surprisingly, schools where most teachers are weak in subject preparation and/or inexperienced show the least progress on PLC development (CRC, 2002). How many expert teachers, or what proportion of the total, are needed in a school, department, or grade-level teacher community is not known. But district and school administrators are challenged to address the "critical mass" question: What is the threshold of well-prepared and experienced teachers needed for a PLC to become successful?

Mutual Accountability for Student Growth and Success

PLCs depend on shared commitment to improve learning opportunities and achievement for all students. Only a few departments in the California and Michigan schools we studied in the 1990s had such a professional culture. Most lacked a "service ethic," or stance to meet all students' learning needs (Talbert & McLaughlin, 1994). Instead, they shared a view that some children cannot succeed because of their difficult home and neighborhood situations and there is little that teachers can do. The "learning communities" we found stood out for their persistent effort to ensure that none of their students fell through the cracks and that none of the teachers in their department floundered (McLaughlin & Talbert, 2001). These teachers shared responsibility for the success of all their students; they supported

one another's learning and improvement; and they organized the curriculum and teaching assignments to ensure that all teachers had classes with struggling students. They challenged the typical practice of tracking courses and of assigning the most experienced and skilled teachers to the most successful students. The development of mutual accountability among teachers prompted them to work in ways that went against the grain of tracked learning opportunities in American high schools (McLaughlin & Talbert, 2001, 2007).

Centralized accountability systems can work against the development of mutual teacher accountability. Their emphasis on near-term gains in test scores pushes a pace of change that undermines the development of PLCs. Norms of collective responsibility and collaboration develop slowly. Further, emphasis on individual teacher quality, curriculum implementation in each classroom, and monitoring of teaching fidelity undermines principles of collective responsibility and improvement. Teachers' attention is focused on compliance rather than accountability to colleagues for developing new instructional interventions that work with their students. Efforts to isolate and reward "successful teachers" through merit pay schemes can further pull away from PLC accountability unless the notion of success and merit places weight on a teachers' effectiveness in mentoring new teachers and collaborating with colleagues to achieve student success in the school. The challenge for system change is to nurture a service ethic among teachers and engender their mutual accountability for improving student achievement.

Initiatives to implement PLCs are relatively new on the landscape of education reform. To succeed, they must take on the challenges of change toward each of the PLC conditions – collaborative practice, focus on students, use of diverse knowledge resources, and mutual accountability. *How* they do so – how school and system administrators go about changing conditions on each front – is also pivotal to the success or failure of a PLC initiative.

Bureaucratic versus Professional Strategies for Change

The strategies a school district uses to create PLCs make a great difference in outcomes. Even if school system leaders share a research-based vision of PLC principles and practices, they often have radically different conceptions of what it takes to get there. Some see mandates, implementation checklists, and sanctions to ensure accountability as key levers for change. Others see change linked to leadership by example, tools and facilitators for learning, and rewards for risk-taking. *In theoretical terms, they differ in embracing a bureaucratic strategy on the one hand, and a professional strategy on the other.*⁴

⁴In his classic study *Schoolteacher*, Dan Lortie (1960) portrayed the growth of education bureaucracies as a threat to teacher professionalism. A long tradition of sociological theory treats bureaucratic authority and professional authority as fundamentally opposed modes of organizing work, with work controlled through hierarchy, rules, and organization sanctions in the former and through professional expertise, standards, and mutual accountability in the latter.

The distinction here is not between top–down and bottom–up views of educational change. Both are top–down in that they use organizational authority and resources in an attempt to change the culture and practice of teaching.⁵ Both use authority and policies to establish essential PLC resources, such as increased teacher meeting time, improved student data systems, and dedicated staff support. However, they differ in their underlying theory and approach to changing the system’s professional culture. A “bureaucratic strategy” uses traditional management tools of directives and rules, prescribed routines, and sanctions for compliance as ways to promote change. A “professional strategy” uses tools of decision-making structures, professional expertise and knowledge resources, and leader modeling and feedback to engender change.

In reality, these are not mutually exclusive system change strategies. Indeed, it appears that they typically coexist and compete in school system where leaders embrace different views of how to create PLCs. Competing logics for organizing change emerge early in a PLC initiative and prompt different tacks on developing the core features of PLCs outlined earlier, or how they go about:

- Establishing expectations and norms for collaboration
- Focusing PLC work on improving all students’ achievement
- Creating knowledge resources for PLCs
- Engendering mutual accountability for success.

Whether district leaders use a bureaucratic or professional approach to creating these system conditions matters for how teachers and principals respond to them and how effectively the system advances on its PLC agenda.

Bureaucratic Patterns

A school system signals a bureaucratic approach to PLC if it labels the effort, funds it through an external grant, and designates individuals (or a specialized unit) to manage it. This denotes a special project whose fate depends on a particular funding source and the career path of the project leaders. Throughout the system, people draw on their experience with such initiatives to conclude that “this too shall pass.”

System leaders and staff who develop a project approach then work to develop technical capacity for PLCs in schools – data systems, specialized roles and training – and use lines of authority to implement them. They tend not to engage the cultural and political challenges of system change, nor to see change in developmental terms.

Mandating teacher collaboration. Once policies that establish PLC meeting times are in place, system leaders will direct principals to ensure that the time is

⁵See Kruse and Louis (2007), on this distinction and for further evidence that centralized strategies can support PLCs.

used for teacher meetings. Teacher teams are then defined by grade level at the elementary level, by content area at middle school level, and by subject department or small learning community at the high school level. Usually the directives specify a particular model that the PLC work should follow, such as data-based inquiry or study lessons in content areas. Directives typically require that principals enforce teacher attendance at PLC meetings, through record-keeping and monitoring, and by tying the meetings to contract requirements.

In one large urban district, an external management consulting firm developed an elaborate set of project management tools for the PLC project. The tools included a monitoring strategy for all system roles (specifying activities for each role, frequency, and follow-up), an implementation checklist for central office administrators and principals to use for monitoring progress, a meeting planning template for use by designated leaders, and a rubric to assess PLC quality. On the one hand, these tools created essential expectations and structures to focus discussion and work around the PLC development initiative. On the other hand, the project management tools framed the system culture change effort in bureaucratic control terms. This orientation and the daunting number of guidelines and schedules accompanying the project management approach risked sacrificing principled conversations and understandings of the vision. In some instances, the schedules put forth were unrealistic in terms of PLC developmental processes. Suggesting that “full implementation” would be complete within a year’s time is one example of undermining the process.

A project management approach signals a compliance orientation to the PLC initiative – prompting administrators to focus on completing forms and monitoring teacher compliance. In the case of this district, however, top administrators who embraced a professional logic for change balanced the bureaucratic frame brought by implementation and monitoring tools. These system leaders ensured that final drafts of project management tools did not include inappropriate monitoring criteria and unrealistic time frames for the change process.

Directing PLCs to meet benchmarks for closing student achievement gaps. District leaders of this stripe frequently translate PLC work in terms of meeting student achievement benchmarks adopted in compliance with accountability system demands. They emphasize the use of standardized test data for monitoring student progress and identifying achievement gaps. They expect teacher groups to focus their work primarily on raising student scores on high-stakes assessments.

Creating roles and responsibilities for PLC leadership. Most systems create a new “coach” or “lead teacher” role to support the development and learning of PLCs in schools. A bureaucratic approach to establishing knowledge resources for PLCs usually stops with the creation of specialized roles, expecting these individuals to transmit particular kinds of knowledge and skills, for example, how to read student achievement data reports, or how to implement a curriculum.

Typically, little attention is paid to the learning demands on individuals assuming the role of PLC leader, or their need for support and conferred authority from school administrators. We have seen that an approach that rests on lead teacher selection, brief training, and marginal incentives results in highly uneven performance among

incumbents. Individual success stories often depend on prior experience and/or access to expertise through long-developed professional ties.

The bureaucratic approach to change tends to ignore the social nature of learning and the key role that professional networks play in PLC development and success. PLC knowledge resources are limited absent investments in developing and supporting teacher and specialist networks within and beyond the system.

Establishing PLC's accountability to higher authorities. In contrast to the PLC principle of mutual accountability among teachers, bureaucratic conceptions of accountability focus on hierarchical relationships. School district leaders invent ways for administrators to evaluate and sanction PLC work. Administrators might adopt PLC checklists and monitoring systems of the sort mentioned above, content specialists might create and use pacing guides to track implementation of the curriculum, and principals might require teachers to turn in records of their PLC meetings as evidence of compliance with district requirements. The more school and district leaders feel pressed to respond quickly to state and federal accountability systems, the more likely they are to put demands on teacher groups to demonstrate progress and to use sanctions to enforce them.

However, top-down accountability systems undermine mutual accountability among teachers within a PLC. They focus teacher attention on narrow, short-term criteria for success that divert them from grappling with both bigger and more fine-grained issues of student learning and teaching that ground effective PLC interventions and create shared accountability for results. Norms of collective responsibility develop gradually through joint work and shared struggles, and bureaucratic accountability schemes both carry the wrong frame and pull teachers away from work that matters.

Patterns of teacher responses. Effective PLCs do not develop and thrive when they are perceived as a mandate for collaboration, as increased pressure to meet benchmarks for student achievement, as unsupportive of their learning needs and improvement efforts, and as creating more paperwork and teacher-evaluation criteria. Project management strategies for PLCs remind teachers of all the other top-down reforms that have come and gone and of the mounting pressures they feel from federal and state accountability systems. This paradigm for change runs counter to professionalism.

Teacher responses to top-down bureaucratic approaches tend toward three broad patterns: *compliance*, *resistance*, and *anxiety*. Each response interferes with joint work and risk-taking. *Compliance* takes the form of ritual enactment of the PLC requirements, usually without substantive engagement. Teachers show up for the required meetings and use the time for their own paperwork. They tell stories about students and vent to their colleagues. Most often they just complain about system requirements. *Resistance* is a variant that challenges the goals and focus of the initiative. In these instances, teachers challenge the core assumption of PLCs – that failing students can be taught to achieve. They attack the validity or value of prescribed PLC work (e.g., analyzing student achievement data); they question the legitimacy of using their time and school resources to support such work; and/or,

they question the role of the designated leader. At the extreme, resisters refuse to attend PLC meetings. *Anxiety* responses are common among novice teachers, who lack the job security and/or cynicism that prompts compliance or resistance among veterans. For new teachers, bureaucratic approaches to a PLC initiative can exacerbate anxieties that come from struggles in the classroom and pressures to raise test scores. In one district where several new teachers were selected to lead PLCs, veteran teachers undermined their leadership and posed yet another threat to their professional self-efficacy and security.

Professional Approaches to Changing System Culture

System leaders who embrace a logic of professionalism to craft strategies for developing PLCs avoid labeling or compartmentalizing the effort in ways that connote bureaucratic mandates. They approach the challenge of developing PLCs as partly a matter of changing one's perspective on the system – that it need not constrain judgments or present bureaucratic hurdles. Such leaders focus on developing new conceptions of professional work and relationships in the system, building partnerships and networks to support professional learning, and limiting damage from federal and state accountability systems. Their policies and actions are based on a theory of changing system culture that is grounded in PLC principles.

Building a shared vision and leaders' capacity to support change. As a first step toward developing a collaborative teacher culture, system leaders organize conversations and learning opportunities for top administrators to develop a shared vision of the goals and challenges of change. In the successful initiatives we studied, top administrators participated in multiple venues designed to deepen their understanding of PLC principles and the substantive focus of their work, for example, data-based inquiry or disciplinary instruction. And they took the lead in designing school and system change strategies and practices that were guided by PLC principles.

Key among these approaches to system change is developing a PLC for principals. Principals met regularly to share their struggles and learn from one another about developing PLCs in their own schools. Because of their formal authority and interstitial position in a district system, school administrators set the stage for starting and sustaining the community development process. They can use organizational resources and persuasion to leverage teacher involvement in facilitated work. And they can broker resources from within and outside the system. For example, school administrators who made a difference in schools had a number of strategies in common. They defined a vision for how collaboration time would be used; were strategic in how they used coaches or facilitators to support PLCs in the school; used base budget slack and categorical funds to support teachers' innovations; invested in developing a wide range of student assessment data and supported its use by teachers and teacher teams; identified and hired skilled teacher educators and facilitators outside the system to support PLC improvement efforts; and supported

participation of teachers in local, state, and national professional networks and high-quality off-site professional development.

Research and practitioner reflection on effective school change has identified particular strategic roles that school administrators play in moving schools through stages of PLC development (CRC, 2002; McLaughlin & Talbert, 2006; Mohr & Dichter, 2001). For example, during the “novice stage” of community development, change focuses on building social trust and norms for group decision-making. At the “intermediate stage,” change centers on sustaining collaborative work when the pay-offs are uncertain and the faculty fears that its work is unproductive. At an advanced stage of PLC, the challenge is to keep the community from resting on its laurels and to press for ever-higher outcome standards. Effective leadership addresses the challenges for change at each stage.

Developing capacity to address student achievement gaps. Using student data to inform decisions entails big changes in current professional culture. It means (a) shifting focus from teacher practice to their students’ success, (b) developing and using a variety of student assessments and data to identify individual learning gaps, (c) designing interventions to address identified gaps in student learning, and (d) using student achievement data to evaluate and refine the intervention.

Yet system accountability pressures focus principal and teacher attention on standardized test scores and drive a pace of change that works against PLC development. Principals and district leaders play a key role in keeping these outside pressures from squelching long-term change efforts. For example, Long Beach district administrators opted to *not* focus their communications with school administrators on federal No Child Left Behind (NCLB) benchmarks or sanctions. Instead, they focus on the district goal of continually developing professional capacity to improve student outcomes, understanding that this sustained message and effort will pay off in desired student achievement gains.

Developing a web of knowledge resources for PLCs. District leaders who embrace a professional approach invest in resources designed to create learning environments for teachers and other professionals that are learner-centered, knowledge-centered, assessment-centered, and community-centered.⁶ Most centrally, they ensure that middle-system specialists and coaches in schools have strong grounding in both the designated work of PLCs and skills in facilitating their development and learning. This system capacity is typically built through partnering with a local intermediary organization or university that has a track record for high-quality leadership development.

Districts are also developing ways to capture and use knowledge of effective professional practice developed within the system. For example, strong PLCs can be resources for system-wide learning when they are authorized to develop and share knowledge of their improvement practices and effective instructional designs.

⁶These are the conditions of effective learning environments identified by the National Research Council panel on learning (Bransford, Brown, & Cocking, 1999)

The use of clinical knowledge for school and district-wide improvement is powerful because it provides concrete, situated illustrations of principles for professional practice. A local learning system brokers both clinical and research-based knowledge of effective practice and provides teachers and school leaders with access to skilled professionals within and outside the system.

Knowledge resources from research and professional practice outside the system are essential to PLC learning and improvement. Districts using this approach to PLC development thus encourage and broker educators' involvement in professional networks and associations, such as the National Writing Project and Councils of Teachers of Mathematics. They build partnerships with teacher education institutions in the region to ensure that teachers are well-prepared, adequately supported in their first years on the job, and oriented to collaborative work with colleagues. For example, Long Beach has a partnership with the local state university's teacher education program that establishes a pipeline for teachers into the district, which carries strong standards for content instruction and for collaboration with colleagues on instructional improvement.

Establishing mutual accountability among professionals. Moving away from a top-down notion of professional accountability to one of professionals holding one another accountable is key to PLC development. In districts where this transition has occurred, administrators have taken a long-term view of change toward a culture of professionalism. They avoid focusing educators' and administrators' attention on how their school or district rates on state accountability reports, instead promoting their use of formative assessments to continually gauge student outcomes and design interventions. In doing so, they locate judgments of progress and accountability for improving student performance within teacher and school communities.

Patterns of teacher responses. Teachers are more receptive to a top-down design for PLC development that uses a professional (as against a bureaucratic) frame. This is not to say that they are always ready or eager for change. Teacher responses to professional change efforts after a year tend toward three patterns: *enthusiasm*, *cooperation*, and *wait-and-see*. *Enthusiasts* are those who were enlisted as leaders of PLCs and who received significant professional development to support their work with colleagues. Some teachers who have taken on these roles report that this has been the most powerful learning experience of their career. *Cooperators* with the PLC agenda are sometimes ambivalent in judging whether the time spent in meetings with colleagues is worthwhile, but they are willing to try to figure out how they might work together. *Wait-and-see* folks stand by to see how the work will go. They are, in theoretical terms, "legitimate peripheral participants" (Wenger, 1998), observing the work but not actively participating in it. Over time, such teachers are likely to join and come to identify with the community of practice.

Table 1 highlights differences between a bureaucratic and professional approach to building PLCs across a school system and differences in teachers' responses to them.

An observation and hypothesis from our research across several districts is that professional strategies take hold most readily when they are linked to prior system reform efforts that were grounded in the same principles, such as a

Table 1 Developing professional learning communities (PLCs): bureaucratic vs. professional approaches

Principles for change toward PLCs	Bureaucratic approach	Professional approach
Establishing expectations and norms of collaboration	● Mandate PLCs and their composition. ● Require and record attendance at scheduled PLC meetings. ● Tie compliance to teacher contract.	● Communicate PLC priority and model collaboration. ● Build PLCs of principals and central office personnel. ● Develop principal skills in nurturing PLCs.
Focusing work on improving all students' achievement	● Establish benchmarks for gains in high-stakes test scores for all student groups. ● Sanction schools and teachers if they do not meet marks.	● Develop data system with multiple measures of individual students' academic skills. ● Adopt formative assessments and support teachers in using them. ● Provide protocols for looking at student work.
Creating learning resources	● Use incentives for teacher course taking. ● Provide training to meet state and federal requirements.	● Invest professional development resources in PLC time and customized support. ● Hire and develop skilled facilitators. ● Build a strong middle system of content specialists. ● Use exemplars to show how PLCs achieve success. ● Promote teacher participation in professional networks.
Engendering mutual accountability for success	● Require PLCs to develop plans for meeting benchmarks. ● Require PLCs to document their implementation of plans and site administrators to review them. ● Use threat of PI status and sanctions to press PLCs to improve student outcomes.	● Create an environment of trust and risk-taking. ● Shift focus from external accountability systems to internal assessments and interventions. ● Establish incentives for innovations. ● Reward PLC outcomes; create a culture of sharing successes and strategies.
Patterns of teacher response	● Compliance: ritual enactment of PLC principles ● Resistance: refusal to invest time ● Anxiety: fear of failing to lead or achieve change	● Enthusiasm: leadership in PLCs ● Cooperation: engagement in designed work ● Wait and see: peripheral participation

foundation-funded initiative or district partnership that engendered PLC development. Organizational memory creates a bridge to future change when system leaders communicate the common principles and draw upon professional networks and leadership developed through the earlier reform work.

Conclusions and Implications for Changing School Systems toward PLCs

Professional community building is not just about creating or defining collaborative work for teachers. Nor is it just about using tools for teachers to use in tracking and evaluating their work with students. It is also about addressing normative and organizational challenges for change – shifting a focus on teaching toward student learning, creating rich knowledge resources and networks, and engendering a social service ethic and mutual accountability. It is about changing the way schools and the school system operate and how professionals at all system levels work to foster success for all students. It is about changing the system from a culture of bureaucracy to a culture of professionalism and using bureaucratic resources to do so. Such profound system culture change takes time and is both driver and outcome of the development and vigor of teacher learning communities across the system (McLaughlin & Talbert, 2006).

Lessons learned from districts' experiences working to implement the vision reveal several key challenges and principles for changing a system to stimulate and sustain PLCs.

First, *system change entails dynamic tensions between bureaucratic and professional perspectives and strategies*. Because local school systems are bureaucratic organizations by nature, history, and broader administrative context, their agenda to create PLC norms and practices poses numerous challenges to re-invent ways of doing business. Administrators need to become clear about which organization functions can be maintained best by bureaucratic means, and which should shift to professional strategies. Schools and system units charged with improving instruction are challenged to resist routines and decisions rooted in bureaucratic habits of mind as they invent policies and practices to engender PLCs.

Second, *deep understanding of the core principles of PLCs grounds effective change strategies*. System approaches to engendering PLCs must develop through leaders' understanding of both the *what* and *why* of changing professional culture. All of the core PLC principles are key – collaboration, focus on students, access to knowledge resources, and mutual accountability – and each is inhibited by teaching conventions or typical system conditions. Change strategies call upon particular kinds of system resources – knowledge and expertise, time and money, external partners, and policies. The effective use of these resources depends on a deep understanding of the principles and challenges of change.

Third, *changing professional culture is a developmental process*. System designs for PLC development need to stimulate and support gradual change in teacher

beliefs, norms, and practices across diverse schools. Schools and teacher groups within them inevitably begin at different stages of “PLCness,” and system strategies must address these differences in order to effectively support system-wide change. Bureaucratic approaches to leveraging change back fire in part because they fail to take into account the developmental nature of change. They assume that mandates and designs for PLCs can be readily implemented. But even professional strategies fall short when they lack sufficient attention to developmental trajectories for change, differences in school and teacher groups’ experience and culture, and effective supports for change at all developmental stages.

Fourth, *changing a system toward PLCs requires coherent professional strategies, policies, and practices at all levels of the system over time*. The problem of changing system culture from bureaucratic to professional norms and practices requires the coalescing of widely diverse resources and perspectives around a shared vision of PLCs. School systems are complex, multilevel organizations in which units and people within them have different responsibilities and roles, different levels and kinds of authority, different histories in the organization and in education, different knowledge and different views of the problem of improving student learning. As a consequence, they will unite their work only through shared visions and principles communicated and sustained by leadership at all system levels.

Fifth, *system leadership for PLCs should mobilize bureaucratic resources to implement professional strategies*. The allocation of resources of all kinds – base budgets, titled funds, personnel, equipment, and space – determines a system’s capacity to develop PLCs. District administrators think about and allocate resources differently when these decisions are made with an eye to supporting vital teacher learning communities in schools, as opposed to ensuring compliance with bureaucratic regulations or accommodating political pressures. A learning system stance directs administrators to map the totality of district resources from public and private sources for professional development and to assess both their coherence and equitable distribution. Key to building teacher learning communities is the integration of resources to provide support for school change and high quality learning opportunities across the system.

Finally, *system leaders must manage context pressures and politics in ways that sustain and mobilize support for long-term, professional strategies for developing PLCs*. State and federal accountability pressures and systems threaten change because they bring bureaucratic frames to local improvement efforts, instill fears of professional and organizational sanctions that undermine innovations, and discourage investments in long-term change. System leaders need to buffer schools from these impacts in order to sustain PLC development and effectiveness.

School systems face a huge challenge in building political commitment for significant reform of any kind. The challenge is no less for PLCs. A proactive partnership with teacher and principal professional organizations is crucial. Union contracts can either inhibit the redesign of teachers’ work or enable and promote change. A school board or other governing body that is knowledgeable and supportive of the PLC agenda is also essential, both for authorizing system investments in change and for promoting it among stakeholders in the community. Informed

political support of parents, members of the business community, and the civic elite are indispensable to significant school reform.⁷

At its crossroads, the international education movement to develop a new paradigm for teaching – one that features PLCs and greater professional control and accountability – will grow and be sustained to the extent that local systems take up the challenges for change outlined here. Administrators and leaders at all system levels will need to resist tendencies toward bureaucratic habits of mind and strategies and invent new ones, adapted to their particular system context, that are grounded in PLC principles and professional approaches to system change.

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⁷See Hill, Campbell, and Harvey (2000) on the topic of civic capacity for reform. For discussion of civic capacity relevant to the PLC agenda, see McLaughlin and Talbert (2006).

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New Teacher Induction and Mentoring for Educational Change

Betty Achinstein and Steven Z. Athanases

In a period of less than two decades, we have seen worldwide a profound change in stance toward the new teacher. School systems began to see the first years in the profession as not a test of “sink or swim” but as a phase that required attention and support in order to keep new teachers from leaving the profession and to develop them into quality educators. Research chronicles that new teachers tend to leave within the first 3–5 years of teaching. In the USA, for example, approximately 30% of those who enter the profession leave within 3 years, and up to 50% leave within 5 years (Darling-Hammond, 1997; Ingersoll & Smith, 2003). Teachers in schools serving high-poverty communities have an even greater risk of leaving at the end of their first year (Smith & Ingersoll, 2004). This early departure has been attributed to job dissatisfaction and unsupportive schooling conditions (Ingersoll, 2001; Johnson, 2004). Beyond retention, developing the quality of new professionals is paramount given the influence on student achievement and reforms that call for complex teacher understandings. Further, from an educational change perspective, new teachers are the next generation responsible to promote equitable schooling for those underserved by the current system.

Out of these concerns came the birth of teacher induction programs and mentoring as a key medium for support of new teachers. Mentoring pairs the novice with an expert veteran teacher focused on supporting the novice’s professional development. New teacher mentoring has been likened to an apprenticeship focused on occupational socialization linked to career development (Little, 1990). Induction programs and mentoring have begun to flourish worldwide. In recent years, reports have been published of studies of programs in many nations, including Australia (Ballantyne, Hansford, & Packer, 1995), China and the UK (Wang, 2001; Wang & Paine, 2003), Israel (Orland, 2001), France, New Zealand, Switzerland, and Japan (Britton, Paine, Pimm, & Raizen, 2003). In the USA, by the 1999–2000 school year, 80% of novice teachers reported having a mentor or participating in an induction program (Smith & Ingersoll, 2004) and by 2005, 16 US states required and financed formal induction

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for all new teachers (Education Week, 2005). Interest deepened as early evidence suggested that high-quality induction and mentoring programs yielded various benefits including improved teacher retention, job satisfaction, teaching quality, and ultimately student achievement (Fletcher, Strong, & Villar, 2008; NCTAF, 1996; Smith & Ingersoll, 2004; Wilson, Darling-Hammond, & Berry, 2001).

However, with this innovation come critical questions if teacher induction and mentoring are to serve larger purposes of educational change that meet the needs of new teachers and all youth in schools. This chapter features three such questions: (a) Induction for what? (b) Induction for whom? and (c) Induction by whom? In answering these questions, we highlight induction for *purposes* of educational change; induction that promotes equity for particularly *students underperforming and underserved*; and induction by *well prepared mentors* who possess the knowledge, skills, and dispositions to guide new teachers effectively. Throughout this chapter, we highlight the potential for induction and mentoring to support educational innovation and transformation. We draw on recent literature and especially on several research projects in which we have engaged in recent years.

Induction for What Purposes?

The first critical question concerns purposes. Induction often has been cast as socialization into norms of a profession, a unique phase as an individual transitions from a student of teaching to teacher of students, and formal programs and comprehensive systems of sustained support and professional development for teachers in their first few years in the profession (see Feiman-Nemser, Schwille, Carver, & Yusko, 1999). However, is it enough to “induct” teachers into the status quo of schools, to orient novices to rules and regulations of local school districts, and to provide curricular and emotional support for the entry period into the profession? Traditionally, induction programs have targeted retention of teachers, an urgent goal, but failed to articulate other pressing and longer-term goals. What other purposes for induction warrant attention? From an educational change perspective, how might induction and mentoring serve as means to develop more effective classroom and schooling practices? How might more veteran teachers equip novices with ways of working that are both standards-aligned and oriented toward re-envisioning schools to meet the needs of all youth? If we draw on interpretive and interactional traditions of research on teacher socialization, which hold that both individuals and their social contexts shape socialization (Lacey, 1977; Lawson, 1992; Zeichner & Gore, 1990), then we must envision ways that new teachers can serve as agents in shaping schooling. In this section, we explore four frames highlighted in the literature on induction that identify different purposes for new teachers, mentors, students, and schooling. Further, we examine how certain frames tend to reproduce the status quo of schooling practices, while others foreground induction for educational change and equity. We note how educators, policymakers, and researchers can consider the ways their implicit and explicit assumptions about purposes for induction promote or inhibit educational change and equity.

Four Frames

Table 1 displays four frames for purposes of induction, highlighting assumptions about new teacher and mentor roles based on these varied frames, and referencing relevant examples in the research literature and sample induction activities. Frames are patterns and interpretations used to organize meaning (Goffman, 1974). Frames can be both ways of seeing and bounded constraints of a picture. Frames bring into view certain things while obscuring others.¹

A *managerial* frame focuses on induction into organizational/institutional procedures, norms, and rules. We see this evidenced in induction programs where district workshops or mentors focus on classroom management techniques, school rules, and district policies (Feiman-Nemser & Buchmann, 1987). This frame highlights the rational/technical aspects of socialization. A *humanist* frame highlights helping novices deal with “practice shock” (Veenman, 1984) through emotional adjustment and self-image support in a stressful transition period (Gold, 1996; Wang & Odell, 2002, 2007). A *cognitive-apprentice* frame features novices as situated apprentices in need of expert guidance to learn a body of knowledge of classroom practice and to participate in the professional community of reflective practitioners (Collins, Brown, & Newmann, 1989; Feiman-Nemser, 2001a; Feiman-Nemser et al., 1999; Wang & Odell, 2002, 2007). Here, novices learn in and from practice (Feiman-Nemser, 2001a). A *political-critical* frame highlights how novices can become agents of change, pose problems of teaching, uncover assumptions, and reconstruct practice (Achinstein & Barrett, 2004; Wang & Odell, 2002, 2007). In this perspective induction moves from traditional knowledge transmission to knowledge transformation, where mentors work with new teachers to challenge current classroom and school arrangements and to foster reform (Cochran-Smith & Paris, 1995). For example, mentors can support new teachers to critically “reframe” their thinking about student and classroom challenges, looking through new lenses and reconsidering their own practices and assumptions to understand political issues and equity concerns (Achinstein & Barrett, 2004).

Undergirding these four frames are assumptions about the new teacher that vary widely. As Table 1 shows, these range from a worker needing to be managed to an agent for educational change. Profoundly different induction programs and mentor practices would flow from these contrasting conceptions of new teacher agency and professionalism. Furthermore, the frames and their underlying assumptions about new teachers and the roles of mentors also reveal some competing visions about educational change, the focus of our chapter.

¹These frames expand on Wang and Odell’s (2002, 2007) initial conceptualizing assumptions about mentoring and mentor–novice relationships of a humanist perspective, a situated apprentice perspective, and a critical constructivist perspective.

Table 1 Frames for purposes of induction

Frame	Purpose of induction	Assumption about new teacher	Assumption about mentor	Example activities	Examples in research
<i>Managerial</i>	Induction into rules of profession and organization of work	Novice worker who needs to be managed and manage students	Local guide	Intro to school/district rules and procedures Classroom management training	Achinstein and Barrett (2004), Little (1990), Feiman-Nemser and Parker (1993), Feiman-Nemser and Buchmann (1987)
<i>Humanist</i>	Induction to ease the transition and practice shock	Survival mode and vulnerable, in need of sense of self-efficacy	Caretaker	Story swapping Advice giving	Gold (1990, 1996), Huling-Austin (1990), Odell and Ferraro (1992), Wang and Odell (2002, 2007)
<i>Cognitive-apprentice</i>	Induction to learn body of knowledge and foster reflective practitioner to join professional community	Apprentice learner who wants to develop knowledge of classroom practice	Expert collaborator	Lesson planning Analysis of student work	Achinstein and Athanases (2006), Britton et al. (2003), Feiman-Nemser (2001b), Feiman-Nemser and Remillard (1996), Feiman-Nemser et al. (1999), Johnson (2004), Orland (2001), Wang and Odell (2007)
<i>Political-critical</i>	Induction to critically reconstruct schooling and teaching with an equity focus	Learning to teach for social change and critique inequitable schooling practices	Change agent	Critique classroom and schooling practices Differentiating instruction	Achinstein and Athanases (2006), Achinstein and Barrett (2004), Cochran-Smith and Paris (1995), Feiman-Nemser and Parker (1993), Hargreaves and Fullan (2000), Ladson-Billings (2001), Wang and Odell (2007)

Induction into the Status Quo or Induction for Educational Change?

While all four frames highlighted in Table 1 serve important purposes in supporting new teachers, and thus are valuable, only the fourth frame focuses explicitly on educational change. The others tend to highlight purposes of induction as enculturating new teachers into the current system and knowledge structures to help novices fit into accepted models of teaching and their new environments, rather than critiquing or challenging existing schooling practices (Wang & Odell, 2002). The political-critical frame envisions induction as an opportunity to help new teachers critically reflect on their own practices and schooling in order to foster equitable learning opportunities for all children and become change agents of the system. It also envisions reform-minded teachers and mentors collaboratively engaged in a change process that impacts themselves, students, classrooms, organizations, and ultimately, the profession. The political-critical frame provides a helpful way to view work from a recent pair of studies on new teacher induction, highlighting the coexistence of two competing conceptions about the purposes of induction, one that reproduces the status quo of schooling and one that fosters educational change (cf., Hargreaves & Fullan, 2000; Imig & Imig, 2006).

Competing Conceptions of Induction: New Teacher Tracking and Resisting Standardization

In a study of new teacher socialization, Achinstein, Ogawa, and Speiglmán (2004) describe a form of “new teacher tracking” that serves to reproduce inequitable learning opportunities for both new teachers and their students. The authors explore the possibility that state educational policies, involving accountability and instructional reform, and local district and school conditions interact with teachers’ personal and professional backgrounds to shape two tracks of new teachers, tracks that reinforce existing educational inequities. It is widely documented that student tracking reproduces inequities along lines defined by race and social class (Oakes, 1985; Page, 1991); other research reveals that teachers assigned to low-track classes suffer from a lack of resources and control over instruction (Talbert & Ennis, 1990). Achinstein et al.’s study extended previous work by exploring the emergence of a system that sorts and socializes new teachers into two tracks. These tracks are distinguished in three ways: (a) distinctions based on social class, race and ethnicity, and perhaps gender; (b) levels of inputs, including professional development opportunities, instructional control, organizational resources, and curriculum and pedagogy; and (c) outcomes in the form of teachers’ sense of competence and efficacy and teaching beliefs and practices.

The authors found new teachers in lower capital and higher minority contexts were encouraged to rely on scripted programs to instruct under-performing students, ostensibly “leveling the playing field” and increasing accountability. In the

more affluent and better performing settings, new teachers were encouraged to apply professional discretion to foster students' independence and creativity. In the name of greater equality, such policies may serve to reproduce the social divide through differential teacher socialization. This study also highlights how conceptions of minority students as "other people's children" (Delpit, 1995), who have different needs and expectations, may produce different conditions and expectations for teachers, producing a form of impoverished induction for "other people's teachers." Thus some teachers get scripted, basics-focused teacher training, while others experience creative, co-constructed teacher education. Ultimately, socialization of novices may produce high and low tracks of teachers whose instructional beliefs and practices enact inequities in the socialization of high- and low-track students. These tracks corresponded with the capital of the district, thus ensuring that the "rich" (higher capital) get richer and the "poor" get poorer. New teachers, under current socializing forces, can become agents in the reproduction of social inequality. Thus two classes of teachers for two classes of students, and communities, emerge.

Compounding the inequities and induction tracking, simultaneously there is the development of increasingly constricting policies for new teachers, which make induction for educational change even more problematic (e.g., the US No Child Left Behind Act, high-stakes accountability testing, standardization, instructional control/scripts, institutionalization/mandates of induction policies). A recent study examined cases of novices who engaged in resistance against a scripted literacy program approved by their state and adopted by the teachers' school districts and the struggles novices faced to uphold their professional principles to respond to the needs of their students (Achinstein & Ogawa, 2006). "Fidelity" was a term used by administrators and teachers in the study to describe strict adherence to the text, pacing guides, and teacher scripts associated with the state/district adopted programs. Teachers experienced this control as coercive, which silenced dissent and drove alternative practices underground even when they were successfully impacting student learning. New teachers who questioned state-authorized and district-adopted programs were deemed "resistant," seen as deviant and pushed out of the profession or compelled to leave the school. This result is particularly disturbing, as research documents the importance of teacher control – the power to make decisions and to influence behaviors or other individuals (Bacharach & Conley, 1989; Ingersoll, 2003; McDonald, 1992). Limited teacher control or agency is associated with higher levels of student behavior problems, conflicts among teachers, and teacher turnover (Ingersoll, 1996, 2003). Moreover reflection and questioning facilitate teacher learning and growth of the profession, thus raising the question: Are new teachers in this study warning us about threats to the profession?

Against limited conceptions of induction, mandated fidelity to scripts, and constrictive policies, a change-oriented and equity-focused perspective of induction suggests the need to look beyond limited purposes that may track teachers, restrict teachers' agency, and reproduce inequities. Ultimately, in considering induction purposes, we need to explore the new professional and what it means to develop change agents for equity. We also need to understand what supporting new teachers to learn

to “teach against the (new) grain” might mean in a growing educational climate of control (Cochran-Smith, 2001).

Induction for Whom? A Call for Equity-Focused Induction

A second critical question is who gets served by induction and mentoring. A problem arises in some induction work, when student needs in new teachers’ classes recede in focus, as needs of new teachers, and their survival and self-efficacy, dominate. In high-need districts, with fewer resources, higher rates of poverty, and achievement gaps, backgrounding urgent learning needs of culturally and linguistically diverse youth proves particularly problematic. Educators, policymakers, and researchers are wise to consider how they articulate the target of induction.

At the heart of a change-oriented induction that targets underserved and underperforming youth rests the assumption that these students need to be cast as the primary clients of induction. This includes developing equity-focused mentors who guide novices to attend especially to students in greatest need. Our focus on equity concerns persistent patterns of difference in educational opportunities and achievement among students due to historical barriers to access, racism and other forms of bias, linguistic challenges, and poverty. Equity refers to a state in which gaps are eliminated and where achievement of all is raised. It includes providing differentiated supports for learners (Haycock, 2001); challenging inequitable practices to transform schools into more socially just and equitable systems (Freire, 1983; Sleeter & Grant, 1999); and knowing how structural inequities persist in larger societal contexts and how race, ethnicity, language, and class impact teaching, learning, and schooling. Working toward equity requires developing cultural competence: teachers’ knowledge of their own, students’, and school cultures; and how to teach content to diverse learners and affirm diversity (Ladson-Billings, 2001).

Focusing *novice* teachers on equity and diversity is a particular challenge in contexts with teacher–student cultural gaps such as in the USA where new teachers are predominantly white, middle class, and monolingual and often unprepared to meet the needs of the culturally and linguistically diverse students they likely will teach. Other challenges for new teachers include negative, resistant, and “dysconscious” assumptions about diverse students (Guskey, 1995; King, 1991); and limited instructional repertoires and resources specifically focused on diverse learners. Another challenge in developing equity-focused new teachers is that those in communities with the highest numbers of underserved youth frequently are the least experienced, prepared, supported, and retained, often reproducing rather than disrupting inequities. New teachers in the USA, for example, especially those underprepared, are disproportionately placed in classrooms with students of color, from low-income families, and with diverse language abilities (Darling-Hammond, 1997; Lankford, Loeb, & Wyckoff, 2002; Shields et al., 2001). Also, new teachers adjusting to demanding jobs can feel powerless to make change. They tend to comply with school culture norms and dominant values (Kelchtermans & Ballet, 2002).

Are Equity-Focused Teaching and Advocacy Even Possible for the New Teacher?

Given what we know about the demanding lives of new teachers, their differential preparation and support, current pressures to conform to scripted models of curriculum and instruction, and the nature of teacher tracking – is it even possible for new teachers to enact the role of change agent? Recent research and teacher case reports suggest that new teachers may take more actions toward change if certain kinds of preparation and schooling conditions occur. New teachers may work toward curriculum and school change if they are educated to develop cultural competence as they teach for diversity (Ladson-Billings, 2001); or if they are prepared in teacher education to work toward social justice in classrooms and schools (Darling-Hammond, French, & Garcia-Lopez, 2002; Quartz & the TEP Research Group, 2003). Preparation in both conceptual and practical tools for social justice teaching is important, as are pre-service placements that provide early-career practice in working with diverse youth (McDonald, 2005). Colleagues and mentors also play key roles. New teachers may work toward change if supported by colleagues who share an activist stance (Cochran-Smith, 1991), or if guided by mentors who help them read, navigate, and advocate in school systems (Achinstein, 2006).

Relevant to development of change-oriented work is a set of studies, in which a research team examined curriculum and impact of a northern California university teacher credential program that had focused over 5 years on developing in teachers a set of roles that included advocate for equity. A survey study revealed that program graduates reported feeling well prepared to teach diverse youth, with particular attention to English language learners (ELLs), and to advocate for equity in schools (Merino et al., 2001). The team set out to understand more about the program and graduates' reports of its effects in these areas, revealing a program in which attention to diversity and equity was infused throughout coursework and lessons, and taught and modeled through many means (Athanases & Martin, 2006). This work was extended through sustained and scaffolded apprenticeships in teaching for equity, including student teaching supervisors as equity mentors, placements that supported teaching for equity, and ongoing cohort discussions of equity teaching, supported by university-based supervisors.

As new teachers, the graduates reported that despite frequent frustration with school constraints, they had engaged in a surprising array of acts of advocacy for equity in and beyond the classroom. ELLs' needs especially prompted advocacy, including instructional tailoring, out of class tutorials, hunts for better texts and tests, a library field trip, creation of a culture/computer club, heightened parent contacts, and launching of a bilingual parent group (de Oliveira & Athanases, 2007). These new teachers spoke for students in need in school forums and spoke up about issues of equity – in faculty meetings, conferences with counselors, meetings with colleagues, and with school administrators regarding policies that needed revision to meet all students' needs. Overall, new teachers' advocacy shared four themes: a goal of *equitable access* to resources and support; *convictions* about

equity; *interceding* on behalf of students in need; and *engaging co-advocates*; and teachers reported that all themes had grounding in their teacher credential program (Athanases & de Oliveira, 2008).

Though new teachers in this set of studies reported that advocating for students helped garner support and affected attitudes and school practices, such advocacy did not occur cost-free. It required persistence and occasional confrontation with colleagues and administrators, some describing an assessment of risk, often feeling vulnerable in new jobs (Athanases & de Oliveira, 2007). The studies also suggest that educators may need to help school leaders, the public, and policymakers understand ways new teachers need to be protected through tenure, organizational structures, and supportive school cultures in order to feel safe to innovate in the classroom on behalf of underperforming students and to speak up and against school policies and practices that impede equity. Even with fairly rich preparation in advocating for equity, new teachers assess risks in assuming the role of advocate and often need a range of human and institutional supports to do this work – and those new teachers with less adequate preparation may need even greater support to critique schooling and to consider ways to make change. Here is where equity-focused and change-oriented induction and mentoring become critical.

Equity-Focused Induction and Mentoring: Potential, Challenges, and Promise

Several studies we conducted of mentor–new teacher pairs and a large network of teacher induction leaders shed light on promises and challenges for equity-focused mentoring. These studies reveal the potential of mentors to support new teachers to move beyond a teacher-centered focus to view students as individual learners with varied needs. Further, they explore a next level in which mentors focus novices' lenses on diversity and equity in classrooms and schools. In one study we found that counter to developmental models of learning to teach where novice-centered concerns of self must be addressed prior to a focus on students (Kagan, 1992), mentors can focus novices on individual students' learning, especially those underperforming, through several means (Athanases & Achinstein, 2003). Chief among these are multi-layered *knowledge and abilities in several domains of assessment* focused on helping new teachers assess their students' diverse levels of performance and need and on assessing new teachers' varied needs related to developing as a teacher. A mentor's skillful use of this knowledge can bring individual student learning into focus, and it can help new teachers generate methods for shaping instruction to attend to the learning needs of their diverse students (e.g., using analysis of student work to differentiate instruction). The cases highlighted the power and complexity of a mentor's knowledge, revealing negotiation between pressing concerns of novices and staying focused on individual student learners.

In another study, we found that a large group of induction leaders distinguished *pedagogical knowledge for equity* as the most essential knowledge category in mentoring for equity, including knowledge of ways to teach diverse *youth* and of ways to teach or guide *new teachers* in promoting equitable learning (Achinstein & Athanases, 2005). Effective mentors know how to use a mentoring session as a strategic site for focusing new teachers on diversity and equity, embedding such work in weekly conversations, and using observational data to help the teacher analyze equitable learning opportunities during instruction. A range of forms of knowledge support this mentoring. These include knowledge of the following: (a) how local and larger social and structural issues of diversity and equity affect students' lives and learning, and ultimately teachers' practice; and (b) how local and professional contexts affect new teachers' worklives. Also, knowledge of what diverse learners bring to class helps a mentor see when to guide a new teacher to move beyond a stance of viewing culturally and linguistically diverse youth as "problems." Finally, mentors need knowledge of themselves related to diversity and equity, being prepared to evolve as needed, and of ways to promote teachers' self-reflection regarding equity. Moreover, the study revealed the significance of mentors' *pedagogical learner knowledge* (Grimmett & MacKinnon, 1992) that includes, "knowledge that allows teachers to understand learners from different cultural, social, and family backgrounds, interpret properly what they say and do, and support effectively their development in cognitive, social, physical, and psychological dimensions" (Wang & Odell, 2002, p. 486). We found that the pedagogy respondents described was informed by knowledge of diverse learners *and* their contexts.

In that study, a critical case highlighted this knowledge base in action. When the novice was assigned a class labeled "low ability" ELLs, her mentor identified the need to differentiate instruction and yet maintain high expectations for students. When the mentor found the novice shifting instruction downward and limiting students' independence, she sought opportunities to intervene. The case highlighted the careful dance of challenging novices about expectations for culturally and linguistically diverse students while not *blaming* them; and ways a mentor can engage the role of advocate for new teachers and diverse students at a schoolwide level. Ultimately, mentoring for equity, like teaching for equity, involves moral dimensions (Hargreaves, 1995; Kelchtermans & Hamilton, 2004) and political dimensions of critiquing the status quo and current institutional arrangements in classrooms, school, and society. Mentors who engage in such an endeavor struggle with competing tensions about easing the transition of novices into the profession – socializing them into school cultures *and* challenging schooling.

New Teachers of Color as Equity Resources: Potential and Challenges

Among the ways the teaching profession might advance educational change that focuses on equitable access and achievement for diverse students is to create

supportive induction contexts for a more diversified workforce.² Previous research has identified how teachers of color can be a *cultural match* with students and support them in crossing boundaries from home to school, promote *culturally relevant teaching* and be more successful with diverse students, and act as *agents of change* (Ladson-Billings, 2001; Quiocho & Rios, 2000; Villegas & Lucas, 2004). Yet, emerging findings from a set of studies highlight that while new teachers of color working in urban, high minority contexts described their hopes about these three areas of promise, they faced some unexpected challenges and received little support during their induction phase (Achinstein, 2007; Archinstein, Ogawa, Sexton & Freitas, 2009). Most novices of color in the studies experienced some challenges by their students of color about sociocultural identifications and began to realize significant differences between themselves and their students that countered an assumed cultural match (Achinstein & Aguirre, 2008). All of the novices attended pre-service programs focused on culturally relevant teaching and all of the teachers expressed commitments to teaching in these ways. While some enacted these professional principles, many reported challenges with promoting culturally relevant teaching in their schooling contexts (Achinstein & Ogawa, 2007), and others described a lack of induction supports related to being an agent of change (Achinstein & Ogawa, 2008).

These challenges are essential for educators and policymakers to consider as they seek to diversify the workforce and promote equity for students of color. The findings speak to the need for more targeted support for novices of color and identify critical induction contexts in schooling climates that influenced novices' ability to tap their cultural resources to impact opportunities for students of color. Such school factors included teachers' *social networks* (shaped by size, collaboration, and interaction among students and teachers) and *professional cultures* involving governance roles, curriculum control, professional collaboration, and new teacher support. Also significant were *support for culturally relevant teaching* in school orientation and practices, and *school ideology and programs* in support of equity and social justice. *School-community relations* involving norms, structures, and practices that bridge school and parent communities also impacted the novices' experiences. These elements influenced how the novices of color could enact cultural and professional roles of culturally relevant teacher, role model, and change agent in their efforts to support students of color – and mark sites and possibilities leaders and policymakers might target.

The Need for Effective Equity-Focused Mentoring

What we see across projects in which we have engaged is this: Despite the personal predispositions of novices, despite their race/ethnicity/gender/language and other

²“People of color” references ethnic and racial minority groups in the USA, including African-American, Latinos, Asian-American, and mixed race people. We recognize the limitations and contested nature of these terms. We also recognize that in varied international contexts quite different groupings and identifications would more effectively frame social representations.

identity factors, despite their capacity to focus on individual learners as the primary clients of schooling, despite their degree of preparation in culturally competent teaching and advocating for equity in classrooms and schools, new teachers need models, mentors, and institutional supports in order to enact equity-focused teaching and to advocate for change in schools. Efforts to enact change must be viewed as embedded within multiple contexts that impact the academic lives of underserved youth. These include policies and politics, teacher education programs and boards of education, teacher credentialing agencies and commissions, human and financial resources, families and communities, school and district cultures, and induction programs and mentors. We highlight induction and mentoring as leverage points for foregrounding underserved students in educational change efforts. In looking to mentors as key agents in such important work, we must examine what we expect of these mentors, and how we need to support their development.

Induction by Whom? Mentors' Knowledge for Educational Change

Our third critical question addresses mentor preparedness for the job of guiding new teachers. Mentors typically get pulled from the teaching force as those most senior, and often those effective in working with students (Porter, Youngs, & Odden, 2001). Questions arise, however, about the knowledge, skills, and dispositions needed by mentors to help new teachers develop effective classroom practices, especially those that foster educational change and equity. What might mentors need to understand to enact more robust and change-minded models of mentoring? What kinds of development and curriculum can support such mentoring models?

In order for induction to promote educational change for equity, mentors need to draw on a knowledge base far more complex than previously depicted. Yet, within and across induction programs, there is uneven quality among mentors and lack of consensus about mentors' roles and knowledge needed (Feiman-Nemser et al., 1999). A key reason for underdeveloped induction programs and mentor practices is the belief that new teacher mentors come ready-made when in fact, recent research suggests that well-conceptualized programs are needed to develop the complex knowledge, skills, and dispositions for effective mentoring. If programs are to hold goals of equity-minded mentoring and educational change as central to their work, focused mentor development is even more crucial, and this needs to begin with determining what effective equity-minded mentors need to know and be able to do.

Drawing on a research project that tapped the wisdom of practice of an educational reform network of expert induction leaders and mentors (Achinstein & Athanases, 2006), we developed a complex portrait of effective mentoring for equity-minded educational change. We articulated the "bi-level" nature of mentor knowledge – one level focused on students, while a second on new teachers. Tapping this knowledge, the mentor assumes a bi-focal perspective focused on the new teacher up close, what s/he knows and needs, and on the big picture, which is

the students, their learning, and their needs. The bi-focal perspective makes mentoring especially complex as mentors at times face conflicts in meeting needs of both student and adult learners. For example, to address inequitable learning opportunities a language minority student experiences in class means confronting the adult learner about her or his practices while still trying to build a trusting relationship with this novice instructor.

We explored effective mentoring for educational change in three domains: learners and learning, curriculum and teaching, and contexts and purposes. These domains map onto the knowledge base for effective teaching as articulated by Darling-Hammond, Wise, and Klein (1999); Grimmitt and MacKinnon (1992); Grossman (1990); Ladson-Billings (2001); Shulman (1987); and Wilson, Shulman, and Richert (1987). We highlight here the first row of Table 2 dimensions focused on new teachers.

Column one, *learners and learning*, shows an effective mentor needs to know about adult learners, and their knowledge, needs, and receptivity to equity-minded change. For example, a mentor needs to “read a mentoring situation,” as Orland (2001) found with mentors in northern Israel, which can be dynamic, unique, and filled with dilemmas mentees face and manage. In our study on focusing new

Table 2 Bi-level knowledge base of mentoring for equity-minded educational change

	Learners and learning	Curriculum and teaching	Contexts and purposes
Focused on new teachers	Novice as adult learner Novice development and needs Novice knowledge base, strategies, and cultural competence Novice’s reflectivity level and receptivity to change	Professional knowledge: content, standards, assessment Knowledge of guiding educational reform and inquiry Pedagogies of mentoring Commitments and pedagogy to focus the novice on challenges of inequities Roles and interactional stances Languages of mentoring	Embedded professional contexts and communities Broader social and structural issues of inequity Political and organizational literacy Leadership and change agency Philosophies of induction
Focused on students	Students as learners, individuals, and group members Learning theory Cultural competence Pedagogical learner knowledge	General pedagogical knowledge Content knowledge Pedagogical content knowledge Reform-focused and culturally-responsive teaching Content standards and assessment	Schools and society Social, cultural, and political contexts Classroom and community contexts that shape learning Educational philosophies

Adapted from Achinstein and Athanases (2006).

teachers on diversity and equity described earlier, the mentor had to know how to manage a tension between her knowledge about sensitivities of the new teacher as an adult learner and knowledge of social inequalities for student learners constructed in the classroom and school (Achinstein & Athanases, 2005).

In column two, *curriculum and teaching*, an effective mentor guides equity-minded inquiry and change. This may include “educative mentoring” practices Feiman-Nemser (2001b) found in her case study of an effective mentor: pinpointing problems and helping the novice work toward the habit of problem solving, and probing novices’ thinking about students and work using nonthreatening questions. This professional knowledge domain also may include mentor actions that support moving novices from positivist to more constructivist conceptions and practices through the following: developing a clear notion of good teaching aligned with constructivism; practicing, modeling, analyzing such teaching; and recognizing and expanding the novices’ zone of proximal development, providing scaffolds and moving towards greater novice independence (Wang & Paine, 2001). Knowing how to mentor in these ways may also include “re-framing” as mentors enable novices to analyze their own initial frame, re-examine and rename the situation, explore different root causes, and open alternative solutions (Achinstein & Barrett, 2004). In that study mentors helped novices move from dominant managerial to engaging human relations and political frames for viewing students and classroom contexts. In one case, the teacher came in with a vision of being a change agent but found herself moving toward more conservative approaches. The mentor helped reframe the challenge. In another case, the mentor helped challenge a novice’s assumptions about students deemed by the school and teacher to be of “low ability,” reframing this issue as a political/equity concern and helped to shift the novice’s practice.

Column three identifies *contexts and purposes* focused on new teachers that require knowledge of multiple embedded professional contexts that shape teachers’ worklives (McLaughlin & Talbert, 2001). We highlight here a particularly underexamined dimension of mentor knowledge needed for induction for educational change – mentors’ use of micro-political literacy to analyze power, influence, conflict, and control inside new teachers’ organizational contexts. Micropolitical literacy includes three aspects: an ability to acknowledge, interpret, and understand (“see” and “read”) micropolitics of a situation; an instrumental or operational dimension involving the strategies teachers apply to address issues; and an awareness of satisfaction or dissatisfaction the teacher experiences as a result of his/her political literacy (Kelchtermans & Ballet, 2002, 2003).

How can micropolitical literacy be used by mentors in service of educational change? In Achinstein’s study (2006) drawing on mentors’ open-ended questionnaire responses and a case study, participants identified three critical domains of mentors’ knowledge of political contexts: reading, navigating, and advocating for change. The case study revealed how a mentor had to work on two levels utilizing micropolitical literacy when the novice came into conflict with school/district policies on instructional approaches and another conflict with a senior colleague who wanted to track students by ability, which the novice identified as inequitable. First,

the mentor guided the new teacher in how to be a self-advocate, supporting his political literacy and capacity not only to navigate, but to challenge the system. Second, the mentor also sought to navigate and advocate on behalf of the new teacher and worked up the system to support educational change. The mentor supported the new teacher to know his philosophical beliefs and to stand by his commitments about equitable practices. In this way, she demonstrated her knowledge of contexts and purposes of induction for promoting equity-minded work and change.

The case also highlights dilemmas for mentors in taking such a critical stance. As one mentor described: “We’re all clear that our role is to support our new teachers to navigate the system they are in, but it’s not clear whether our role is to support our teachers to change the system.” The mentor’s role is often seen as easing the transition of novices into the current system, rather than challenging inequitable schooling practices, critiquing curricular choices, and confronting colleagues. The mentor in the case noted how stressful it was to continually navigate and advocate, sometimes putting her at odds with the school. She also worried that the focus on politics may have taken away from much needed coaching on teaching. The politics brought her into conflict with her perceived mentoring role. Also, her politicized role and support for the new teacher’s self-advocacy may have put the novice at odds with his school/district, thus making him more vulnerable in his job. In these ways, she demonstrates the interactive nature of the domains in her mentor knowledge base for equitable education. She understood how *curriculum and teaching* decisions would impact student learning opportunities, and knew how to navigate school *contexts* to advocate for her mentee and his students for equitable learning *purposes*. She knew also to weigh all of this against the demands (and potential risks) for the new teacher, the adult *learner* she was mentoring to be a self-confident advocate for equitable student learning.

Examining a knowledge base for effective mentoring for educational change clearly requires more than a technical “knowing how to” (as it often gets cast in mentoring programs). It requires also a “being someone who” perspective that includes moral dimensions related to justice, fairness, and ethics, and political dimensions related to power, interest, and conflict (Kelchtermans & Hamilton, 2004). These areas prove salient as mentors tap a complex knowledge base and make judgments about doing justice to students and new teachers for whom they are responsible.

Curriculum for Equity-Minded Mentor Development

Developing the capacity for mentors to learn about and use the kind of knowledge base we have described raises another set of issues. Seldom has preparation of mentors been cast as curriculum (although Davis, 2006, features one such model) – and even less often as curriculum grounded in equity concerns. A recent study, however, examined four cases of induction leaders conducting action research on how

to develop and refine mentor curricula, with some findings related to equity-minded mentor development (Athanases et al., 2008). Cross-case analyses suggested the need for three elements of mentor curriculum. First, tools, scripts, and routines can support the work but generic scaffolds need to be adapted and tailored to local needs and to monitor usefulness. In one large urban district serving large numbers of students of color – many underperforming – induction leaders successfully adapted state teaching standards to foreground meeting the needs of diverse learners, and used these adapted versions to guide mentor development and mentoring of new teachers. This adaptation placed equity center stage.

Second, in a time of standards reform and high-stakes assessment, the needs of novices ought to be tied to students and their learning, the ultimate target of mentor development, particularly when dramatic achievement gaps persist. In one case, induction leaders in a fairly diverse elementary school district grounded an entire mentor curriculum in a district goal of developing powerful literate thinkers. Leaders began with this student goal and mapped backward to what knowledge, skills, and dispositions such a goal required of new teachers – and by extension, their mentors and the program's induction leaders. Focusing induction sharply on this student learning goal enabled all actors in the project to track how well the district was enabling new teachers to meet the literacy needs of all of their students, including those underperforming. Finally, the use of action research and inquiry skills enabled mentors and induction leaders to generate and respond to data about how effectively mentor curriculum had been tailored to particular needs of mentors, new teachers, and students. These cases highlight the need to develop and test induction curriculum models and processes that go beyond the status quo, harnessing and adapting human and material resources and profoundly rethinking how an educational system can work to promote equitable learning for students.

Conclusion

To explore how induction and mentoring can serve the goals of educational change, we anchored this chapter in three essential questions. For the first question ("Induction for What Purposes?"), we examined the range of purposes programs and writers have articulated for teacher induction. We argued that retention of teachers is a simplistic and ultimately only short-term purpose for induction, and that calls for more reform-minded and change-oriented teaching require that we develop, foreground, and study more robust visions of induction and mentoring. We also described studies about the constricting policy contexts that foster a form of new teacher socialization toward the status quo countering the purposes of educational change for equity. Such evidence calls for educators to consider larger purposes of induction and the often hidden perspectives that underlie dominant approaches to induction, namely retention and socialization into the status quo. Educators,

researchers, and policymakers need to examine organizational cultures into which novices are inducted and the messages transmitted about professionalism.

For the second question (“Induction for Whom?”), we focused on ways induction and mentoring need to foreground K-12 students as the primary clients of schooling. We argued that such work requires particular attention to equity-minded teaching to meet the needs of culturally and linguistically diverse students, and with particular attention to meeting the needs of those underperforming and/or underserved in schools. This section reveals the need for educators, researchers, and policymakers to investigate ways induction can move beyond support for novices to foreground needs of students who have historically been underserved.

To answer our third question (“Induction by Whom?”), we explored the need to develop rigorous models of a mentor knowledge base, with attention to the knowledge, skills, and dispositions needed by mentors to enact more robust and change-minded models of mentoring. In this way, we answer the question of induction by whom by arguing that induction and mentoring must be conducted by engaged, supported, and knowledgeable mentors who are well prepared to match change-minded, equity-oriented models of induction.

That change-minded mentors are not born, but continually in the making, holds implications for policy, practice, and research. Policymakers who advocate proliferation of induction programs without adequate support and resources for ongoing professional development of both mentors and novices may undermine their policy goals of improving the quality of new teachers’ practice. For practice, the kinds of professional development offered to mentors matter. That means providing meaningful contexts for learning beyond quick-fix training workshops focused on limited conceptions of the novice and mentor learners. Moreover, the content of such professional development must reflect the complexity of the knowledge base needed for mentoring. Rather than a reductive approach to teacher development focused on emotional support and advice giving, the kinds of reform-focused teaching expected of novices must be supported by informed conceptions of mentor development. Also important for practice is that mentors need support and development to re-envision their roles from local guides to critical agents of change (Feiman-Nemser & Parker, 1993). This involves developing their own critique of educational institutions and building a repertoire of critical practices – for example, in supporting equitable outcomes. For research, reconceptualizing the knowledge base of mentoring challenges underdeveloped perspectives of the work of mentoring. Too often the act of teaching is cast as one behind the closed door, stripped of consideration of its multiple embedded contexts. However, left unexamined has been a conception of what the embedded contexts look like for the mentor guiding the novice teacher for educational change.

Ultimately, if induction is to serve as leverage for change in schooling and the lives of all youth, then we will need to reconceptualize how we envision new teachers and mentors as professionals, learners, and change agents. We will need to move from a model of induction into current schooling arrangements to a view of induction for equity-minded educational change.

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Smart School Improvement: Towards Schools Learning from Their Best

David Reynolds

The experiences of those who have tried improving schools over the last 20 years are somewhat sobering. School improvement practised by academics and others in the school effectiveness and school improvement communities has passed through a number of phases, which do indeed show intellectual progress (Hopkins & Reynolds, 2001), and there are some recent formulations of improvement theory and practice that represent an advanced formulation on the past in such areas as system reform at the *macro* level and networks at the *micro* level (Hargreaves, 2003; Hopkins, 2007).

However, overall, when educational policies have been scaled up that are based upon these insights and formulations, experience in many countries across the world has verged on the disappointing (Elmore, 2004; Leithwood, Jantzi, & Mascall, 1999).

The value of these salutary lessons is, though, that they spur new explanations of what may have gone wrong and encourage new kinds of school improvement methodologies in future. In terms of what policy areas specifically might have been problematic, there was firstly the influence of the school effectiveness movement in the 1990s, which provided to practitioners in schools the famous checklists of 8, 10, 15 or 20 things that the *effective* or *high added value* schools do, from effective management to generating a climate of high expectations (Teddlie & Reynolds, 2001).

This phase, although useful, had a number of limitations. It was based upon giving schools, from the outside as it were, ideas about what to do, and there was subsequently no *ownership* of the process of improvement by the school and its teachers. As more and more schools did what the knowledge base suggested they should be doing – from ensuring the entrance hall displays the details of the languages spoken in the school to ensuring that there are formal organisational structures to involve parents – the prospects of any future *return* on further concern with these factors became limited. Many schools simply *maxed out* (Reynolds, 2000).

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The next two phases of educational reform were limited in their effectiveness too. The specification of what schools should be doing by the state – in the recommended prescriptive practices outlined in the literacy, numeracy and secondary strategies – did give perhaps a short-term boost to teaching skills and test scores, but did not provide for the long-term development of the profession (Earl et al., 2003). The use of *school to school* methods was likewise probably not in the long term hugely powerful – schools can be geographically far apart, are often psychologically distant from each other, have different cultures, and are often used to employing excuses as to why they shouldn't take up the methods of operation of the school down the road.

Likewise, the potential for networking between schools, school federations and the like is probably slightly difficult to deliver if schools are competing against each other in educational markets in practice.

However, no one would suggest that *school to school* is not useful (DfES, 2003). At the level of subject specialisms, contact between departments in the same subject in different secondary schools can be really powerful, indeed sometimes transformative. And there are many examples of schools picking up useful ideas they would not have thought of themselves from their collaborations with other schools (Hargreaves & Fink, 2006).

But none of these three *phases* of educational reform outlined here appear to have been necessarily what the UK situation requires, in terms of the improvement of student outcomes and the reduction of inequalities between social class, ethnic and gender groups. Now, policy espouses a *consumerism* for parents combined with strong central intervention upon lower-performing schools, but it is unclear whether this fourth phase will be any more successful than previous policy periods (see Hopkins, Reynolds, & Gray, 2005, for further discussion).

This chapter considers a new possibility for productive educational change – the use of schools' own internal conditions, processes and behaviours in a process of benchmarking of schools against their own best people and best practice. Known as a *Within-School Variation* (WSV) approach, the purpose is to develop a sustainable engine of school improvement from *within* organisations, rather than continuing the reliance upon *without-the-school* educational changes that may implode on the impermeability of schools' organisational structures and cultures when they are brought to one school from another.

In medicine, this *within-system* paradigm is associated with the development of the so-called *smart* drugs that operate through bypassing the surface structure of the cells that they wish to affect by camouflaging themselves. They operate then on the internal conditions of target cells to achieve their goals. In education it will be interesting to see if similar approaches are equally applicable and effective.

Within-School Variation

Extent

Over the past two or three decades, variation within schools in their student achievement, rather than between them, has been occasionally remarked on, but

only recently has come into major focus in the research literature. For example, Fitzgibbon (1985) reported on differences between mathematics departments that were large even after value-added estimates were made, and indeed her own philosophy of empowering teachers with quality data had the learning from, and reduction in, WSV at its heart. But little attention was paid to this work.

However, it took the announcement of the Programme for International Student Assessment (PISA) results, published by the Organisation for Economic Co-operation and Development (OECD), to fully bring this issue into the professional spotlight. In the PISA results for the UK, 80% of the variation between pupils in their achievement lay within schools, fully four times as much as lay between them (20%), a finding that was markedly different from many OECD societies’ results and that put the UK towards the very top of the WSV table. Some societies, like Germany, for example, had a very small amount of variance within schools, with the greater amount lying between them.

Quite what the explanation of the UK performance was is still unclear. In a comprehensive system like that of the UK, there are no selective types of schools that, as in Germany, would inflate the *between school* estimates. Perhaps the strong influence of social class in the UK would minimise the effect of school differences and maximise the variation within a school, any school.

It is also possible that there might be some structural looseness in the UK system compared to those of other countries. This unreliability or variability is shown in Table 1 below – compare the variance at school level shown in the column looking at pupils’ aged 7 intake scores and later scores (marked “C”) in the UK, USA and Taiwan, for example, which shows that the school and classroom *level* in these analyses is more constant and less variable in Taiwan than in the UK and USA.

It is also possible that the historic relative autonomy of UK schools from society, local authorities from state control, schools from local education authorities and teachers/departments from school management control, created a system of multiple autonomies and unreliability that might explain the UK results.

Contemporary data certainly suggest that WSV continues to be large. Using data from Fischer Family Trust, and looking at the 65–75% of secondary schools where pupils’ progress in Key Stage 3 is roughly in line with national expectations, if one takes six groups of pupils (boys/girls in three core subjects), then:

Table 1 Percentages of variance in mathematics achievement to be explained at school level before and after correction for student background variables, for selected countries

	Intake: end year 1 A1 unconditional model A1	Intake: end year 1 B1 with background covariates B1	End year 1: end year 2 A2 unconditional model A2	End year 1: end year 2 B2 with background covariates B2	Intake: end year 2 C C
USA	0.35	0.29	0.37	0.20	0.25
UK	0.21	0.11	0.22	0.07	0.10
Taiwan	0.03	0.02	0.07	0.04	0.04

Source: From Reynolds, Creemers, Stringfield, Teddlie, and Schaffer (2002).

- Eighty percent of all schools show value added significantly higher than might be expected for one or more groups;
- Over a 3-year period, 50% of schools have at least one subject in which progress would put them in the top 20% nationally in the subject concerned. (See Reynolds, 2004, for further details.)

Our own research on primary schools also shows the power of within-school factors. Table 2 shows the variance in pupils’ mathematics scores that is explained by individual background factors (the customary 75–80%) and by educational organisations and processes (in this case a slightly higher 20–30% of total variance than is usually seen in such studies, perhaps explicable by the use of mathematics as the outcome factor, on which educational effects are much higher than reading ability).

Table 2 Variance at the school, classroom and pupil levels on mathematics achievement

	School	Class	Individual pupil
Year 1	9.9	14.1	76.0
Year 2	5.6	18.0	76.4
Year 3	4.8	28.8	66.4
Year 4	5.7	22.4	71.9

Note: Year above is the year of the study itself.
Source: From Reynolds, Muijs, and Park (in preparation).

The class *level* related to the practices of individual teachers explains considerably more variation than the school *level*, a very similar picture of WSV to the secondary departmental data.

Causes

The factors that might account for WSV, and particularly for the high levels in the UK, are not totally clear. It may be that the sheer scale of the pressures upon teachers and schools in what is a heavily driven *accountability culture*, through parental choice and publication of school results, may have had the effect of differentiating out teachers and whole departments across a wide range of competence, with the best *thriving on pressure* as it were, whilst the worst *spiral* into decline. Indeed, given that the educational system is premised upon the effectiveness of an economic, market-based approach, it would be intended that poorer schools and poorer teachers would receive progressively fewer students and the income that they bring, and would ultimately therefore spiral into closure (Reynolds, 1999).

It may also be that the basic model of teacher education practised in the UK may not have worked to minimise differences within schools. In a model that may loosely be called one of *apprenticeship* with the trainee teacher being guided towards appropriate professional standards by their *mentor* in higher education and

in school, the level of professional effectiveness will depend partially upon the initial characteristics of the trainee, thus generating a possible variation in performance subsequently.

It may finally be the case that the prevalence of national programmes, such as the primary and secondary strategies, in the UK and other societies generates a situation where the *ceiling* of competent teachers rises away from the *floor* of more average-performing professionals.

Interestingly, the school effectiveness literature has insights into the causes of WSV at an individual school level, since more *ineffective* schools have greater WSV than effective organisations (Teddlie & Reynolds, 2001; Teddlie & Stringfield, 1993), presumably because the ineffective have not been coherently reliably managed. The effective organisations appear by contrast to be intolerant of large negatives in their organisational effectiveness and indeed see their initial steps to school improvement as most easily accomplished by involvement with the least effective, through professionals benchmarking against their best.

There are also hints from the literature on educational policy reform that some of the characteristics of some programmes may intensify variation. If schools *self invent* strategies, the effects are likely to be more variable than if they utilise predeveloped, known-to-be-effective programmes like *Success For All* (Slavin, 1996).

In evidence from programme evaluations additionally, the factor that matters in terms of maintaining student outcomes is to pursue any project reliably in terms of pursuing innovation thoroughly, rather than through unreliable implementation of one project and not another (Stringfield, Ross, & Smith, 1996). In the school improvement literature from the 1990s, this became known as the *fidelity of implementation* issue (Fullan, 2001).

Addressing Within-School Variation

Given its scale and practical policy centrality, it is perhaps surprising that WSV has not received more attention at the national policy making level. There are no countries, indeed, where action on WSV is part of national formative policy discourse, although in the UK it is addressed summatively in a number of instances. The inspection agency OFSTED collects information on school mechanisms for reviewing WSV, and the improvement *partners* that each school has in the UK are furnished with information from their partner schools concerning variation between core subject performance and what is being done to reduce it (from the “SEF” form). Differences in subject assessment performance, for individual schools, by comparison with national performance for comparable schools, are also made available through the RAISE online national data systems.

But the present limited acknowledgement of WSV is recognised in the UK more as a *summative* issue to do with evening out performance across school departments than as a *formative* issue that might provide the resources and possibility

for school improvement in all areas of its functioning. Indeed, the national policy arrangements – in the UK as in other societies – continue to focus on whole-school reform through changes to accountability mechanisms, governance structures and the introduction of new school *brands* such as the Charter Schools in the USA, the Academies and Trust Schools in the UK, and the schools set up and run by parents in parts of Scandinavia.

The explanation for the neglect of WSV-based policies at UK national level is probably very simple. Policy makers have been attracted to pulling policy *levers* at whole-school level because these resonate with the somewhat simplistic educational notions held in their political communities. The read across into political debate is therefore straightforward. Additionally, the scale and extent of WSV in the UK is probably underappreciated as it only featured in comparative educational research findings post PISA in 2001.

It is also possible that policy makers would have anticipated a less than favourable response from educational professionals if more were attempted to learn from and expose interprofessional variation, even if that were to have been done in the interests of possible system reform.

At individual school level, it is also easier to see why WSV may be a difficult issue to embrace. National systems for skill sharing are rudimentary, such as the *exemplary* observation system for teachers' classroom performance in the UK that involves assessment of only the teacher's behaviour and not the learning behaviours of students (DfEE, 2001). Given that therefore any effective individual school systems need to be *home made*, this involves allocation of considerable resources of time, money and attention in a school, all of which are obviously in short supply.

Also, in many schools, the quality of school leadership may mean that it is hard to talk about such an intensely personal issue as variation in practice, especially with an entire staff group. The literature on the more ineffective schools suggests this particularly (Clarke, Reynolds, & Harris, 2005; Reynolds, 1996, 1997).

Even where schools may be willing to learn from internal variation, there are difficult conceptual and practical issues to doing it. It is difficult to sort out the *personal* reasons for some persons' or departments' greater effectiveness from the *methods* that they may be using, a difficulty even more pronounced because of the very exceptionally effective teachers who often *break the rules* of the teacher effectiveness literature (Muijs & Reynolds, 2005), because they are such unusual people. Indeed, it may be that the unusual cannot easily be replicated.

Likewise, when subject cultures in secondary schools are so strong, it may be difficult to get professionals to see the utility of the methods of subject departments other than their own. Given that the teacher effectiveness literature suggests that there are subject specific behaviours that are important in determining student outcomes as well as some universal behaviours that are important (Muijs & Reynolds, 2005), the whole process of benchmarking professionals against other professionals is fraught with conceptual difficulty in addition to the distinctly practical difficulties we noted above.

In addition, schools themselves of course have been co-opted into the national UK policy discourse that is *whole school* or *school-to-school* rather than within-school orientated. They will reflect the same policy concerns as they are made to reflect.

School Improvement Through Addressing WSV: The High Reliability Schools Study

Attempts to systematically build school improvement models based upon the recognition of, and benchmarking with, WSV have indeed been very few in number. There are of course those who have seen performance data on WSV, as on many school related issues, as the foundation for school improvement, as celebrated in the *evidence informed education* model. There are additionally those models that seek to improve schools through improving their *organisational intelligence* as it were, in the hope of creating more rational school systems generally (see Teddlie & Reynolds, 2001 for a review).

However, only two projects that systematically have attempted to use WSV for improvement purposes have been reported in the literature: one, the High Reliability Schools (HRS) project based upon more generally transferring the principles of high-reliability organisations to schools (Reynolds, Stringfield, & Schaffer, 2006; Stringfield, Reynolds, & Schaffer, 2008), and the other a specially designed development project in the UK organised and funded by the National College for School Leadership, the Department for Children, Schools and Families and the Innovation Unit, which ran from 2003 to 2007 (NCSL, 2006; Reynolds, 2003, 2008; Tarleton & Reynolds, 2005).

The HRS project was based upon an assessment that the organisational characteristics of those organisations that have to function by being *failure free* might be useful as an evidence base for school improvement. Assessment of the failures of educational reform (Datnow, 2005) have indeed suggested that sometimes valid reforms may have failed because they were unreliably implemented and that, in a sense, unreliability seen in such areas as WSV in teacher effectiveness behaviours and the like may put a ceiling on the achievement of high outcomes. In other words, reliability puts a potential brake on validity.

The literature suggests that regardless of the sector of a society in which they work, HROs share numerous characteristics:

1. An enabling social context: HROs evolve when both the larger society and the professionals involved in the working of the organisation come to believe that failure of the organisation to achieve its key goals would be disastrous (thus individual airlines are allowed to add and subtract specific routes, but both commercial aircraft maintenance and air traffic control are very closely monitored).

2. Organisational reliability requires a clear and finite set of goals, shared at all organisational levels. No organisation performs huge numbers of tasks with very high reliability. Reliability requires priority setting and focus.
3. An ongoing alertness to surprises or lapses. Small failures in key systems are monitored closely, because they can cascade into major problems. In order to sustain multilevel awareness, HROs build powerful databases. These databases can be described as possessing “Four R’s”:
 - Relevance to core goals
 - Rich triangulation on key dimensions
 - Real-time availability to all organisational levels
 - Regularly used and cross-checked by multiple, concerned groups, both inside and outside the organisation
4. The extension of formal, logical decision making analysis as far as extant knowledge allows. Regularly repeated tasks, which are effective, become standard operating procedures (SOPs). This is in part to make *best practice* universal, but also to allow a rich web of peer observation and communication.
5. Highly reliable organisations actively sustain initiatives that encourage all concerned to identify flaws in standard operating procedures and honour the flaw finders.

Because high reliability is a social construction and requires high levels of individual professional decision making, HROs perpetually engage in the following three activities:

1. Active, aggressive recruiting of new staff at all levels;
2. Constant targeted professional development/training and retraining;
3. Rigorous performance evaluation. In HROs, monitoring is necessarily mutual without counterproductive loss of overall professional autonomy and confidence. This achievement is possible because experience has taught all concerned that reliable success evolves through frank, protected, multiway performance feedback.

The organisational structure of the HRS programme was built upon the notion of the importance of schools learning from their within school variation, through benchmarking against their best departments and personnel. Performance data were used to identify overperforming departments, and resulting buddying systems put together middle management departmental leaders to skill share and skill swap. In the case of one of the local authorities that took part, as an example, all secondary schools sent all their heads of department to evening courses to receive the knowledge base about effective departmental practice.

The volume of performance data was also increased so that the climate within schools stood a better chance of being *evidence informed*. Additionally, observation of teachers’ within-classroom performance, using their peers from within the

same department or outside their department, was encouraged, using state of the art observation systems (Muijs & Reynolds, 2005).

Many attempts at selecting out what worked best in each school became codified standard operating procedures that were introduced in *core* areas of functioning such as behaviour management, data collection and even the structure of lessons across all subjects, where in certain schools it became axiomatic to start all lessons in all subjects with an *advance organiser* and to finish for the final 10 min with a lesson closure that was *cognitive* as it were rather than the *social* closure that was often characteristic of teaching before the project.

It is important to note, however, that in no sense were teachers and schools left on their own to self-invent the mechanisms by which they learned from their variation in internal functioning. Bodies of knowledge in school effectiveness (Teddlie & Reynolds, 2000), and school improvement (Hopkins, 2001; Hopkins & Reynolds, 2001), were consistently introduced to schools.

Performance data on the initiative were very encouraging, with schools in the first follow-up achieving more rapid improvements in their examination results the more they followed the high reliability principles and improving more than all nonproject schools in the nation they were part of (Reynolds, Stringfield, & Schaffer, 2006). A second follow-up on progress in the innovation a full 5 years after it finished (Stringfield et al., 2008) shows this performance being sustained, with improvement in examination results 90% better than that of the nation's group of schools as a whole. Additionally, the local education authority in which the schools were situated was reported in a value-added study of all local authorities in the nation to have been the most *effective* in examination performance (Stringfield et al., 2008).

School Improvement Through Addressing WSV: The WSV Study

The second study was specially designed to learn from WSV and was the first of its kind in the world. It suggested, not surprisingly, that the process of change is complex, more so within today's schools than at any other time in educational history because of the speed of technological change and the historic absence of any proven principles of managing educational change other than the simple one. Our group of schools varied – rightly – in how they handled change in accordance with their own culture, context and catchment area.

But a number of clear principles of how to handle change in the complex, potentially professionally fraught and delicate area of WSV were clear, in order for schools to use the variation productively.

The introduction of WSV-related change required a systematic audit of individual school's presenting cultures, organisational factors, past attempts (if any) to deal with the issue and indeed the scale of WSV itself. Change was contextually specific to each school, all of which had their own entry points into the WSV area and issues. These were micro (the issue of variation in course work marking standards, say) or macro (departmental/academic year variation in pupil outcomes) according

to context. School underachievement may be the peg that was appropriate to some schools, but in schools that were already overachieving in value-added terms, other *hooks* were necessary (pupil voice filled this role in some schools and accelerated learning in others).

The core issue in managing change was to hold on to the necessary collegiality, which was needed to collaboratively generate change, while at the same time recognising the variation within schools by individuals and departments that was necessary to generate professional learning. Holding on to that collegiality and maintaining enthusiasm for WSV activities was best shown when existing training days and resources were utilised, rather than the imposition of an additional burden through special additional sessions. Besides the argument that WSV, and reducing it, is a core mainstream issue could only be sustained if the training activities related to it were themselves mainstreamed rather than bolted on.

Change was bitty, messy and chaotic at first, and progress came in bursts and fits and starts, but the vision of learning from WSV and not being afraid of it needed to be held on to. Only head teachers, and to an extent, middle management leadership could do that.

Close attention was given to ensuring schools possessed a culture of openness, collaboration and collegiality before any WSV work began, given the sensitivity of the WSV issues, in every school. While each school was contextually different, there was much sense in beginning the WSV work by ensuring that data about WSV, of the highest quality, were available to begin the professional conversation within schools and to identify the sources of strength to be benchmarked against. Relatedly, WSV needed to be seen as a programme of interacting factors and not a series of unconnected one-offs. This necessitated more than badging and labelling of activities to achieve professional support and understanding and required a level of conceptual understanding within the senior management of schools embarking on WSV. Schools also needed multiple sources of support from external agencies (other schools, higher education, local authorities) to enable WSV initiatives to take place successfully, given their novelty.

Attention to school ethos and culture was seen as critical across the group of schools, since attempting to do work on WSV that necessarily involved collaboration within an educational setting that did not foster it, would have been impossible and, possibly, educationally dangerous. Schools specifically attempted to do the following:

- Start small but quickly scale up by either using one or two departments to start things off or using one issue across all departments.
- Use within-school training events to build a coalition for support of the project.
- Use re-titling (such as departments becoming *attainment teams*) to symbolise change.
- Use participation in project events and meetings with other schools in the project to build networks across individual schools that would give esteem to those participating.

- Use able, or aspirant, staff in schools as pioneers, given that this would maximise the chance of success.
- Use the national scale and potential international significance of the project to motivate participation.
- Ensure very full provision of knowledge about the project within schools.
- Use off-site events that ensured staff were free from the *furniture* of the school, given that WSV is part of any school furniture.

The great majority of schools sought to improve the use of existing data by more specifically developing them into useful management information that would benefit pupils and the school. This involved:

- Encouraging the sharing of data between and within departments, and from any feeder schools;
- Developing clarity about what data should be used for;
- Monitoring at the point of outcomes, involving sampling pupils' work;
- Using data to build a *coalition for change* in the schools and to build morale through showing improvement;
- Using data to track pupils against expectations;
- Using data to identify the *excellent* departments (and for that matter *the less excellent*) who could be used in whole-school work;
- Developing better systems of prediction of grades and performance, identification of grades and under performance and so on;
- Analysing data at year level in addition to cross-year departmental level, for all years;
- Collecting data on new areas in addition to that of academic achievement, such as pupil attitudes, and valuing qualitative as well as quantitative data;
- Using existing national data sources in a more informed way; and
- Collecting data from new constituencies (e.g., parents and employers).

The focus of the project on a level closer to the classroom than that of the school clearly encouraged a focus on teaching and learning issues in these schools. This was shown in the following:

- Developing high-quality observational systems, used by peers with peers, that gathered high-quality data on teaching behaviours, pupil behaviours, classroom processes, learning and the climate in different classrooms (this is different from the national system developed by Hay McBer, 2000);
- Encouraging pupils to provide feedback of their opinions on their own learning-related issues as well as on their teaching;
- Attempting to specify within and across subjects what might be the core classroom-related teacher behaviours;
- Encouraging discussion of teaching in departments and across the school;
- Attempting to enrich teaching through the use of new curriculum developments;

- Attempting greater consistency in teaching behaviours, especially in the expectations of pupils, within and across departments;
- Encouraging using effective *lead* departments, the use of novel methods of teaching and learning;
- Encouraging a common language for the description of teaching and learning across departments; and
- Developing academic tutoring within pastoral teams.

Virtually every one of these secondary schools launched training initiatives with their middle management departmental heads. In most schools, these roles had been historically poorly resourced and indeed, sometimes, regarded as an infliction on the people holding them rather than as a management tier offering an opportunity for personal and professional development. These initiatives were specifically as follows:

- Changing philosophy from being purely middle managers to being middle leaders;
- Training of middle managers, particularly in areas such as coaching/mentoring, data usage, classroom observation and so on, not just using exceptional individuals as models but using all middle managers on the sound basis that all had learned one good piece of professional practice to share;
- *Buddying* or *matching* of middle managers with others specially chosen to permit transfer of skills, attitudes and behaviours rapidly;
- Using exemplary middle managers in whole-school training days;
- Using key personnel – heads of department respected by the wider staff group – to start the ball rolling;
- Extending the focus to heads of year, or heads of house, and ensuring the same programmes were created for them as for heads of department;
- Disaggregating data to subject level to permit fine-grained analysis;
- Inspecting pupil performance and its variation across subjects.

Pupil Voice

The involvement of pupils in furnishing data on learning in these schools is a further example of what happens when the lever of the department, or the individual teacher, or the pastoral/tutoring team, is being addressed rather than that of the school, given the closeness of these levers to teaching and learning. Specific initiatives involved are as follows:

- Greater involvement of pupils in planning for their future achievement;
- Pupil-based surveys of learning styles; and
- Pupil-based surveys of teaching.

As schools explored the variation in their gains across different departments and years, shown by their use of data systems, and attempted to focus on training of middle managers and their departments, many of them, as in the HRS project, moved towards tighter specification of systems, procedures and responses to pupil needs in an attempt to iron out WSV.

The experience of the work on data that most schools began with was that there was huge variation in what was regarded as the normal procedures in what happened to the data, what was meant by data-related words and indeed what *data* were. Most schools used in-service sessions, based on a cascade from the departments or parts of the pastoral structure that were exemplary in their use of data, to ensure that there was reliability and consistency in these issues, and most schools gained remarkable improvements, with limited efforts and limited time. This encouraged a broader focus on other areas:

- On ensuring all departments and year teams had consistency in other areas in their expectations and procedures;
- On reducing the isolation of staff by promoting team approaches and networking; and
- On ensuring at school level that there were clear expectations of what was expected from pupils in their commitment to school (e.g., time keeping, bringing the right equipment, completing work on time or ensuring work was properly presented).

Conclusions: Practice and Policy

The *micro-level* educational policy implications of the work on WSV are important for practice in that while it might be difficult to have policies for what happens in individual classrooms, this might be feasible at the subject departmental level or academic year level in a secondary school or the year level in a primary school. Targeting these means that policy can get far closer to what ought to be the real focus, the classroom level, than if it only addresses the school level. Also, while not every school is effective, all schools will have within themselves some practice that is relatively more effective than elsewhere in the school. Every school can therefore look for generally applicable good practice from within its own internal conditions. Within-school units of policy intervention such as years or subjects are also smaller and, therefore, potentially more open to being changed than those at whole-school level.

More generally, there may be lessons from the WSV project for the direction of public sector reform. This has involved a focus on trying to improve service delivery through improved preservice, initial training across many professions, but has been less sure-footed when it comes to maximising knowledge transfer of good practice subsequently.

Organisation-to-organisation transfer is thought to have been maximised by varying the external contingencies within which state welfare works, as with the use of

the private sector to *lever up standards* in the public sector or the use of performance information and public choice to expose poor performance. Yet while such policies may encourage welfare organisations and professionals to work harder, they may not generate smarter working unless the people and the organisations have more effective *technologies of practice*, as it were, on which to draw. Getting these to move between schools, or hospitals, or prisons, when all organisations have relatively impermeable cultures, boundaries and defences is the problem.

Fortunately, we are now beginning to have the understandings of how to achieve smarter working. It involves resourcing organisations with performance data on their subunits or individuals to enable benchmarking against their best people. It involves systematic attempts to transfer knowledge between professionals at the point of impact of the individual concerned on service delivery, the frontline, as it were. It involves making available to individuals and organisations the *fundamental* knowledge of good practice that has accumulated since their preservice education, using the IT systems that now make this much easier than before.

Teachers in general, and those teachers in less effective schools in particular, seem to be more influenced by classroom-based policies that are close to their focal concerns of teaching and curriculum and less by policies that are managerial and orientated to the school level.

The focus on WSV hopefully moves us closer to a world where no school needs to wait for another school to help it out, since it can help itself by looking at its own best people and learning from them. This world is one where a school's departments and teachers cannot use excuses such as *it's the pupils* for their performance, since they have generally the same pupils. This world is one where excellence is regarded not as something to be hidden but as something to be learned from, for the benefit of all.

It also involves charting the views of consumers directly, gathered at the point of service delivery. And, finally, it involves attempting to use the naturally occurring variation that exists within organisations for the benefit of the organisation's effectiveness by not sweeping it under the carpet, but by creating an engine of improvement that operates independently of outside organisations. That *engine* can operate at local level, within each organisation and within each workforce, without any need for national *top-down* strategies that disempower. It may just be the wave or phase of the future to restore disappointed hopes of public sector reform.

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How Successful Leadership Influences Student Learning: The Second Installment of a Longer Story

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Stephen Anderson, Blair Mascall, and Molly Gordon**

This chapter summarizes recent evidence about the links between successful leadership and student learning. Results of a wide-ranging review of literature, initially completed several years ago (Leithwood, Louis, Anderson, & Wahlstrom, 2004) and regularly updated, are combined with key findings from a large-scale study of leadership and student learning currently underway in US schools. Results from the study reported in this chapter are based on responses by more than 3,400 teachers and 130 school administrators to the first of two rounds of surveys. Also included are selected results of the first three rounds of district and school site visits including observations of instruction in more than 165 classrooms and interviews with 32 principals and 180 teachers, along with board members, community members and district staff.¹

The organization of this chapter follows a backward mapping logic, beginning with what is known about the variables and relationships having the most immediate impact on student learning, and moving toward the most remote. Rather than attempting comprehensive coverage of the variables and relationships included in our initial review, this chapter is limited to new and interesting findings that have emerged from evidence collected in the initial stages of the research. States are an important part of the overall study, but not considered in the chapter.

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¹A more extensive treatment of this evidence can be found, for example, in Wahlstrom and Louis (in press); Louis, Thomas, Gordon, and Febey (2008); Leithwood and Jantzi (2005); Leithwood and Mascall (2008); Leithwood, Strauss, and Anderson (2007); Anderson, Moore, and Sun (2009); Anderson and Sacks (2007).

Building a “Rich” Curriculum for Deep Understanding

Prior Evidence

A considerable amount of prior evidence suggests that the best curriculum for all students is the same “rich” curriculum typically experienced by relatively advantaged students. Such a curriculum does not neglect “basic skills”, nor does it treat them as ends in their own right. Rather, it develops them as the “tool skills” or instruments needed by students to acquire deep understanding of big ideas; this is the overriding goal of most curriculum policy, albeit one infrequently realized in practice. This is a curriculum in which the learning activities and assessment practices are clearly aligned and aimed at accomplishing the full array of knowledge, skills, attitudes, and dispositions valued by society. The content of such a curriculum is organized in relation to a set of powerful ideas. These ideas are “internally coherent, well connected to other meaningful learning, and accessible for application” (Brophy, n.d., p. 7). Skills are taught with a view to their application in particular settings and for particular purposes. In addition, these skills include general learning and study skills, as well as skills specific to subject domains. Such metacognitive skills are especially beneficial for less able students who might otherwise have difficulty monitoring and self-regulating their own learning.

Evidence to this point has had little to say about the leadership of schools which offer their students the rich curriculum needed to develop deep understandings. Evidence does indicate, however, that a rich curriculum is not what least socially, economically, or culturally disadvantaged children normally experience. Rather, the typical curriculum experienced by such children is narrowly focused on basic skills and knowledge and lacks much meaning for these students.

New Evidence

Evidence from our current study has not yet brought the leadership required for implementing a rich curriculum in schools into clear focus. But our classroom observations, while providing only a glimpse of the full curriculum being delivered by the teachers in our sample, do suggest that a “rich” curriculum is rarely experienced by most students, no matter their social, ethnic, or cultural background. Only about one in five teachers, of the more than 165 we observed, were engaged in some activities that appeared to encourage thoughtfulness, meaning making and deeper understanding on the part of students.

This evidence indicates that district and school leaders have considerable work to do with their teachers before the rich curriculum – and the deep understanding it aims to develop – is a regular part of the school experience of most American students. Just ensuring that teachers adhere to state standards is not nearly sufficient; it is how those standards are implemented that will determine the richness of the curriculum experienced by students. Many leaders will need to extend their own

understandings about what such a rich curriculum entails, as well as further develop their skills in working with teachers toward such shared understandings.

Researchers should begin to replace the typical outcomes measured by state achievement tests with deep understanding as the criterion variable in studies about the nature of effective leadership. Almost all research-based knowledge about such leadership is narrowly about leadership that improves students' basic skills in math and language. It is reasonable to expect that more sophisticated forms of leadership will be required for a more complex set of student outcomes.

Adopting a “Focused” Approach to Instruction

Prior Evidence

There has been an ongoing debate over the past decades about effective forms of classroom instruction, forms of instruction capable of bringing a rich curriculum to life in the classroom. An early review of research (Brophy, 1986) found that certain behaviors of teachers, such as using academic objectives to establish learning expectations, effective classroom management strategies, and differentiated pacing of instruction based on both the content of the curriculum and the characteristics of students, were consistently associated with student achievement. Between the late 1980s and early 2000s, the emphasis shifted toward inquiry-based instructional models, in which the teacher's most important role was in designing lessons or learning experiences that involved guiding students toward new understanding through exploration and induction (Wiske, 1998). Research reviews have begun to re-emphasize the value of teacher-directed instruction, however (Kirschner, Sweller, & Clark, 2006, p. 83).

Brophy's (n.d.) synthesis of research suggests that effective instruction is conducted in a highly supportive classroom environment, one embedded in a caring learning community. In this environment, most of the class time is spent on curriculum-related activities and the class is managed to maintain students' engagement in those activities. Effective instruction also includes questions “planned to engage students in sustained discourse structured around powerful ideas”, and teachers provide the assistance students need “to enable them to engage in learning activities productively” (pp. 8–9).

New Evidence

Distinguishing among three overlapping orientations to instruction labeled “focused instruction”, “grouping practices”, and “standard contemporary practice”, our survey results indicate that “focused instruction” explained significant amounts of variation in student achievement across schools (particularly in mathematics) and that this approach to instruction was most sensitive to school leader influence.

Focused instruction is not so much a specific technique or method as it is an approach to implementing most instructional techniques or methods. It might usefully be considered a “meta-instructional strategy”.

While we have much more to learn about focused instruction, our current evidence points to goal-oriented teaching with the whole class, as well as with individual students. Teachers engaged in focused instruction actively monitor the work of students in groups, protect instructional time from disruptions, and make substantial efforts to fully engage students in meaningful work in the classroom most of the time. The pace of instruction is carefully managed and students are provided with targeted feedback about their progress in a timely manner. On-the-spot adjustments are made to lessons that seem to be missing the mark.

While the measures of student learning we used to assess the effects of focused instruction only weakly reflect the deep understandings we spoke of above, this approach to instruction seems likely to be productive whatever the goals of the curriculum. A substantial body of evidence now demonstrates the positive effects on student learning of a school’s academic press (e.g., Goddard, Sweetland, & Hoy, 2000), disciplinary climate (e.g., Ma & Willms, 2004), and uses of instructional time (e.g., Ben Jaffer, 2006). Focused instruction may be the visible face of these variables in the moment-to-moment construction of students’ classroom experiences.

Encouraging a Distributed Approach to Instructional Leadership

Prior Evidence

“Distributed leadership” is much in vogue with researchers, policy makers, educational reformers, and leadership practitioners alike (Hammersley-Fletcher & Brundrett, 2005). Although this current interest represents a shift in both educational leadership research and policy from a preoccupation with those in formal roles, the study of distributed sources of leadership can be traced back at least to the work of Gibbs in 1954 (Gronn, 2008) and possibly as far back as the mid-1920s. Furthermore, including teachers in formal shared leadership roles is a reform strategy that has been both weakly and strongly implemented for over 20 years. The effective schools initiatives of the mid-1980s indirectly distributed some tasks to teachers (Teddlie & Stringfield, 2007), while more recent policies and discussions (e.g., the Education Commission of the States and the Council of Chief State School Officers, and teacher professional associations) supported expanding teachers’ participation in leadership and decision-making tasks. Efforts to promote school-based management often included formal representation of teachers in decision making, but many investigations report weak implementation (Malen, 1995). Others argue that increasing teachers’ influence in schools, which may or may not include formal role definitions, has the potential for significant positive effect on school improvement.

While contemporary literature about distributed leadership associates it with a great many positive outcomes, evidence to justify them is mixed and indirect. On the supportive side of the ledger, for example, the effectiveness of democratic, supportive, and shared forms of organizational leadership (defined as control and influence) have received support from research on teacher participation with peers in planning and decision making (Talbert & McLaughlin, 1993) and from tests of shared transformational and instructional leadership effects (Marks & Printy, 2003). A reasonably strong case for the value of distributed leadership can also be found in studies of both organizational turnaround processes (Murphy, 2007) and leader succession processes (Goodson, Moore, & Hargreaves, 2006).

New Evidence

Evidence from the current study makes six distinct contributions to our understandings about distributed leadership. First, it provides much needed empirical justification for the claim that at least some forms of leadership distribution have a greater impact on student learning than individually-enacted leadership alone. Conceptualizing leadership as “influence on school decision making”, survey data measured the extent of influence of district and school staffs, as well as parents and students, in a large number of elementary and secondary schools differing widely in their aggregate math and language student achievement scores over a 3-year period. Replicating the design and some of the results of Pounder, Ogawa, and Adams (1995), results indicated that in higher as compared with lower performing schools, greater amounts of influence were attributed to all sources of leadership. In the lowest performing schools, relatively small amounts of influence were attributed to all sources of leadership. In the highest as compared with the lowest performing schools, ratings of teams of teachers, parents, and students differed most – all much higher in the higher performing schools.

Second, principals were rated as having highest influence in schools at all levels of performance. Suggesting that formal leaders do not lose influence when others gain it, these results argue for building a better understanding of influence as an “infinite” resource among formal leaders who may still view influence as a “zero sum game”. These results also argue for the extension of opportunities for leadership development to those in most roles, including more serious efforts to engage students in school leadership. The highest performing schools in our study were not hierarchically flatter. People at all “levels” had more influence, thereby increasing the density and intensity of leadership.

As a third distinct contribution, the current study demonstrates the direct effects of shared or distributed leadership on the promotion of focused instruction (see earlier discussion). While the extent to which focused instruction was exercised in classrooms depended significantly on the leadership of principals, such leadership was significantly associated with teachers’ focused instruction, especially when principals shared instructional leadership responsibilities with other staff in the school. Indeed, this evidence suggests that at least one productive model of

instructional leadership is a collaborative one – staff throughout the school, with the principal's encouragement and facilitation, share knowledge amongst themselves about how to improve classroom practice. For most principals, this will be viewed as a more realistic image of instructional leadership than one of the alternatives now being increasingly advocated, at least in the United States, one requiring principals to have deep content knowledge across many subject domains (e.g., Nelson & Sassi, 2005). Such a requirement resuscitates earlier, heroic, and ultimately unscalable images of school leadership, in this case one built on subject matter knowledge rather than charisma.

Although more realistic and scalable, in our view, a collaborative approach to instructional leadership nevertheless appeared to be uneven or rare in the schools in our study, perhaps explaining why a focused approach to instruction on the part of teachers was also quite rare. The largest proportion of American principals likely need more professional development aimed at fostering deeper conversations and assessments of teaching and learning. Our survey evidence indicated that principals' instructional leadership had its strongest effects on elementary school teachers' instructional practices and on schools serving disproportionate numbers of racially mixed (vs. Caucasian) students.

A fourth contribution of the current research is greater clarity about the relationship between patterns of distributed leadership and their consequences for student learning – as well as the factors which shape the particular patterns of leadership distribution that emerge in schools. This aspect of the study was informed by previous conceptions of leadership distribution patterns, especially those which distinguish between levels of coordination and alignment of leadership enactment (Leithwood et al., 2007) and a conception of broad leadership functions, described in our initial literature review, including “setting directions”, “developing people”, “redesigning the organization”, and “managing the instructional program”.

Fifth, this evidence indicates that principals are part of almost all leadership initiatives in schools, whereas teachers and other staff are typically involved in leadership about only those specific initiatives for which they have special interests or expertise. Indeed, expertise is the central criterion principals use in determining who they will encourage to take on leadership responsibilities. Furthermore, principals' participation in patterns of leadership distribution can vary within the same school for different initiatives, depending on principals' own claims to professional expertise and their sense of priorities for improvement. While different patterns of influence are enacted through the same organizational structures across and within schools, more complex and coordinated patterns of leadership distribution emerge when student learning goals are the focus of school improvement efforts as compared with, for example, the implementation of a new program. Patterns of leadership distribution, in sum, appear to be contingent on goals and the expertise of those likely to be providing leadership.

Finally, evidence from the current study indicates that, among the broad leadership functions in our framework, “developing people” and “managing the instructional program” are more likely to be distributed, whereas “setting directions” and “redesigning the organization” are functions most frequently carried out by those in formal hierarchical leadership roles.

Nurturing the Soft Pathways of Leadership Influence

Considerable prior evidence indicates that the forms of influence and power required for leadership to be successful depend on the “soft” features of the organization, primarily the psychological and socio-psychological states of mind of organizational members. Evidence from the current study points, in particular, to three of these soft organizational features – sense of professional community, efficacy, and trust in leaders – as especially important pathways of leadership influence. This evidence also refines existing understandings of how leadership practices interact with them.

Sense of Professional Community

Prior Evidence

Professional community has been conceptualized along five dimensions including shared values, a focus on student learning, collaboration, deprivatized practice, and reflective dialogue (Louis & Marks, 1998). In its most powerful form, these elements of professional community are so deeply embedded into the school’s culture that teachers are often not aware of them. Recent evidence indicates that teachers’ sense of professional community is related both to improved instruction and to student achievement (e.g., Smylie & Wenzel, 2003). Professional community also is closely associated with organizational learning and change in two ways. Teachers have to *learn* how to successfully interact, and it is the leadership of teachers and the principals that creates the conditions within which the organization can make changes.

Principal leadership, in particular, is one of the most significant factors determining the extent of professional community in a school (Youngs & King, 2002).

As leaders arrange time for collaborative dialogue, the social construction of meaning and shared norms and values among teachers is enabled. In addition, the presence of professional community appears to foster collective learning of new practices when there is principal leadership (Marks, Louis, & Printy, 2000). But this evidence notwithstanding, much of the case for attention to this professional community is based on anecdotal evidence and a few case studies.

New Evidence

Findings from the current study substantially strengthen claims about the value of professional community in school. Our evidence indicates that it explains significant amounts of the variation across schools in all three approaches to instruction which were identified (Student Grouping Practices, Standard Contemporary Practice, and Focused Instruction). This evidence also indicates that different dimensions of professional community are significantly associated with different approaches to instruction. Reflective dialogue (opportunities to discuss one’s practice with other colleagues) is most strongly associated with Standard Contemporary Practice, whereas shared norms about teaching and assessment are particularly important

predictors of Focused Instruction. Deprivatized practice (opportunities to see other people teaching) is most strongly associated with the use of deliberate instructional grouping. The variable contribution of different dimensions of professional community to each of the three approaches to instruction is consistent across elementary, middle, and high schools.

For leaders working to create professional community in their schools, as a strategy for fostering focused classroom instruction, this evidence recommends special attention to the development of shared norms and to encouraging deprivatized practice among one's staff.

Individual and Collective Efficacy

Prior Evidence

Efficacy is a belief about one's own ability (self-efficacy), or the ability of one's colleagues as a whole (collective efficacy), to perform a task or achieve a goal. It is a belief about ability, not actual ability. Considerable evidence has now accumulated about the significant contributions that positive efficacy beliefs on the part of those in many different roles make to such important personal and organizational outcomes as job search success, increased task performance, improved attendance, and increased academic achievement (Prussia, Anderson, & Manz, 1998). In the case of teachers' individual efficacy beliefs, a small but impressive body of research indicates that it has large effects on both teacher performance and student outcomes (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998). For example, teachers who have a strong sense of their ability to address the learning needs of students are more resilient in challenging situations and handle setbacks more readily (Ashton & Webb, 1986).

This research also identifies the conditions that give rise to positive self-efficacy on the part of teachers (Tschannen-Moran & Barr, 2004) and other groups of non-school employees (e.g., Thoms, Moore, & Scott, 1996), and leadership among them. Collective teacher efficacy also has been related to student achievement (Bandura, 1993) and appears to be conceptually comparable to collective sense of responsibility (Bryk, Camburn, & Louis, 1999).

Efficacy is a key variable in better understanding effects in most organizations. Pointing to the similarity of efficacy and self-confidence, McCormick (2001) claims that "Every major review of the leadership literature lists self-confidence as an essential characteristic for effective leadership. . ." (p. 23). That said, we know very little about the efficacy beliefs of leaders, in particular (Gareis & Tschannen-Moran, 2005), and even less about the antecedents of those beliefs (Chen & Bliese, 2002).

New Evidence

Early results of the current study extend claims about the salience of individual and collective efficacy to an understanding of both teacher and leader practices.

Teachers' individual sense of efficacy explained more of the variation than any of our other measures in the extent to which teachers used a focused approach to instruction. Teachers' sense of collective responsibility or efficacy was a weaker but still significant predictor.

Evidence about the effects of principal efficacy is similarly impressive. First, results indicate a quite strong influence of district leadership and other district conditions on principals' sense of efficacy. The direct effect of district leadership, our findings suggest, is to create district conditions that are viewed by school leaders as enhancing and supporting their work.

Second, district conditions had much larger effects on school leaders' collective than individual efficacy confirming earlier expectations (Chen & Bliese, 2002) based on the assumed "proximal" influence of organizational conditions on collective efficacy but only distal influence on individual efficacy. Common to both types of efficacy, however, was the strong influence of the district's focus on student learning and the quality of instruction, as well as district culture. These mutually reinforcing district conditions seem likely to focus the collective attention of school leaders on the district's central mission. District investments in instructional leadership, in particular, were a substantially greater influence on leaders' collective efficacy than their individual efficacy.

Third, we found a modest effect of our aggregate (individual and collective) measure of efficacy on school leader practices, mostly accounted for by individual efficacy. There was a stronger, though still moderate, effect of aggregate leader efficacy on both classroom and (especially) school conditions. Collective efficacy explained most of this variation.

Fourth, there were modest but significant effects of leader efficacy on student learning. These effects are most certainly indirect through their effects on school and classroom conditions, and the size of these effects is comparable to what has been reported from other studies of school leader effects on learning and other student outcomes (Leithwood & Jantzi, 2005).

Finally, these results indicate that leader efficacy effects are significantly moderated by a handful of organizational characteristics but by none of the personal variables included in our study (e.g., leaders' gender, experience, race, or ethnicity). The positive effects of leader efficacy are muted, more specifically, in relatively large schools and districts, in secondary schools, and in contexts of rapid leader succession.

Trust

Prior Evidence

Organizational trust has been examined in business and management settings for over 30 years. Within the past two decades, studies of trust as a factor in school improvement also have begun to illuminate the actions that leaders take which positively alter school cultures. For example, Tarter, Bliss, and Hoy (1989) found that

supportive principal behavior and faculty trust were significantly correlated in their sample of secondary schools, and that schools with higher levels of engaged and committed teachers had higher levels of trust in colleagues. Directive, as opposed to supportive, principal behavior was negatively correlated with teachers' trust in their principal, but had no impact on trust in their teacher colleagues.

By contrast, Bryk and Schneider's (2003) study of Chicago elementary schools found that respect, personal regard, competence in core role responsibilities, and personal integrity were associated with relational trust among all adult members of the school, a finding that is consistent with the business literature (Louis, 2007). Specific principal behaviors had an impact on teacher-teacher trust, including effective communication, clear vision, consistency between words and actions, and competent management of school affairs. Trust was also built by reshaping the composition of the staff through hiring and counseling out teachers who did not live up to the school's mission and values.

New Evidence

Prior evidence, in sum, suggests that trust (in leaders and among teachers) is a powerful mediator of leadership influence. Evidence from our current study sounds a more cautious and nuanced tone, however. Of the three "soft pathways" of leadership influence we highlight here, trust is overshadowed in its importance by professional community and efficacy. But it has its moments. The extent to which teachers trust their principals has a modest relationship to all three of the approaches to instruction that we have identified. This influence is most likely to encourage the use of a focused approach to instruction, especially in middle schools. Principals' influence is much stronger, this evidence suggests, when teachers trust their principals *and* perceive them to be sharing instructional leadership with others in the school. Recent, related evidence also suggests that teachers' judgments about their principal's trustworthiness tend to be influenced most strongly by their principal's caring and supportive behavior, integrity and honesty, and willingness to share power and decision-making authority (Louis, 2007).

Getting to the Center of the District's Role in School Improvement

Prior Evidence

Recent district case study literature provides illuminating stories and analyses of district-wide efforts to improve the quality of student learning and teaching in all classrooms and schools. Researchers have provided convincing accounts of change at the level of district ethos, goals for improvement, and restructured organizational infrastructures to support reforms. Based on a review of this literature, Anderson (2006) concluded that districts able to demonstrate significant positive impacts on

student achievement are characterized by a large proportion (or all) of the following 11 features:

- *District-wide sense of efficacy.* This is marked by a willingness if not compulsion to identify poor performance (student, teacher, school) and other obstacles to success, to accept responsibility, and to seek solutions.
- *District-wide focuses on student achievement and the quality of instruction.* A clear focus on attaining high standards of student achievement with an emphasis on high-quality instructions.
- *Adoption and commitment to district-wide performance standards.* Attention to state-mandated standards for curriculum content, student, and school performance, such standards serving a key feature of district performance monitoring and accountability systems.
- *Development/adoption of district-wide curricula and approaches to instruction.* Establishment of greater coherence in curriculum content and materials extending to support for the use of specific instructional strategies believed to work well with the content of the curriculum, its objectives, and the district's students.
- *Alignment of curriculum, teaching and learning materials, and assessment to relevant standards.* The development or adoption of district-wide curricula and instructional materials takes place in the context of state/district standards for curriculum and learning. Thus, alignment of curriculum at the school and district level to state and/or district standards, and assessment programs.
- *Multi-measure accountability systems and system-wide use of data to inform practice, to hold school and the district leaders accountable for results, and to monitor progress.* Considerable resources devoted to developing the capacity to assess the performance of students, teachers, and schools, and to utilize these assessments to inform decision-making about needs and strategies for improvement, and progress toward goals, at the classroom, school, and district levels.
- *Targeted and phased focuses of improvement.* Reform efforts are system-wide, but initially they are targeted on specific curriculum content areas, such as literacy (reading, writing) and mathematics, and interventions and support for reform typically begin in the elementary schools. Additional help is typically targeted toward lower performing schools and classrooms.
- *Investment in instructional leadership development at the school and district levels.* An intensive long-term investment in developing instructional leadership capacity at the school (especially the principal) as well as at the district levels. In many cases this also includes the establishment of new school-based teacher leader positions (e.g., literacy coaches, resident teachers) to work with principals and with district consultants to provide professional development assistance.
- *District-wide job-embedded professional development focuses and supports for teachers.* Intensive off-campus and school-based professional development experiences are provided combining input from external and local experts and focused on school and district priorities for improvement.

- *District-wide and school-level emphasis on teamwork and professional community.* Collegial work groups (e.g., grade-level teams, school improvement teams) share expertise across schools.
- *New approaches to board-district and in district-school relations.* Adoption by the district of a policy governance role that emphasizes policy development, goal and standards setting, strategic planning, and monitoring of system/school progress in relation to district plans, priorities, and accountability systems. Boards operating in this mode hold the superintendent responsible for administration, for implementation of system plans, and for reporting on progress, but avoid direct involvement in managing the school system.

Empirical evidence of links between district policies, the actions of district leaders, and improvements in teachers' instruction and students' learning remains extremely thin and quite inconclusive, however.

New Evidence

Three results of our current research significantly extend previous understandings about district approaches to school improvement. First, the initial round of survey evidence failed to identify much difference among districts in the support they provided to their schools. Principal respondents from districts varying widely in size, diversity, and poverty levels painted much the same picture of the kinds of support they were receiving. If this apparent convergence is confirmed by our subsequent inquiries, it would seem to indicate convergence in the ways that districts approach change influenced, we speculate, largely by the contemporary standards and accountability-driven policy context. Current consensus on broad focuses and strategies of effective district-level support for school improvement, however, may mask variability in the actual ways in which those strategies are enacted and the quality of that enactment in specific settings. Continuing research needs to move beyond general prescriptions for district-level actions, such as "developing principals as instructional leaders" to explore the more specific ways in which those broad focuses of district policy and action are implemented (Massell & Goertz, 2002). Our survey results also indicate a high degree of co-linearity between many of the 11 district-level policies and actions, thus complicating efforts to isolate the distinct effects of particular factors on school- and classroom-level variables. Others have similarly described district reform policies and strategies operating as a syndrome of interdependent variables (McLaughlin & Talbert, 2002). Future research efforts could explore more fully how district-level variables work together to produce their effects.

Second, in spite of limited variation in responses to our survey, this evidence also provided a much needed, large-scale, quantitative test of the extent to which the 11 case-based features of effective districts account for variation in student achievement. These results point to the special contribution of one of these 11 features,

with 3 others serving in a supporting role. “District-wide sense of efficacy” on the part of principals was the only feature, of the 11, which had a significant, albeit indirect, effect on student achievement. Using interview evidence from a sample of 31 schools in our sample, we asked what districts do to successfully foster this sense of collective efficacy. The answer: they establish clear, widely shared purposes; they award priority to the improvement of instruction; and they ensure that teachers and administrators have access to appropriate amounts of meaningful professional development aimed at developing the capacities needed to achieve the shared purposes. District professional development policies create a consistent environment for instructional improvement. High-quality district professional development comes in many forms ranging from workshops, intervisitations, study groups, to monthly meetings which include opportunities for professional development.

Third, our site-visit evidence also indicated, however, that in only about one in five districts was there a concerted focus on the development of principals as instructional leaders. In some districts, principals became instructional leaders by default when district curriculum specialist positions were cut to meet the demands of shrinking budgets. The majority of districts did not seem to know how to structure adult learning experiences which would deepen knowledge about instructional leadership on the part of principals. Smaller district size appeared to foster the use of knowledge about curriculum content and pedagogy distributed across different people in the district.

Evidence from the current study indicates that the majority of central office leaders urgently need increased knowledge about how to effectively teach school leaders about instructional leadership. They also need the time to regularly observe and meet with principals about their instructional leadership, as well as the expectation that this is part of their jobs. Professional development in instructional leadership and supervision of principals needs to be linked to policy and practice.

Parent and Community Involvement and Student Learning

Prior Evidence

Parent and community engagement with schools has attracted a considerable corpus of research. The concern in our research has been “narrowly” focused on how district and school leaders foster the types of engagement by parents in schools that have positive consequences for students, as well as other desirable outcomes.

Although not the case historically, the participatory components of most recent reforms have become so commonplace that increasing community participation has become institutionally legitimated. There remains, however, a wide gap between this stated participatory reform agenda and practices observed in schools (e.g., Malen & Ogawa, 1988).

Even within participatory democratic movements in education, there has been uncertainty about how greater involvement operates in schools and, in particular,

what being “open” to stakeholder involvement means in practice. Furthermore, such openness presents an explicit challenge to the traditional, hierarchical leadership and power structures in schools. Participatory reforms, as a consequence, have been tolerated “only to the extent that participation enhance[d] institutional legitimacy without extracting too many costs” (Blase & Blase, 1999). Evidence suggests that schools traditionally have not practiced or reflected larger democratic principles of inclusion. Reform initiatives calling for decentralized forms of decision making, however, have embedded in them assumptions about the roles of the principal and other school leaders quite inconsistent with the low levels of tolerance suggested by this evidence. For example, Leithwood and Prestine (2002) claim that a community-control model of site-based management assumes that principals will empower others; actively share their power; act as team members; and teach others how to make defensible decisions. But these are assumptions often not reflected in the actual behavior of school leaders.

Research also indicates that strong leadership plays a pivotal role in the formation of collaborative partnerships between schools and other community agencies and in creating and sustaining legitimate shared decision making. Goldring and Sims (2005) found “that cooperative inter-organizational relationships can take firm root and flourish under an innovative leadership structure that is grounded in principles of shared power and shared learning” (p. 223). Opfer and Denmark (2001) found that school superintendents largely influenced the nature of the relationship between the school board and the surrounding community. In addition to strong support and direction from leaders, Goldring and Sims found that “the bridger role” or “boundary spanner” was central to the process of creating successful partnership structures that promote democratic inter-organizational relationships.

Parent involvement is affected by the organization and culture of schools. Socially constructed norms institutionalize relationships among teachers, administrators, and schools that often lead to negative teacher reflections of parents who are not involved (at least visibly) in the development of their child’s education (Smrekar & Cohen-Vogel, 2001). Recent systematic reviews of research, nonetheless, indicate that parent engagement can have significant positive effects on students (e.g., Jeynes, 2007). But many parents need assistance from schools in order to productively participate in their children’s education (e.g., Epstein & Dauber, 1991). Furthermore, not all forms of such parent engagement are equally productive. Sheldon (2002) found, for example, that activities involving “learning-at-home” was the only type of parent engagement that could be linked directly to increased achievement scores in mathematics.

New Evidence

Evidence from our current study, survey data from a large sample of both principals and teachers, explored school and district leaders’ contributions to productive forms of parent engagement in schools. While fostering democratic participation,

we learned, appears to be a function of both district and school leadership, these sources of leadership exercise their influence in quite different ways. District policies rather than cultures seem to have the greatest effect on how open schools are to parent engagement; it is the expectations for such engagement embedded in these policies that matters most. At the school level, by contrast, it is the principal's personal behaviors and attitudes about community and parent influence that make significant contributions to parent and community engagement in schools. However, it is only when teachers also perceive their own and parent involvement to be part of the school's ethos that such involvement results in positive consequences for student learning. Our results also suggest that districts and schools serving low SES communities have to work especially hard to develop an ethos supporting parent involvement.

If principals are to forge more productive forms of parent/school engagement, they will need to direct their efforts toward ensuring that teachers understand and believe in the role of parent involvement. Parent/community involvement should likely be integrated into discussions of distributed leadership in preparation and professional development programs where this is not yet the case.

Conclusion

As this chapter has demonstrated, our present understandings about the nature of successful school leadership and the paths along which its influence travels to improve teaching and learning include more than a few "black holes", not to mention many more that are still only dimly lit. Should we consider the glass to be half full or half empty?

Most of us engaged in doing leadership research, and writing about it, are professionally disposed toward a focus on the black holes. They are our livelihood, after all. So it would be easy to underestimate the progress that has accumulated over the past two decades of inquiry, progress significantly speeded up by a significant handful of recent, large-scale, robust, replicable, and even externally valid studies of the matter. It is important to illustrate by way of concluding, then, the significant nature of this progress. Compared to the state-of-the-art knowledge a short two decades ago, the accumulated evidence available today provides substantially more certainty about:

- those practices which form the core of almost all successful leaders' repertoires;
- how those practices are adapted and enacted differently in challenging school contexts, as compared with more typical school contexts;
- many, if not most, of the school and classroom conditions that significantly mediate the indirect influence of successful school-level leadership on the improvement of students' language and math achievement;
- some of the key dispositions that shape the ways in which both principals and teachers approach their work;

- several of the key strategies useful to district leaders in building the capacities of schools; and
- at least a handful of individual and organizational variables which either dampen or magnify the effect of successful leadership practices on teaching and learning.

While we could certainly extend this list, it is sufficient to justify our claim that considerable progress has and is being made in understanding how leadership contributes to student learning.

This is not bad considering the scope of the challenge! Between “leadership” and “student learning” lie most of the variables and relationships considered to be the collective responsibility of the educational research community, as a whole. This is the central conceptual and methodological challenge to knowledge generation in the field. It is a challenge that requires leadership researchers to “mess about” in almost everyone else’s intellectual problem space. But the progress we have aimed to illustrate in this chapter sounds an optimistic chord for now and for the future. The research community can now lay claim to be a source of increasingly powerful advice to those willing to actually do school leadership work. This was most decidedly not the case 20 years ago.

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The Moral Character of Academic Learning: Challenging the Exclusivity of the Reigning Paradigm of School Learning

Robert J. Starratt

One approach to the study of change is to ask, “change of what, for what?” This essay advocates for a change of the schooling process from an exclusive, and therefore distorting, concentration on the intellectual character of learning to a learning process that attends to both the moral as well as the intellectual character of learning. Such a change would lead to promoting more authentic learning – that is, real learning, not make-believe, drive-by learning that lasts, at best, less than a day after the grades for the test descend from on high. By authentic learning, I mean a learning that enables learners to encounter meanings embedded in the academic curriculum that reveal features of the natural, social, and cultural worlds *they inhabit*, and, at the same time, enables learners to *find themselves* in and through those very encounters. That kind of authentic learning, I argue, is intrinsically moral.

In order to explore the moral character of learning, however, we will first review a distinction between general ethics and applied, or professional ethics. We will then explore a foundational understanding of the moral character of learning by connecting it to the ethics, psychology, and epistemology of authenticity and authentic learning. I will argue that this kind of learning is absent by and large from the current school reform effort, and that its absence leads to the corruption of the learning process – leads, in fact, to the acceptance of a form of learning that is at least tacitly immoral.

Applied, or Professional Ethics in Education

Traditional analyses of ethics in education explore issues of equity, justice, power, and care in the politics and procedures of organizing and running schools (Haynes, 1998; Maxcy, 2002; Shapiro & Stefkovich, 2001; Starratt, 1991; Strike, Haller, &

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Soltis, 1998). These analyses concern what would be considered the realm of general ethics, the ethics dealing with the everyday lives of people trying to live their relationships in a more or less honorable manner within a community and cultural context that tends to provide a fairly recognizable code of conduct. More recently, applied ethics, or what has been termed “the ethics of the profession” has been added to the menu of ethical concerns in education (Sergiovanni & Starratt, 1998; Shapiro & Stefkovich, 2001; Starratt, 2003, 2005). The ethics of the profession lead to a primary focus on serving the good of the client – in the case of education the good of the student or learner.

While one would agree that the ethics of the profession oblige the professional to seek the good of the student, the professional is also obliged by professional ethics to pursue *the good intrinsic to the work*, intrinsic to the *practice* of the profession. Because the second concern – with the *integrity of the work* – seems insufficiently developed in the literature, we will pursue more thoroughly the analysis of the inherently moral nature of the core work of the profession, namely, cultivating learning. Indeed, we will find that the moral good of the learner is intrinsically tied to the moral good of learning.

Connecting the Moral Agenda of Learners to the Intrinsic Morality of Learning

This exploration cannot abstract from the moral context of the individual learner as well as the community of learners, as though the moral character of learning could be considered in a vacuum separated from its human and social home. The personal and social moral agenda must necessarily be accommodated if the integrity of the learner’s activity of learning is to have its fullest moral realization.

Sometimes teachers forget that the youngsters in their classrooms have a rich, if complicated, life of their own. Neither the school nor the teacher “owns” them. They are not cardboard people patiently waiting to be programmed with the official “right answers” by their teacher. Each learner has the right to his or her destiny, the right to fashion a life for themselves – in relationship to their community, to be sure, but as a distinct, personal life to be *negotiated and improvised* within their community. Each of them has an intrinsic moral agenda that belongs to them as full human beings. That moral agenda is to find, create, own, and be true to themselves. It is not an agenda they can turn over to their parents, to their teachers, to the community elders, and to the state. It is an agenda that tacitly unfolds for them every day of their lives as they learn to negotiate relationships, neighborhoods, new challenges, and unexpected surprises. It is an agenda that they do not shelve or surrender when they enter the school grounds; neither do educators have the right to demand that they do so. Moreover, this is not simply the agenda of isolated individuals. It is the moral agenda of their whole generation, the agenda of all the children in the classroom, the agenda not only of creating and fashioning “me” but of creating “us” as well. Individuals have to find out how to belong as well as how to be. Being with

and belonging to contain specific moral challenges which help to define the “me” an individual is discovering how to be.

What the school must do, and I pose this as an ethical obligation if the moral character of learning is to be sustained, is to connect the learning agenda of the school to the central moral agenda of the learners during their 13 or more years in school, namely the agenda of finding and choosing and fashioning themselves as individuals and as a human community. Educators miss this connection because they are accustomed to viewing the learning agenda of the school as an end in itself, rather than as a means for the moral and intellectual “filling out” of learners as human beings. Present school policies at the state and federal levels seem to assume that the learning of state and district curriculum standards stands above and outside of the personal and civic life of learners, as though these standards take on a priority over all else that might be going on in a young person’s life. By and large the message communicated to learners is: leave your personal and civic lives at the schoolhouse door and subject yourselves to the discipline of learning the school’s curriculum. Tests of this learning rarely ask for personal connections or commentaries; they want the curriculum rendered back in its pure academic form, as it was “delivered” by the textbook and the teacher, untainted by personal associations.

The Journey Toward Authenticity

Learners, however, have a life outside of the classroom, a life-world filled with family relationships, friends and enemies in the neighborhood, and hobbies and interests. They are engaged in a very important agenda of their own, namely to figure out who they are, how to make and keep friends, how the social and natural worlds make sense, and how they fit into and participate in those worlds. That agenda has been charted by child and adolescent psychologists, as well as by social psychologists and sociologists. Much of that agenda has to do initially with their primary relationships, with their parents and their siblings, and gradually with a widening circle of relationships of friends, schoolmates, and other significant adults.

Along the way children learn how to get what they want, how to satisfy their basic physical and security needs, how to be accepted by others, how to be liked and respected, how to belong, and how to have fun with others. Along the way they gradually learn that there are rules and customs that people are expected to follow: table manners, linguistic syntax, the rules of various games, hygiene, courtesy, physical contact, cleaning up after oneself – the basic habits of being a social and cultural person. They also learn the lessons of reciprocity, namely, that they cannot expect to have their own way all the time, that membership in a group requires one to make some sort of contribution to the group, and that being on a team requires teamwork and good sportsmanship in order to enjoy the satisfactions of the game. This process of socializing and culturing the young begins in the family and extended family, continues through neighborhood experiences and day-care centers, and is extended further through formal schooling.

Young children gradually discover that they have an inside world and an outside world. They can conceal that inside world from adults if they choose. The inside world is the world of the running self-commentary on their experiences. It is their personal autobiography in the making. The inner world creates a silent conversation with the outer world, weighing its challenges and demands, its satisfactions and humiliations, and its possibilities and its limitations (Becker, 1971). It is revealed somewhat in personal journals and diaries, but even there, the written expression is often incapable of capturing the fine nuances of feeling and impression that course throughout the inner life.

This inner life is where the child begins the quest for authenticity, that is, the quest to be a genuine actor on the stage of life, rather than an indistinguishable face in the crowd, or worse, an anonymous spectator in the audience. It is a journey to becoming real, to discovering who one wants to be, and, further along the journey, who one has to be in order to fulfill one's destiny. The inner journey continuously grapples with the question of responsibility, of ownership of one's choices and actions: "Do I want to do this, or am I simply doing this to please others, or because I'm afraid to be ridiculed if I speak my mind?" The inner journey seeks consistency between outer behavior and inner convictions.

Charles Taylor provides perhaps the clearest philosophical analysis of this ethic. He suggests that there is a "certain way of being human that is my way. I am called upon to live my life in this way, and not in imitation of anyone else's" (Taylor, 1991, p. 28). There is a tacit moral imperative to be true to oneself. To not be true to oneself would be to miss the whole point of one's life. Since every person is a unique being who will exist only once in the whole history of the universe, that person's originality is something only she or he can discover, author, perform, define, and actualize. If a person refuses this most basic human privilege and opportunity, then that person violates her or his destiny.

To give in to what others want one to become, to go with the flow, to slavishly follow the dictates of parents and other authority figures, to empty oneself of oneself in becoming the puppet controlled by others – this is to prostitute oneself; to squander one's eternally unique inheritance, one's possibility; and to abort oneself in the process of being born. The activity of becoming real, becoming authentic, and becoming true to oneself is indeed the most weighty of life's moral activities.

Bringing oneself to birth, however, does not happen in isolation. Paradoxically, one cannot lock oneself in a closet and enact one's authenticity. There is a difference between being centered on being true to oneself and being self-centered. That is to say, one is authentic in relationships. One needs other persons to talk to, to relate to, and to be with in order to come to self-knowledge. The other person will know, by and large, whether one is fake, phony, selfish, or trying to be something or someone other than who one is. And the signals of disapproval, rejection, and disinterest will overtly or subtly let the inauthentic person know that he or she cannot get away with the subterfuge. A genuine relationship is impossible under manipulative or dishonest conditions. Something between humans has to "ring true" if an authentic relationship is to develop, a relationship of mutuality and reciprocity, where levels of self-disclosure are both possible and honored. Relationships of dependency or

mutual manipulation are the stuff of human comedy and tragedy precisely because there is an element of betrayal of one's own humanity and the humanity of the other – a betrayal that is comic in its transparency, or tragic in its relentless destructive force. Humans bring themselves to birth through and with others – a birthing that continues through a lifetime. From this perspective, we acknowledge that our authenticity is ontologically relational and developmentally unfinished.

Relationships of a more casual nature also play a part in the ongoing shaping of the self. One takes into account the advice, counsel, and approval of family, friends, and authority figures. One also takes into account the larger culture's models – both within its epic and heroic literature and its contemporary media – of virtue and vice, courage and cowardice, honor and dishonor, creativity and conformity, the beautiful and repulsive, and success and mediocrity. Along the way humans position themselves within human history, within the lessons of its past, and the possibilities of the present and future. They position themselves as belonging to a community that requires them to participate with others – at least minimally – in collective self-governance. Gradually, they position themselves within the cosmos, as insignificant within its immensity, as entrepreneurial exploiters of its resources, or as carriers – however fragile and inconsistent – of its infinite possibilities.

Here we are very close to the basic meaning of freedom. Authenticity is grounded in self-determination (Taylor, 1991). Freedom to determine oneself is exercised within a culture that believes that there is something noble and courageous and inescapably decisive in giving shape to one's life. As Dewey understood it, individual freedom actually finds its fullest realization in a voluntary participation with other free individuals in sharing responsibility for common public concerns (Block, 2002; Dewey, 1916). The humanity of free persons is to be realized more fully by using their freedom for something larger than themselves. What it means to be human is precisely to celebrate this freedom and to bear this burden, and to enjoy this journey and brave its challenges. To be human in this sense requires a continuum of the most decisive moral choices. The young people who arrive at schools every day bring with them this weighty, though mostly tacit, moral agenda. The tragedy is that the presentation of the academic world of the school does not invite the involvement of that personal life-world in a dialogue that could potentially enrich both worlds.

Authenticity in Work

Authenticity involves not only our personal human identity, it involves our work as well (Knowles, 1986). In any kind of work, the worker has to respect the integrity of the work, and the integrity of the worker's relationship to the intrinsic demands of the work. Whether one is a carpenter or an engineer, an artist or an accountant, one is a "real" carpenter, engineer, artist, or accountant, or a make-believe, fake, phony one who has no commitment to the integrity of the work. One might be a painter who decorates a canvas with colors and forms, one whose ornamentation is technically virtuous. That is not what makes an artist, however. An artist has to

carry on a continuing dialogue with both the materials of his or her medium and the insides of the realities the artist is trying to express. A carpenter has to know the properties of the wood and other materials at hand, be able to read blueprints, and measure three dimensions accurately. He or she has to be present to the work with care and dedication, making sure that what is built will reflect both utility and proud craftsmanship.

We may categorize the activity of learning as work, work that requires a level of presence to what one is working with and working on, a dialogue with the intelligibility of what one is working with and working on. That intelligibility involves mutuality, an intuition of the relationality between the learner and the subject of the immediate work of learning. The subject of learning has its own integrity, its own authenticity, and its own intelligibility. The methods the learner uses to explore that integrity, authenticity, and intelligibility have their own built in craft discipline. The methods of studying the subject and of reporting the knowledge gained are to be used carefully.

That knowledge will always begin, for better or worse, as personal. The learner will approach the subject matter using past learnings and life experiences, relating the new material to the internal encyclopedia of what the learner already knows. In schools through classroom sharing and discussion, personal meanings become reshaped into what the group seems to agree are their public meanings. As with apprenticeships, so too in school learning, learners talk with others and themselves into understanding what they know. The back-and-forth between personal and public shared meanings makes the knowledge available for public use, available now for various applications to real situations in public life (Applebee, 1996). Only gradually does initial school knowledge begin to resemble the already catalogued and polished, abstract academic knowledge of the scholar.

The way the product of the work of the learner is assessed ought to have some relationship to the way it is produced, namely, as initially an unfinished personal meaning, and then as the product of shared understanding – an initially tentative public, social meaning. Instead, most classrooms demand that learning look like – *from the outset* – the finished work of the academic scholar. Forcing it to look like the finished product catalogued in textbooks is what contributes to make-believe learning, a learning all too quickly wrenched away from the inside dialogue between the learner and the subject in order to meet an artificial time schedule set up by the school authorities. The continuous demands for almost instantaneous conversion of the preliminary steps of learning into the finished product of the textbook (the “right answer” the teacher and the testers expect) easily convinces the learner – however tacitly – that the school does not take the work of authentic learning at all seriously. Rather, the learner realizes that the school is set up to enforce inauthentic, make-believe learning. Many studies (e.g., Applebee, 1996; Drummond, 2001; Egan, 1997; Reay & William, 2001; Shultz & Cook-Sather, 2001) tend to confirm that the moral agenda that young people feel is by and large ignored, disregarded, and actively rejected in many schools.

Thus we see that the authenticity of the learner *as a learner* is at stake every day at school. The school either supports that authenticity or it warps and suppresses

it through the routines of its pedagogy, through the very limited time and space allotted for learning, and through the hurried and harrying assessment procedures employed. If the work of learning ignores the personal authenticity of the human beings involved in it as well as the integrity of the subject being studied, then young people attending schools find themselves in triple jeopardy. They can find neither themselves, nor the authentic subject being studied, nor the integrity of the learning activity itself, in what they are made to do in school.

The Dynamics of Human Development in Becoming Authentic

The argument so far is that the pedagogy of the school needs to redefine the academic curriculum as something that reveals the intelligibility of the natural, the social, and the cultural worlds and connects the student's journey toward self-understanding to his or her membership in those worlds. Membership in those worlds helps learners to identify themselves as cultural, social, and biophysical beings; to situate themselves inside those worlds; and to see those worlds as the context within which they will improvise and negotiate who they are and who they want to be. What is sought in this pedagogy is increased cognitive clarity about the physical, social, and cultural contextual markers of one's identity (e.g., male or female, tribal or cosmopolitan, Christian or Muslim, citizen or foreigner, and farmer or computer engineer). That cognitive clarity, however, is not an end in itself, but as a means of *choosing to be this kind of individual* pursuing these values and ideals, finding fulfillment in a variety of interpersonal relationships that cross neighborhood, family, occupational, and cultural boundaries, as well as fulfillment in the contributions one makes to one's larger society. In other words, humans pursue not only understanding – the true – but also fulfillment – the good, their good.

The pedagogy of most schools in the United States, however, is currently dominated by cognitive psychology with its emphasis on cognition – a cognition abstracted from its real life context, removed from the learner's emotional life, the learner's life-world, and its connection to action and moral choices (Applebee, 1996). It is important, therefore, for educational leaders to reintroduce into classroom pedagogy an understanding of the learning process as related to psychosocial development and human agency.

To learn, then, is to develop understanding which leads into, and grows out of, action; to discover a sense of agency that enables us not only to define and make ourselves, but to do so by actively participating in the creation of a world in which, inescapably, we live together. (Nixon, Martin, McKeown, & Rawson, 1996)

The learner's developing quest for authenticity can no longer be ignored in schools. The construction and enactment of personal authenticity are the most fundamental and profound ethical responsibilities all human beings face. To own oneself, to sing one's song, to improvise one's place in the drama of life, to be real instead of phony, to be a somebody instead of a cardboard imitation, to risk giving oneself away to another person in intimacy, and to assume the challenge of caring

for the next generation is to be responsible to the complex, situated truth of who one is and is capable of becoming on the journey toward full human maturity (Erikson, 1964; Freire, 2003). Being real, being authentic, in the concrete historical and cultural circumstances of one's life, is the burden only we can bear, is the adventure only we can live, and is the satisfaction and fulfillment only we can enjoy. The academic curriculum of schools has the potential to reveal the worlds in which the enactment of one's authentic life takes place, in the cultural, the social, and the natural world. The competence to enact one's life, however, is learnt with and through others. With and through one's teachers and one's peers, learners co-construct their agency in those worlds, co-construct themselves as real, not make-believe participants in those worlds and thereby engage the struggle to be authentic in living out their membership.

Having hinted at the chasm between the school's learning agenda (achieving the right answers to the tests that measure mastery – however superficial and transitory – of the state-defined curriculum standards) and the students' learning agenda (the existential task of becoming a somebody in the drama of everyday cultural and social life with all of its ambiguities and challenge), we have to ask ourselves where schools went wrong. To understand what persistently reinforces that chasm, we have to highlight the distorted epistemology that tends to dominate schools' operational definition of learning. The way the school curriculum and classroom teaching are structured, it would seem that knowledge is understood as something an isolated learner steals or coaxes or conjures from a social, cultural, or natural world that stands at a distance over against the isolated knower.

Basic Assumptions: The Isolated Individual and the Need for Irrefutable Proof

One of the most profound flaws in modernity was the gradual emergence of an aggressive assertion of the necessity for the autonomous individual (Bernstein, 1976, 1992; Sullivan, 1986). This assertion eventually developed into a philosophical, political, and economic theory and became firmly entrenched as an ideology of individualism, an unquestioned dogma that the individual, in order to be fully human, had to assert his independence from family, community, nature, God, and cosmos. (The masculine is used intentionally here.) The individual had to stand apart and alone against the cosmic, political, and religious landscape. To admit any intrinsic dependence on that landscape was to negate, it was believed, the individual's uniqueness, the particular destiny, and the freedom to be the one-of-a-kind person all individuals were entitled to be.

That ideology had profound consequences for understanding how such an isolated individual could know the world from which the individual stood decidedly apart. It led to Descartes' struggle to build a logical basis for knowing even that he existed; his "cogito, ergo sum" (I think, therefore I exist) was the act of an isolated individual who had to be the sole explanation of his own knowledge, since

his standing apart from the world left him no secure bridge or connection to that world. Descartes' radically isolated knower became the starting point for most of the subsequent epistemologies of the modern world.

Somehow the mind of this isolated, separated knower had to be predisposed to know the world objectively whether through innate ideas, or through logical and perceptual mechanisms whose forms naturally conformed to the logical and conceptual forms of objective realities grasped through reason and the methodologies of science. Much of cognitive science is today still wrestling with what is basically the epistemological question inherited from Descartes (Bernstein, 1976; Bruner, 1987; Frawley, 1997).

Knowledge as Coming to Know Mutual Relationships

New understandings of knowledge and learning have emerged in the past century which help us overcome the isolation of the knower. The new sociology of knowledge places the knower inside culture, inside a historical tapestry of already constructed knowledge and language maps, frameworks, theories, logics, and methodologies (McCarthy, 1996). The knower knows by receiving the culture's knowledge already constructed for the knower by the community that enfolds the knower. That prior knowledge, of course, did not fall from the sky. It was constructed by humans already conditioned by the accepted frameworks and methodologies of their time. The construction of new knowledge, however, always had to struggle against the accepted frameworks and methodologies, for they defined the status quo and therefore occupied a privileged position in society as well as in the academy (Kuhn, 1970; Mills, 1959). Knowledge in any society is always in the process of being constructed, deconstructed, and reconstructed because of new theoretical interpretations, new scientific and historical discoveries, new technologies, and new power relationships in society. Knowledge generation is therefore a social and a political process, contested, creative, adaptive, and exploratory – a journey of *collective* human intelligences, sometimes collaborating, but often competing for clarity and depth of understanding as well as for public legitimacy and political advantage (Carby, 1999; Ruckriem, 1999).

If knowledge is not a particular something that an isolated individual somehow steals or coaxes or conjures from a hostile or indifferent nature, then what is it? To overcome the riddle of knowledge, we must overturn one of the basic assumptions that has led to the riddle in the first place, and that is the assumption of an isolated knower, separated from the natural, social, and cultural worlds he or she is trying to know. Contemporary philosophers, scientists, and psychologists have come to view the human and natural worlds as defined, not by physical or social atomism but, by relationality. Augros and Stanciu (1987), Bateson (1979), Dewey (1916), Macmurray (1999), Whitehead (1957), Zohar and Marshall (1994) and many others suggest that we begin with the assumption that the individual human being is not isolated from nature or society but is in a dynamic relationship of mutuality

to all of nature as well as to the social and cultural worlds. Being in relationship to the natural, social, and cultural worlds means being in multiple relationships simultaneously: relationships to, for example, gravity, the food chain, weather patterns, tribal vocabularies, one's family history, to the Japanese stock market, the Australian wool market, the Middle East oil market, technological inventions, and one's children and their children. Knowledge is what emerges from the intentional exploration of those relationships, whether those relationships are benign or problematic, and whether their complexity and multidimensionality accommodate or defy reductionistic definitions.

Knowledge is established and legitimated in this emerging epistemology as a dialogue between the intelligences found in the natural, cultural, and social worlds and the intelligences of individual knowers. The known, therefore, can never be separated from the knower, for the knower is the person who initially and then in increasingly more sophisticated depth calls the known into existence *as known*, and the known is the subject that reveals initially and then in increasingly more sophisticated depth its intelligibility to the knower. In other words, knowing is always and inescapably dialogical, even in memory and imagination, as well as in physical, perceptual contact. Being in relationship with the natural, cultural, and social worlds implies, for the authentic learner, mutual involvement and mutual respect. It implies a language or languages by which a dialogue takes place. The knower and the known speak to, resist, attract, threaten, seduce, and puzzle one another. Since they naturally belong to one another, since they exist continuously in relationship to one another, there is no question of the knower living independently on some higher plane above the known. They are intertwined, implicated in each other's existence. This holds for relationships of love and relationships of enmity; relationships between humans and songbirds, and humans and the HIV virus; relationships between spouses and relationships between jailers and prison inmates; and relationships with benign as well as inimical aspects of one's culture. Unless the experiences of these relationships issue in a dialogue of mutual understanding at some minimal level, there is no knowledge. We are left with information or data, but no meaning.

Learning Leads to Responsibility

Knowledge, in other words, can be understood from the standpoint of *relationality*, from an ontology, not of isolated beings, but of beings in a field, the energy of which grounds, creates, and sustains relationality. Authentic knowing slowly reveals the relationship between the knower and the known. Authentic knowing gradually implies responding dialogically to the intelligibility of the known as the known can be interpreted in human categories. From this perspective, knowing is not only a meeting between intelligences, it is also an implicit moral act. In that moral act of knowing, the knower accepts the responsibility of coming to know the known carefully – that is, full of care for the meanings implied in the relationship with the known. That implies avoiding a careless approach or superior attitude to the

dialogue, so that the knower knows the known as it truly is, or at least as truly as present circumstances allow.

Coming to know enables one to enter more fully into a dialogue with the natural or constructed realities of the world, with the depths of its richness and its pain, its potential and its struggles. Through this kind of authentic knowing that both listens to and interrogates the world one inhabits, one becomes a richer, deeper, and stronger human being who begins to know and construct oneself within and against one's situatedness and one's predicament within the world one inhabits, and within, perhaps, the world one would rather belong to.

The Social Responsibility of Knowledge Utilization

Beside the knowledge of the other as it is in itself and in relationship to the knower, knowledge also reveals the relationships between the properties of various things. One knows the properties of types of steel, types of gasses, and types of acids. One knows that certain gasses when heated will melt steel, and that certain acids will corrode steel. One knows that steel is "stronger" than wood, and that a steel axe can cut through wood. One knows that termites can eat wood. One discovers that certain microbes will help to diffuse an oil spill, and that a certain circumference of pipe will allow only a certain volume of water to flow through it at any time. Rarely, however, are these isolated, one-to-one relationships. For example, water will flow through pipes according to conditions of pressure, as well as conditions of gravity; water will not flow through a pipe going up a hill unless it is pumped, or unless the water source is already at a height above the hill. Microbes cannot be introduced into a water system to dispel an oil spill unless the water is sufficiently warm to sustain the life and activity of the microbes. The knowledge that one acquires not only reveals the relationships the knower has to the world, but it also reveals how the world works, or how, with some inventiveness, one can make it work. Knowledge not only teaches reverence for the world, it reveals the actual or potential working relationships of the world.

Knowledge is useful for one's work in the world. That work involves not only a career, but also one's work as a member of a family, as a neighbor, as a citizen, as a homebuilder, as a member of multiple organizations, as a member of the human race, and as an intelligent animal in the natural environment. Often one's work is indeed focused on one's career. That is where many make their public contribution to the world. That work involves intelligence, artistry, and energy. It also involves a basic sense of obligation, obligation not simply to one's employer to give an honest day's work for a day's pay, but an obligation to the world – however amorphous our definition of that term might be – to make a contribution, to respond to some minimal sense of stewardship.

There are, unfortunately, many examples of unscrupulous people who use their knowledge in exclusively self-serving ways. Almost every day the media carry reports of people and companies violating the trust of their profession or their

craft: insider trading; tax fraud; bribery of public officials; shoddy field testing of medicines; misleading manipulation of experimental research results; misleading public accounting reports; cost-cutting procedures that endanger the lives of automobile drivers; violations of health code regulations in food processing plants; insurance companies that refuse to honor the terms of their policies; violations of construction safety codes; willful violations of workers' workplace safety regulations; and sexual improprieties of teachers, doctors, or clergy. The public is outraged precisely because of the public trust in the integrity of professionals (Sokolowski, 1991).

Thus, knowledge of how the cultural, social, and natural worlds work gradually equips the learner with the power such knowledge brings. That power can be used to exploit the natural, social, or cultural worlds for one's personal advantage, irrespective of the harm one's self-serving actions might cause in those worlds. On the other hand, that power can be used to benefit, protect, or repair the natural, social, and cultural communities one belongs to. As learners grow to appreciate how they belong to those communities, they need to learn that their very humanity is at stake in how they exercise their membership in these communities (Freire, 2003).

Leading Change at the Level of Moral Learning

Obviously, the challenge to leadership for effecting such a profound change can seem daunting. The challenge must be seen as involving the effort of multiple generations, from those who prepare teachers and administrators in universities, to those embarking on careers in education, to parents whose influence over the life-world of children is so profound, to policy makers and curriculum teams and professional development teams. The first step in accepting the challenge, of course, is embracing this larger and richer understanding of learning, and the second is to embrace that understanding as the heart and soul of the school's mission. Obviously, the transformation of the academic curriculum into a curriculum that promotes both moral and intellectual learning will require the full cooperation of the teaching faculty. This implies the embracing of capacity building strategies; of a continuous, focused professional development effort; and of promoting parental partnerships in reinforcing the moral and intellectual learning at home.

The effort may begin modestly enough, asking teachers to pick out one curriculum unit a semester that offers the potential to provide both intellectual and moral inquiry, linking the unit to the life experiences of the learner, raising issues around their sense of responsibility as members of the social, cultural, and natural worlds. The unit may be linked to one or more "official" curriculum standards, but add value to the learning experience by opening up a deeper dialogue with the subject matter. Whenever it can be appropriately asked, teachers should ask the questions of learners: "How does this stuff we've been studying relate to our lives, either positively or negatively? What lessons does it suggest for how we might or should live our lives? Does this material have any connection to our understanding of who we are,

as individuals and as a community? What does this stuff teach us about how to participate in the cultural world, in the social world, and in the world of nature? What would you say might be three applications of our understanding of this material to life outside of school? How might I use the knowledge I've gained in this study? How might we as a community put our learning into practice?" Asking these questions does not require any new per-pupil expenditures. Neither does it take very sophisticated professional development. It does take time and patience and openness to explore curriculum possibilities. When students, however, know that these kinds of questions will be asked regularly, they will become disposed to think about their personal responses. Furthermore, these questions suggest to the learners that there are indeed connections between their own human journeys and the academic curriculum.

Initial responses to the above questions should suggest how teachers might alter their lesson plans and their assessments to attempt to suggest concrete connections to their learners' present and future lives. I am not implying that these questions need be asked for every lesson, or indeed, in every week. Rather, teachers can pick out two or three units from the semester's syllabus that might lend themselves quite easily to making concrete connections to the lives of their learners. As students begin to see at least occasional efforts along these lines from their teachers, and hear those questions repeated by other teachers, and perhaps even forming the topics for conversations with their parents, then slowly the message about the moral character of the learning process may begin to get their attention.

Change at this level will start small, and has to start small. It will involve trial and error, an approach to action research, and an experimental mind-set. It will require leadership support at both the district and building level. In other words, it will require all the leadership skills that good leaders already know how to employ. The difference is that it will be leadership of an effort that can revitalize teaching and learning beyond the limited expectations imposed by the current policy agenda.

The leader's efforts will be accompanied by a continuous stream of encouragements and admonitions to learners:

- Knowledge brings responsibility. What are the responsibilities this lesson suggests?
- If we do not use our knowledge to improve people's lives, to contribute to the human journey, then what good is it?
- Respect the integrity of what you know and how you came to know it, but recognize that what you know represents a tiny fraction of what you need to know.
- Respect the craft of language and rhetoric; it communicates respect for your audience.
- Respect the audience who receives your knowledge reports by providing them illustrative examples and precise language and occasional humor for when they get drowsy.
- You do not have the moral option to choose not to learn. Choosing not to learn is choosing not to learn who you are and what you will need to know in order to

make a contribution to the world. An organization's or a community's achievement of excellence is dependent not only on the quality of its most talented members, but also on the intelligent cooperation of people like you and me. The shoddy or incompetent work of anyone diminishes the achievement of the whole.

- Whatever level of greatness we have achieved as a civilization, and whatever level of excellence and good order we enjoy are because countless people like you and me knew what to do when it counted most. That's why learning what you learn in school is not only a privilege, it is a duty to yourselves and to your community and to your future children and grandchildren.

Summary and Conclusion

We have been exploring the moral nature of human learning. The moral agenda of the learner, namely to become a somebody, a real person, and then to participate authentically in the "us" that engages in self-governance and community, of necessity involves coming into an authentic relationships with the natural, social, and cultural worlds that the learner inhabits with other humans. Establishing those authentic relationships with the natural, social, and cultural worlds as represented in the academic curriculum not only plays an essential part in the self-understanding and the self-construction of the learner, but also points to building those capacities of mind and heart for taking on the multiple responsibilities that all the learners have to those worlds and for those worlds. This is real learning.

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Teacher Leadership: Developing the Conditions for Learning, Support, and Sustainability

Ann Lieberman and Linda Friedrich

In surgery, as in anything else, skill and confidence are learned through experience – haltingly and humiliatingly. Like the tennis player and the oboist and the guy who fixes hard drives, we need practice to get good at what we do . . . we want perfection without practice . . . learning is hidden, behind drapes and anesthesia and the elisions of language.

Atul Gawande (2002, p. 18)

The research on teacher leadership like that of school reform has become more and more nuanced in the last two decades as the reform context has changed (Smylie, 1995; York-Barr & Duke, 2004). Since the 1980s there have been consistent calls for teachers to be leaders, often with no preparation, support, or understanding of the school culture nor the demands of the reform context. How has our knowledge grown and what do we know so far?

A Nation at Risk and Teacher Leadership

There are literally hundreds of studies of *individual teacher leadership roles*, the skills they require, and how these roles bump up against the structures and norms of the bureaucratic school organization on the one hand and the egalitarian culture on the other (Smylie, 1995).

During the 1980s while *A Nation at Risk* (National Commission on Excellence in Education, 1983) dominated the larger discussion about improved standards and testing, the Carnegie Corporation's *A Nation Prepared: Teachers for the Twenty-first Century* (1986) laid the groundwork to legitimize a variety of teacher leadership roles. There was a press for teachers to lead through school-based management teams and the first introduction to the idea of a "lead teacher." Little (1988) immediately tackled the problem of the needed conditions that could support teacher

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leadership. She described the need for teachers to know each others' teaching, to make teaching public, and to work in a collaborative manner. Her oft-quoted aphorism that teacher leadership was a "high gain, high strain" (p. 98) referred to the fact that few, if any, of the conditions that she described were operative in schools. Miles, Saxl, and Lieberman (1988) studied a group of teacher-leaders to identify the skills and abilities of teachers who assumed leadership roles. These leaders had many skills before they assumed leadership roles. They were very effective interpersonally, were knowledgeable about curriculum, and some had administrative experience as well. However, they quickly learned that they had to acquire a new cluster of skills to help them gain legitimacy with their principals as well as the teachers. These skills included building trust and rapport, making an organizational diagnosis, using resources, managing the work, and building skill and confidence in others. In this study, learning these characteristics helped them organize successful school improvement programs.

Organizational Constraints and "Contested Ground"

It soon became evident that as a variety of teacher leadership roles were created tensions arose between the bureaucratic nature of school organization and the collaborative strategies of the teacher-leaders. Often getting caught in the middle, teacher-leaders found themselves in contentious territory. Smylie and Denny (1990) documented the certainties and uncertainties associated with the roles of thirteen teacher-leaders in a district. Although they were supported by the district and knowledgeable about classroom practice, they were uncertain of their role in their individual schools. Many suffered role conflict and ambiguity as they tried to combat the organizational constraints of the job. In like fashion, Little (1995) found that the "contested ground" and the quest for leadership legitimacy placed teacher-leaders right in the middle as they sought to do their jobs in two restructuring high schools in California. She found that teacher-leaders were caught between strategies of commitment and strategies of control. Bartlett's study of teacher-leaders in two secondary schools continued to test the concept of "contested ground" (2001). She found that the absence of appropriate structures for support and the culture of schools made it difficult for teacher-leaders to negotiate reasonable professional and personal lives.

Teacher Leadership and the Changing School Culture

In the last decade there has been increasing research and discussion on the concept and reality of distributed leadership – the idea that leadership is shared by a number of people in a school. In their recent book, Spillane and Diamond document what distributed leadership looks like in a variety of contexts (Spillane & Diamond, 2007).

Fullan (1995) proposed a different view of school reform when he used the term *reculturing the school*. His conception of teacher leadership was that a number of teachers would be responsible for creating a new collaborative culture. In his scheme, teachers could reform schools and take responsibility for leadership work by knowing about teaching and learning, collegiality, context, opportunities for continuous learning, management of the change process, and a sense of moral purpose. For him, reculturing could only be accomplished through the work of teachers as leaders.

Lambert (2003) also wrote persuasively about broadening the concept of teacher leadership when she offered a view of “constructivist leadership” which for her is grounded in “relationships, community, learning and purpose” (p. 14). For her, leadership is about “performing actions . . . that enable participants in a community to evoke potential in a trusting environment; inquire into practice; focus on constructing meaning; and frame actions based on new behaviors and purposeful intention” (p. 13). Both Fullan and Lambert pointed to a broader direction for teacher leadership – one framed as groups of teachers intentionally working together to transform the culture of the school.

Teacher Leadership and Building Community

The term *professional community* was first used by Talbert and McLaughlin (1994) when they reported on a 5-year study of secondary schools in California. A few high school departments were characterized by teachers talking openly about their students and their problems, discussion of curricular approaches to making changes together, committing themselves to collective discussion about their pedagogical work, and becoming authentic colleagues in the process.

Westheimer (1998) further defined community as involving interaction and participation, interdependence, shared interests and beliefs, concern for minority viewpoints, and meaningful relationships (p. 12). In studying two schools that had professional communities, he sharpened our understanding of how “communities” differ. Professional community for one school was procedural and conforming. For the other it was characterized by joint work, broad leadership responsibilities, and strong identification with the larger community.

Both of these studies teach us about the very nature of participation and how context matters significantly. On a more individual level, Little (1990) documented the differences between teachers who move from independence to interdependence – all modes of participation critical to those teachers who hope to lead their peers in a positive direction.

More recently, Grossman and her colleagues (2001) conducted an interesting study of professional community. In this study, the researchers worked with and studied two departments in a secondary school. The researchers helped the teachers form a book club with social studies and English teachers. Their hope was that they would form a community and each learn from one another. The study documents

the process of the development of a community from a collection of individuals to the exposure of a number of fault lines (race, gender, subject matter, etc.) and finally to teachers taking responsibility for their own and colleagues' learning.

Smylie (1992) found that it was possible to have a collegial and open culture among teachers but where teacher leadership *did not* flourish. Collegiality and openness were evident as long as these teachers were considered equals. Teacher leadership violated the norms of equality and independence. These themes then keep getting introduced over and over again. Teacher-leaders must learn how to negotiate the egalitarian culture, create opportunities for social learning, engage in collaborative work, learn the skills and abilities for managing disequilibrium, and find a way to support teacher learning over time. So how does such learning take place?

Learning on the Job in Communities of Practice

The idea of learning in practice is now viewed as foundational to teacher leadership. A number of theoretical and research traditions explore how individuals learn from their daily experiences. Schön (1983) described the idea that professional learning can be discovered in the process of work and reflecting upon it. It is in this arena that there has been little, if any, research. Finding out what teacher-leaders do and what they learn is critical if we are to understand the contribution of teacher leadership to the improvement of teaching and learning.

Within the sociocultural learning tradition, Lave and Wenger (1991) further developed the idea that learning is an aspect of changing participation in what they called "communities of practice." These communities were made up of people doing the same kind of work, but the theory as developed by Lave (1996) described learning as more social and collective, rather than solely individual. The idea of social learning is particularly important as we come to see just what it is that teacher-leaders do when they are responsible for organizing professional development among their peers. Wenger advanced the theory even more as he described social learning as involving three processes: learning, meaning, and identity – these processes occur side by side in "communities of practice." Wenger (1998) views practice as both explicit and tacit, including both what people say and observe and what is left unsaid and begs for explanation. Professional learning for Wenger is rooted in the human need to feel a sense of belonging and make a contribution to a community where experience and knowledge function as a part of community property.

These frames are particularly powerful for understanding how teachers learn to lead. In their comprehensive literature review, York-Barr and Duke (2004) note that the literature is replete with calls for formal preparation but that research about such opportunities remains relatively limited and continues to be weighted toward frameworks and designs to support learning. Across the literature reviewed, they see evidence that teacher leadership is fostered within learning communities.

In reviewing the literature we found that we had a unique opportunity to study teacher leadership within a professional learning community. It is just these issues

that we found compelling and important when we mounted a study of 31 teacher-leaders in the National Writing Project (Lieberman and Friedrich, 2008). Using vignettes, we were able to study the pathways that different teacher-leaders took; and show how, and in what ways, they learned leadership in practice.

The National Writing Project: A Comprehensive Model

Through the National Writing Project's (NWP) professional development programs, teachers in all subject areas and at all grade levels learn new strategies for helping their students become accomplished writers and learners. Teachers also become members of a professional community that helps them keep their teaching fresh and vibrant. There are almost 200 university-based writing project sites in all 50 states, the District of Columbia, Puerto Rico, and the US Virgin Islands. NWP sites promote core principles of effective instruction while they respond to the needs of local schools and communities.

The Summer Institute

The NWP model begins with an annual 4-week summer institute at each site, led by university faculty and K-12 teacher-leaders. Here experienced teachers prepare for leadership roles by demonstrating their most effective practices, studying research, and improving their knowledge of writing by becoming writers themselves. Previous research has documented the "social practices" of the summer invitational institute (Lieberman & Wood, 2003). During this institute, teachers, often for the first time, go public with their practice by teaching some aspect of their instruction to their peers; work in writing groups; share and critique each others' work; and learn from research and theory in the field of writing as well as from the knowledge and practice of other educators. At the institute, teachers participate in a learning community that is collaborative and inquiry oriented, while at the same time they are expanding their knowledge of writing and the teaching of writing.¹ Teachers become learners engaging in the various stages of writing, which deepens their understanding of their own and their students' strengths, challenges, and development as writers; they participate as colleagues in a way that is starkly different from much of their experience as teachers in their own school. Many speak of their experience in the summer institute as being "transformative" and "magical."

¹The social practices include the following: honoring teacher knowledge; creating public forums for sharing, dialogue, and critique; situating learning in practice and relationships; sharing leadership; guiding reflection on teaching through reflection on learning; providing multiple entry points into the learning community; turning ownership over to learners.

Opportunities for Leadership Development

Teachers' involvement with their writing project sites does not end with their participation in the summer institute; they become writing project teacher-consultants and members of an ongoing professional community. Writing project sites establish opportunities for continued learning and for these new teacher-consultants to take on a variety of leadership roles. In particular, teacher-consultants take their expertise in the teaching of writing to schools and districts in their region.²

The Vignette Study

As we began our study, we wondered about several things. What does teacher leadership look like in practice? How does it differ from common conceptions of leadership? What problems do these leaders face and how do they negotiate their roles and responsibilities? How do teachers learn to lead? Answering these questions required us to understand how the work of teacher-leaders unfolds both day to day and over time. We also needed to get a picture of teacher-leaders' principles, interactions, and challenges. To do so, we decided to identify a sample of NWP teacher-leaders who were locally recognized as strong and effective models of teacher leadership and engage them in a vignette study.

In many studies of leadership, one challenge is that leadership involves daily activity and takes place among myriad actions that accrue over time. Typical data collection strategies – interviews, surveys, or even observations and focus groups – often fail to show the interconnections and variety of activities, strategies, and tactics that people come to learn over time when they take on leadership responsibilities. For these reasons, the vignette was developed. Our study, which uses vignettes as its primary data source, is built upon the assumption that when a number of people write to a common set of prompts, it is more likely that people's dynamic practices of work and interaction with others can be revealed, because we can see both the common elements that emerge across several stories as well as the complexities and specificity of each individual story.

The Vignette as a Research Methodology

The vignette was first used by Miles, Lieberman, and Saxl (1988) in a study of assistance personnel who were change agents in a variety of school reform efforts in New York City. After interviewing the successful leaders in this project, the research team was told by the participants, "You don't get it." The participants taught the research team that it was hard to describe the many things that these successful leaders did

²Nearly 12,000 writing project teacher-leaders served more than 137,000 educators in their home communities in 2005–2006.

every day despite our well-thought-out interviews and observations of them at work. The vignette helped fill the gap. The researchers wrote several prompts that would help the participants write about a set of events (spanning less than 1 year) where they learned about and helped facilitate improvement with one or more teachers. In that study, the vignettes did indeed help show how those in leadership worked on a daily basis (Lieberman, 1987). In this current study, we changed the prompts to get at the essence of the NWP culture and what the teachers were learning in their leadership positions (see Appendix).

The Sample

Writing project site directors, as well as leaders from NWP's nationally sponsored programs, observe writing project teacher-leaders at work in a variety of settings.³ Therefore, we called on a selected group of them to identify teachers who had successfully taken on leadership positions in their schools, districts, or states, or in NWP,⁴ and to each nominate one individual whom they knew to be professionally active; reflective about work she or he has done to influence students, peers, and the contexts in which she or he works; and comfortable writing about his or her work.

Of the vignette authors, 88% are women and 12% are men; 79% are Caucasian, 15% are African American, 3% are Asian American, and 3% identify as "Other." They come from 21 states and 31 writing project sites. Their leadership work spans all school levels: elementary, middle, senior high, and university. The authors work at all levels of the education system: classroom teachers, school administrators, and district administrators as well as leaders of writing project sites. They participated in the writing project's invitational summer institute between 1983 and 2004. On average, they have worked in education for 18.5 years.

Writing the Vignettes: The Writing Retreats

The vignette writers and researchers met for two writing retreats, each lasting 2½ days. In the first retreat, we explained to the assembled teacher-leaders that we wanted them to write about their leadership by selecting a series of activities – less than a case, but more than one event – that "showed" rather than "told" how they were learning to lead.

At this retreat, we worked with the teacher-leaders both one-on-one and in writing response groups to choose one slice of their work to write about,

³The leaders of NWP's National Programs and Site Development unit selected a group of 35 writing project leaders who are geographically diverse, are knowledgeable about a range of program content areas, and have nurtured the development of many teacher-leaders.

⁴We originally requested nominees from 35 individuals. Of these, 33 people each nominated 1 teacher. All 33 nominees accepted our invitation. Following the first writing retreat, two people dropped out of the Vignette Study for personal reasons.

offering guidance about which aspects of their work seemed particularly well suited for this study. In the 4 months between the two retreats, each person produced at least two drafts of his or her vignette and received written responses from one lead researcher.⁵ In our responses, we asked them to elaborate what they did, to focus their stories, and to make explicit their leadership and the ways in which they learned to lead in the situation described.

At the second writing retreat, the teacher-leaders shared their works-in-progress with us and with their colleagues. Often, hearing others' stories and listening to the questions of their peers prompted them to add nuances to their stories and to clarify information about the context in which they worked. Following the second retreat, the writers received one final round of response and polished their vignettes.

Organizing and Analyzing the Data

After all the vignettes were finally finished, we read and made notes about the roles each author played, the key content dimensions, common themes related to leadership, the role of the writing project in shaping the work, and the process of learning to lead. We then met to discuss our understanding of each vignette and out of our initial readings we identified three broad categories of vignettes: teachers leading change inside their own schools; teachers facilitating an array of professional development opportunities outside of their own schools; and teachers moving into formal, named leadership roles in their schools, districts, states, or writing project sites.⁶ We read each subset of vignettes to identify and categorize the strategies these teacher-leaders used to make change, as well as to understand patterns in how they learned to lead. To confirm these themes, we reanalyzed the entire set of vignettes noting patterns and marking specific evidence in each vignette that illustrate how the authors developed their leadership skills, dispositions, and capacities.

Teacher-Leaders Negotiate Tensions and Challenges

Teacher-leaders negotiate a variety of challenges as they work to enact a collaborative approach to leadership. These include dilemmas that arise when attempting to work collaboratively inside traditional bureaucratic structures, pedagogical challenges that emerge from teaching in any situation including other teachers, and tensions that stem from conflicts between policy mandates and values and approaches

⁵Ann Lieberman, Linda Friedrich, and Liza Percer served as the lead researchers during the data collection phase.

⁶Much prior research about teacher leadership has focused on teachers taking on leadership roles inside their own schools. Our research includes teacher-leaders engaged in similar work as well as teacher-leaders who exercise leadership in other settings, including intermediary organizations, and those who make transitions from the classroom into more traditional roles.

that run counter to those mandates. Through responding to these challenges, teachers learn to lead.

Normative/Institutional Dilemma

Few teachers leave an NWP summer institute without learning the power of collaborative work. So it is not surprising that this is one of the key strategies that teacher-leaders use. But such an approach runs smack into the bureaucratic way most schools are organized and the way most teachers become socialized.

Our study builds on earlier research, as we see through our analysis how these teacher-leaders deal with the potential conflict between working to make change in their schools and risking rejection for stepping out of the egalitarian expectations so tightly held by many teachers in their school culture. As Paul Epstein noted,

It is one thing to stand up in front of strangers . . . and ask teachers to try something they may not have tried, to show them ways to teach writing, maybe even to ask them to write and to share something. . . . It is quite another thing to get up in front of your coworkers and tell them they should teach differently.

For the vignette authors who worked to make change in their own schools while continuing to teach, we observed an important dynamic that facilitated these teachers' leadership work – they were recognized by their peers as excellent teachers who were willing to share practice and most held ancillary roles that gave them some time to work with peers outside their classrooms while defusing the authority-like associations with formal administrative roles.

Role/Identity Dilemma

Teacher-leaders who choose to leave the classroom and pursue formal administrative positions – especially inside schools, districts, and state departments of education – confront another dimension of the egalitarian teaching culture. Formal leaders are often perceived as abandoning the fold of teaching and ostracized by former colleagues. Vignette authors wrote about no longer being part of the web of personal or professional relationships inside schools – finding themselves eating alone, seeing their colleagues fall silent as they walked into a room, and being told that they should not speak because they were not teachers.

Indeed most of the vignette authors who ultimately accepted formal administrative positions as assistant principals, district or state curriculum leaders, or even writing project site directors articulated some reluctance to accept these administrative positions. They feared losing direct impact on students as well as a direct connection with teacher colleagues. They worried about establishing and imposing policies that demanded compliance but did not support teaching. Kim Larson, who moved from her elementary classroom to become the reading and writing director with the Nebraska Department of Education, articulated this dilemma,

If I was going to succeed at my job leading state initiatives in the area of literacy, I knew that I would need to find ways to hold onto my long-held beliefs about teaching and learning, and utilize them as I met new expectations, responsibilities and formed new relationships.

Larson believed that teachers are the people best positioned to positively effect student learning. She viewed her role in the state department of education as an opportunity to support teacher learning and growth through creating venues in which teachers could learn together. Early in her tenure, she sought to change teachers' perception of her as an "informer and enforcer" by co-facilitating a semester-long, distance learning course for three elementary schools scattered across Nebraska focused on teaching writing. This proved to be a successful strategy which she continued to use in other venues.

In working to transform administrative roles, these new administrators found themselves confronting the tacit expectations of teachers and other administrators that they would set a direction and assert their authority. While many attempted to reinvent administrative positions in ways that engaged teachers in collaborative learning and decision making, they found that they had to balance their desire to establish collegial non-hierarchical relationships with their positional authority. In her vignette, Ronni Michelen, an assistant principal in a New York City high school, reflected on her role in creating opportunities for teacher collaboration while enacting her responsibilities as an administrative supervisor.

I always seem to have three voices in my head as I plan for our weekly English team meeting. One is the voice of Assistant Principal, one teacher, the other is my Writing Project voice. The three have sometimes learned to work together as collaborators. But it is the struggle, the tension, the questions the voices raise independently, the conversations they have among each other that excite me, stress me and move the work forward.

Michelen described how her attempt to establish her office as a collaborative work and learning space for teachers spiraled into a center for gossip. Michelen's efforts to "symbolically represent leader as alongside person" slowly unraveled. By the end of the year she realized, "... I was getting too close, and the space between my assistant principal self and my teachers needed a boundary." The next year she took a different office space of her own; at the same time she continued to facilitate professional development team meetings using content and practices from the writing project that modeled collaborative leadership.

For the vignette authors who moved into traditional leadership positions, maintaining a visible, public identity as a teacher comprised an important part of their work. They also showed how they used their formal positions to advocate for and support the development of teacher collaborative learning and teacher-leaders. Throughout this work, they had to negotiate traditional expectations for administrators and learn how to instantiate and demonstrate their values in these new roles.

A Pedagogical Challenge: Stepping In, Stepping Back

In addition to confronting institutionalized norms of egalitarianism and privacy, teacher-leaders seeking to support the professional growth of other teachers face a dilemma of providing sufficient support and access to knowledge as people are beginning to learn something new without taking complete control of the learning situation. The vignettes demonstrate the difficulty of moving from the role of expert sharing knowledge to the role of collaborative leader creating structures and opportunities that support people in taking a piece of work and reshaping it for themselves. This tension is particularly evident in the vignettes focused on leading professional development and coaching.

Anne Aliverti, a new teacher coach in the Seattle Public Schools, portrayed how she negotiated this tension in her work with a white female, first-year French teacher. During Aliverti's initial visits, she observed that her mentee's students were ignoring classrooms policies, questioning pedagogical choices, imitating the new teacher's errors, and eventually dropping the class. Seeing this scenario, Aliverti "dramatically" increased the amount of time she spent in this classroom.

Aliverti also analyzed her mentee's challenge – although she had deep content knowledge, her cultural differences from her students meant that she lacked "both the ability to interpret her students' behaviors and the experience to redirect them." Aliverti called on a colleague who was an experienced middle school Spanish teacher and had worked successfully with African American students. Together the three of them devised some approaches that would help this new teacher turn her classroom around; Aliverti's colleague also gave her guidance about what to look for.

Shortly after this intervention, the "... panel overseeing our mentoring caseloads expressed concern that I had spent close to 40 hours with [this new teacher] in the first four months of school, when 20 hours were the expected norm for the whole year." This expression of concern prompted Aliverti to review her logs, reflect on her approach, and to pull back considerably. She still checked in with this mentee but no longer spent extended hours in the classroom; she also redirected conversations so that they focused on their established goals. Pulling back was a success. "In my subsequent observations of her classes her students' increasing engagement and jovial, respectful rapport negated my impulses to coach [her] between classes or to return for crisis prevention a mere few days later. I sat in the back of her room, letting go, letting her come to me."

While Aliverti's vignette illustrates a successful resolution of the stepping in or stepping back dilemma, other vignettes demonstrate just how challenging managing this dilemma can be. C. Lynn Jacobs of the Northern California Writing Project reflects on the process of mentoring other teachers into leadership roles within her writing project site as part of a national initiative focused on content-based reading practices and strategies for middle and high school teachers. The two teachers would be designing and leading writing project professional development for the first time. In mentoring them, Jacobs operated largely behind the scenes – sometimes doing work because it needed to get done; other times co-planning

professional development which one of the new leaders would then facilitate. One activity that Jacobs co-planned with one of the new leaders ended up not working. Jacobs writes, “[W]hen he presented it, I suddenly realized that he had not understood the session as I thought we had planned it; it was actually my idea that he tried to deliver and it didn’t work. I can now see that the idea had to be his, not mine.” In this instance, stepping back didn’t work as planned and left Jacobs feeling that she had much to learn about how to support other teachers in developing as leaders.

Sharing deep knowledge with those new to a particular role or practice is critical to their learning. However, this knowledge needs to be shared in such a way that the person new to leading the task isn’t simply asked to carry out a preplanned script but rather has opportunities to sit on the sidelines, examine principles, and explore a variety of ways to enact those principles. Like all teachers, these teachers of other teachers confronted the dilemma of when they needed to step in and direct learning and when they needed to step away so that the teachers with whom they were working could take up and own the work.

Value Conflicts

Teacher-leaders confront how to address policy demands that conflict with professional beliefs, values, and knowledge. In the current environment, teacher-leaders often find they must work carefully to simultaneously advocate for their deeply held attitudes and values about teaching and learning and to address assessment mandates. These tensions are evident in the vignettes of authors who hold positions in their school districts as well as authors who describe leading professional development for their writing project sites. The authors describe analyzing policy mandates so that they can understand how teachers can continue to use practices that build on writing project values and attitudes while responding to the larger assessment and accountability mandates present in the system.

Some teacher-leaders address conflicts between their own attitudes and values and policy mandates by engaging the teachers with whom they work in analyzing what is being demanded of them and where they maintain professional authority. Astra Cherry, a teacher of 32 years now retired and a teacher-consultant with the Gateway Writing Project in St. Louis, MO, described facilitating a voluntary teacher inquiry group. Cherry’s purpose in engaging teachers in inquiry was to help them to take ownership for their teaching practice and for their students’ learning. She wrote,

... I often ask teachers, “Who is in charge of how you teach the curriculum in your classroom?” [...]

I struggle with how strictly monitored scripted text and prescription writing programs have been imposed on teachers and students.

I struggle with how teachers are under pressure to meet timelines that conflict with writing process, writing to learn, inquiry communities, and teacher empowerment.

In leading the inquiry group, Cherry took these struggles head on by asking participating teachers to articulate the constraints they face. Teachers often expressed fear that if they deviate from policy mandates, they will lose their teaching appointments. As these teachers examined their teaching practices, they began to see that their own “preconceived notions and suppositions,” in addition to policy mandates, sometimes stood in the way of effectively supporting their students. Gradually, through closely examining students’ work and other classroom artifacts, these teacher-inquirers built their sense of efficacy and identified ways to take charge of their teaching practice – and negotiate policy demands.

Other teacher-leaders facilitated professional development that supported teachers in meeting mandates while using teaching practices that fostered in-depth student learning. As they designed these learning opportunities, teacher-leaders often found themselves navigating potentially conflicting sets of messages. For several years, Denise Amos with the Louisville Writing Project had taken on the challenge of creating and leading a 3-h workshop about on-demand writing assessment. As Kentucky increased the weight given to on-demand writing assessment scores, teachers have struggled to both improve the teaching of writing and raise scores.

As Amos designed and revised her workshop over the years, she faced contradictions between her beliefs and values as a writing project teacher-consultant and the expectations of Kentucky’s assessment system. When she analyzed the state’s scoring of student writing samples, she noticed that proficient papers were distinguished from apprentice papers by their organization and the development and support provided for the main ideas. Amos was “surprised [by] how alike [the proficient papers] all were in their organization.” To her, these on-demand essays were perfect models of the five paragraph essay. She expressed concern that by modeling and teaching topic sentences and supporting details that she may be untrue to her beliefs about what constitutes good writing – in other words, writing that uses varied organizational structures and approaches.

To confront this dilemma she collaborated with another writing project teacher, who had experienced success in both helping students develop as writers and with improving on-demand assessment scores, to design additional professional development for teachers. Amos spent time in her colleague’s classroom in order to more fully understand how she approached the teaching of on-demand writing. Together they designed minilessons that they could model for teachers during professional development. In creating professional development focused on helping students become proficient on the state writing assessments, Amos took up teachers’ real and pressing questions. In the process, she asked herself “hard questions about [the] beliefs and instructional strategies I shared with my colleagues.”

Remaining true to one’s writing project principles while supporting teachers and students as they respond to daily accountability pressures prompts teacher-leaders to evaluate their own practices. The vignettes illustrate the ways in which these writing project teacher-consultants explore the connections as well as the conflicts between their values and attitudes and today’s accountability demands. This learning process is an important aspect of “managing the polarities” of their responsibilities.

How Do Teachers Learn to Lead?

Leadership learning often involves working through challenges and wrestling with dilemmas. While the literature about teachers' leadership learning focuses on formal training structures and programs (York-Barr & Duke, 2004), our study demonstrates how teacher-leaders learn in the course of their daily pursuits. The vignette authors elaborate how their development as leaders is supported through their deep experience as teachers and their ongoing inquiry and research as well as through their ongoing participation in professional communities, such as the writing project.

Learning Leadership from Teaching

Teachers' deep understanding of the daily workings of classrooms has long been recognized in the literature as a hallmark of their leadership. The vignettes echo this theme and illustrate the myriad ways in which the authors draw on their own teaching in their leadership work across different roles and settings. Classroom practice forms the foundation of these teacher-leaders' knowledge base and serves as a continued source of leadership learning. The vignettes demonstrate that teacher-leaders share the philosophies and research base that motivate their teaching, as well as specific practices and materials, as they work to improve education. Specifically, the vignette authors describe the ways in which they collaborate with their peers so that other teachers can adapt practices to best meet the needs of their students and to create their own practices. These teacher-leaders also incorporate practices and processes that they use with their K-12 students as they work to build constructive learning environments for adults.

Linda Tatman, a retired 30-year veteran teacher, learned to draw on her "storehouse of teaching strategies" as she transitioned from teaching high school English to managing the Miami University/Ohio Writing Project Master of Arts in Teaching (MAT) program. Tatman found that productively sharing her own teaching practices, many of which she first encountered through the writing project, with the MAT candidates started with learning their questions and interests. Tatman and her colleagues

... invite[d] our teachers to think about what they are doing in their classrooms and why, and we asked them to keep a reflective teacher journal to record daily experiences and explore concerns. ... The responses from my high school teachers ... revealed as much about their struggles as they did about their successes.

Close reading of these emails helped Tatman understand "what I had in my boxes of packed teaching materials ... to share with them." Over time Tatman tailored what she shared to meet the specific individual needs of each teacher and approached offering recommendations by asking the MAT teachers questions about their practice. Once Tatman understood these younger teachers' questions, she identified units of study related to the literature or topics the teachers were exploring, specific teaching strategies, and professional literature that would support teachers in expanding

their teaching repertoires. Ultimately the MAT teachers felt they had permission to use Tatman's ideas and rework them to meet their needs. In addition to sharing ideas and theories from her own high school English practice with these younger teachers, Tatman drew on her deep understanding that effective teaching involves understanding the needs and gifts of the learners in the room whether they are high school students or teachers. In her vignette, Tatman reveals how she activated knowledge accumulated over decades of teaching and reshaped it to build the capacity of a younger generation of teachers. Her leadership learning unfolded subtly as she enacted her new role as a leader of an MAT program.

The parallels between teaching young people and working with adults do not stop with the university classroom. Several authors who moved into formal administrative positions drew analogies between creating communities of learners in their K-12 classrooms and building collaboration among their fellow administrators. Shayne Goodrum, a Secondary English Coordinator in North Carolina, writes about her experiences of building a community among the literacy specialists who worked on a new adolescent literacy initiative in her district. In the program's first year, Goodrum saw meetings devolve into a space for socializing rather than a place for professional learning and collaborative problem solving. This compromised the success of the adolescent literacy initiative. Entering the second year, several of the specialists turned over and Goodrum reflected on how things needed to change in order to insure the specialists' success in working with school and in collaborating with one another.

I thought about my years in the classroom, considering what, as a teacher, I had been solely responsible for deciding and what I left open to student choice. This team was my new class, and I was responsible for establishing the structures that would ensure it achieved its goals. I needed to build a support structure so that each specialist felt safe making decisions but knew the expectations for success.

As Goodrum redesigned the team's meetings, she set content and helped keep focus. At the same time, she created opportunities for all members of the group to present. In this way Goodrum built on her successful practice as a teacher and fulfilled her role as a leader. In her view, "It's the leader's obligation to hold space for individual contributions while ensuring the momentum of the whole." Goodrum represents another case of learning to tap into one's storehouse of teaching knowledge as she transitioned into a formal leadership role. These two examples show how the vignette authors' experiences as K-12 classroom teachers inform their leadership and how classroom teaching experience can help teachers learn to manage the pedagogical challenges they face when working with adults.

Learning Leadership Through Research, Inquiry, and Reflection

The vignette authors characterize themselves as lifelong learners. While they acknowledge their expertise, they do not view their knowledge base as complete.

When faced with challenges in their leadership work, they often respond by examining new research literature and theory, studying student artifacts, co-researching with other teachers or inquiring into their own leadership practices in order to deepen their capacities to lead.

Sometimes leadership learning arises from reflecting on failure. Mimi Dyer wrote of being recruited as the English department chair for a traditional high school to “fix” the teaching of writing. Emboldened by her passion for effective teaching and her own classroom successes, she began to make unilateral changes to the high school’s curriculum. Going in, she “knew” that teachers would be thrilled with her innovative, writing project–derived ideas. But after 2 years, the members of her department fought to have her removed.

Dyer stepped down and started reflecting on why she had, in her words, “failed.” She turned to her father, a leader in the military, and to her writing project site director to help her understand why she was unable to enact her vision and how she might work more effectively in the future. Ultimately she realized that she had *not* built community or drawn on the strengths of her new colleagues. In a sense, she was blinded by her own pedagogical vision. With a clearer understanding about why her efforts fell short, she accepted another leadership opportunity and this time adopted a more collegial (and effective) approach to making change.

Like their counterparts who remained in the classroom or took on leadership for their writing project sites, vignette authors who moved into formal positions of authority also engaged in research and reflection when responding to leadership challenges. Deidre Farmbry, now an independent educational consultant in the Philadelphia area, shared three snapshots of moments in her long career in which research and reflection were critical to solving leadership challenges. In the first snapshot, Farmbry recounts her opening days as principal at the high school where she had served as a teacher. Through focus group interviews with faculty members she learned that in the 5 years since she had left the school “teacher morale had declined, serious behavioral infractions had escalated, and academic expectations for students had plummeted as a result.” One teacher’s comment – “Make me feel safe, and I’ll do whatever you want” – prompted her to question whether she would need to address safety and security issues before she could attend to teaching and learning, her intended focus. Farmbry realized that she would need to bolster her school’s capacity for addressing safety and security concerns so that they did not derail a focus on raising expectations and achievement for students. Farmbry engaged a sociologist to collaborate with her and the staff so that they could “improve their ability to navigate shared space respectfully with students perceived to be threatening.” She reflected,

In the course of making it through this detour, I had to address issues of race, perceptions, and stereotypes—topics not discussed in my leadership preparation classes. I had to seek balance and perspective before making critical decisions about how to allocate resources, including my own energy, to address this issue of fear, lest it become all consuming.

Through her actions, Farmbry exhibited a stance of inquiry and reflection. She sought to build her own knowledge base – as well as that of her staff – so that they could focus on learning.

Learning Leadership Through Participating in Communities of Practice

Participation in a community of practice supports teachers in developing their capacities as leaders. Many vignette authors explore the ways in which their participation in the writing project or other communities of practice supports their ongoing development as leaders. As documented in Lieberman and Wood (2003), taking part in the writing project invitational summer institute socializes teachers into a set of beliefs, values and practices. The vignette authors describe the ways in which their involvement in the summer institute strengthened their teaching practices, transformed their attitudes and values about the teaching of writing and about teachers' knowledge, and modeled for them processes for facilitating professional learning and building communities among adults and young people alike.

Legitimate peripheral participation. Some vignette authors make explicit the importance of having opportunities to learn from more experienced teacher-leaders, gradually taking on increased responsibility for facilitation and leadership. Lave and Wenger (1991) describe this process as one of "legitimate peripheral participation." Because local writing project sites serve as long-term communities of practice rather than one-time staff development offerings, we see these processes in sites' programs and mentoring processes being enacted not only within the summer institute but also as a mechanism for developing the leadership capacities of writing project teacher-consultants. Karen Smith, a new director of a writing project site that had experienced much director turnover and was on the brink of losing its funding, describes the process of rebuilding the teacher leadership base in order to "breathe new life into" her writing project site. The first step in this process was to invite 18 teacher-consultants who had already participated in a summer invitational institute at some time in the previous 5 years to a "return institute." The focus for the return institute was guided by three goals: building leadership, increasing opportunities at the writing project site for teacher-consultants to continue learning, and expanding the writing project's in-service offerings in the region. The agenda for the institute was very open and the participating teacher-consultants were expected to help shape the agenda, in this case a component of legitimate peripheral participation.

While the return institute was running, Smith "quietly identified people whom I wanted to push toward more leadership when the school year started." She invited several return institute participants to join the writing project site's leadership team which was comprised of seasoned writing project teacher-consultants as well as these newcomers. At first, Smith observed that the newcomers seemed overwhelmed and were uncertain about whether they had contributions to make. She explained, "I had those same feelings when I first became involved in [our writing project site] leadership." She encouraged the newcomers to continue attending meetings so that they would gradually deepen their understanding of the work of the site and would gain the confidence to take leadership of pieces of site work. After a year, Smith noted that four of the teacher-consultants whom she recruited accepted key leadership roles in the site and that they "now see themselves as an integral part of

our team.” In observing the ways in which these teacher-consultants’ identities had shifted, Smith also recognized a shift in her own identity,

I realized in the middle of it all that I am now on the other side of the fence from where I was ten years ago. It is now my job to support and encourage them to step out as teacher-leaders. I want to help them see their strengths, formulate some plans for the kind of work they’d like to do, and let them do it.

The process Smith described reflects the writing project’s social practices as well as the broader dynamics that shape communities of practice in which individuals gradually adopt not only the community’s ways of working but also take on an identity as a community member. By showing her own leadership trajectory, Smith also illustrated the process of new-timers becoming old-timers and guides for new members of a community of practice.

Membership. Learning is a key element of the day-to-day work of any community of practice and often occurs through ongoing dialogue and problem solving. The vignette authors illustrate how ongoing participation in a community affords opportunities to learn new ways of working and addressing challenges that they face in their daily work. Carrie Usui, who worked as a literacy coach in the Los Angeles Unified School District, explained how collaborating with a group of literacy coaches who were also writing project teacher-consultants helped her “manage the polarities” of responding to assessment pressures and advocating for high quality writing instruction with other teachers. In seeking to achieve her goal – “to support and help every student to be successful in school, and in particular English” – Usui “holds the philosophy of the writing project as the cornerstone for [her] planning of professional development for teachers and administrators.” At times, however, her beliefs and philosophy as a writing project teacher-consultant conflict with her responsibilities as a representative of district policy. She confronts questions like,

What do I do when I truly believe that certain items on the assessment are faulty? Or when deadlines and timelines set by the central office are unreasonable for teachers and schools? Or when teachers assign writing instead of teach writing, not letting their students have the experience of becoming writers?

When these dilemmas arose, Usui turned to her community of literacy coaches, who were also writing project teacher-consultants. Together they brainstormed and collaboratively developed strategies to manage the conflicts in their roles. They resolved tensions by focusing on the broader goals of the standards and showing how rich, carefully considered writing instruction both responds to the standards and works to help students achieve on high-stakes assessments. In this way, Usui’s vignette illustrates how together members of a community of practice learn to lead in an environment that is filled with contradictory messages and values thus taking on a core challenge confronting teacher-leaders.

Brokering. Across the vignettes, authors describe re-creating core elements of the writing project model as they lead professional development in other settings. In this way, these authors become “boundary spanners” introducing and adapting the practices and values of one community of practice into another (Wenger, 1998, p. 105).

Paul Epstein illustrated how writing project teacher-consultants engage in these boundary-spanning practices. As a Title 1 reading teacher in his West Virginia elementary school who also co-directed the summer institute at his local writing project site, Epstein gradually worked to bring a focus on the teaching of writing – engaging his colleagues in establishing benchmarks, offering advice about approaches to teaching writing based on his own practice as well as what he learned from other teachers in the summer institute, and recruiting other teachers to participate in the summer institute in order to further build the base of expertise about teaching writing in his school. Epstein’s long-term goal was to establish professional study groups at his school. After several years of careful work, Epstein succeeded in setting up study groups and he recruited another new writing project teacher-consultant from the faculty to lead the study group, while he would work alongside her and help her plan the conversation. Together Epstein and his colleague created a study group that modeled many elements of the summer institute. They started off each study group meeting with a time for writing using prompts designed to help teachers transition from a long day of teaching to focusing on their own learning. The participating faculty members shared their writing, which helped to further build professional and personal connections among the group. They engaged in reading about best practices in the teaching of writing and shared teaching practices with one another. In this way, Epstein and his colleague reproduced key elements of the summer institute for their school-based colleagues. They took the risk of stepping out as leaders in their own school and worked to build community, breaking down privacy norms. In the process teacher-leaders learned to create new norms which supplanted isolation with learning openly from one another.

Teacher Leadership in a Changing World

Today’s teacher-leaders confront normative, role, pedagogical, and value challenges similar to those faced by earlier generations. The vignettes illustrate the ways in which teachers can grow as leaders as they respond to challenges during their daily work. They also highlight the role that participation in a community of practice can play in supporting teachers to deepen their knowledge and capacity for leadership.

The vignettes teach us again that teacher-leaders gain credibility with their peers through their classroom practice. They further highlight the skills and knowledge teachers bring to bear from their classrooms in both formal and informal leadership roles. This situates teacher-leaders well to take on a variety of instructional leadership roles.

Participation in a community of practice both builds leadership capacity initially and offers teacher-leaders a setting in which to explore ongoing problems of practice. Woven through the vignettes are references to the ways in which writing project participation helped the authors grow as teachers, shaped the authors’ vision for teacher learning and collaboration, and supported them in learning how to enact that vision. Access to an ongoing learning community makes leadership learning

public and provides a place for practice, reflection, and exchange of knowledge. This research builds on previous research studies but adds to a closer understanding of how teacher-leaders learn in the context of their work.

Appendix: NWP Study of Teacher-Consultants and Leadership: Vignettes the Vignette Prompt

We are doing a study of the leadership work of writing project teacher-consultants. We are looking at what TCs do, the content of their work, how TCs develop and get supported in their work with colleagues, their systems and their students.

In no more than 5 pages tell us about a concrete example of your work with colleagues, your school, your writing project site, your school district, or any other context that has occurred recently or in the past year. It may be a situation that includes a set of activities that took time to unfold.

Tell us a story of this situation framing it by using the guidelines below.

Describe:

- what you were hoping would happen or be accomplished
- the context within which this work occurred
- what was involved
- the impact of the work
- why you think it happened
- the role you played
- what feels most important about this work for you and why.

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On Personalizing Learning and Reculturing Teaching in Large High School Conversions to Small Schools

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Despite repeated evidence of successful change efforts in K-8 schools over the nearly three decades since the dawn of the standards era, the literature on school reform and change is fairly clear – high schools remain a kind of “holy grail” for education reformers. Graduation statistics suggest that American high schools fail to grant diplomas to a high percentage of students entering school as ninth or tenth graders. In many locales, 30–40% or more do not graduate on time¹; too often, these students drop out early in the experience. Other schools, particularly those located in urban centers, realize even lower student success rates.

Common arguments appear in educational theory and research as to why high schools fail to adequately serve so many. Some frame the basic problem as a lack of personalization for students (Cotton, 2001; Raywid, 1996; Wasley et al., 2000). Earlier work by Boyer (1983), Goodlad (1984), Sergiovanni (1996), andSizer (1984) all identified the comprehensive high school’s burgeoning size and lack of personalization as key elements leading to apathy and alienation among both teachers and students. These perspectives suggest that over the century that has passed since their creation, large comprehensive high schools have evolved into notoriously impersonal places that sort and select students into various tracks, but do not enable deep, connected relationships between students and the adults who teach them.

Closely allied with the perspectives on personalization, others identify the central problem with high schools as one of reculturing teaching, what McLaughlin and Talbert (2001) describe as “changing the ethos of teaching from individualism to collaboration, from conservatism to innovation.” Similarly, Miller (1998), in a contribution from a previous edition of this *Handbook*, centers on the issue of reculturing teaching as the main underlying problem in school change. Fullan

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¹The Web site for the National Center for Higher Education Management Systems (NCHEMS) puts the US average for high school graduation in 2005 at 68.8% (see <http://www.higheredinfo.org/dbrowser/index.php?measure=23>).

and Hargreaves (1991) concur that many teachers were raised up in factory-model schools where the norms of “uncertainty, isolation, and individualism” prevail. Teachers in large comprehensive high schools traditionally work in separate content disciplines, mostly in isolation from one another, and the subject department is typically the locus of teacher professional identity and community (Lortie, 1975; Siskin & Little, 1995). Such a structure can contribute to isolated teachers, each in his or her own cell of the egg crate, or clusters of content area teachers that do not interact much with colleagues outside their departments, contributing to stagnation in instructional practice and greater diffusion of the students’ educational experience. Moreover, others argue that instructional practice in the high school is frequently out of touch with the realities of current students’ lives, lacking relevance, depth, or imagination (Daniels, Bizar, & Zemelman, 2001; Newmann & Associates, 1996; Queen, 2000).

Spurred by these perspectives on the problem, various recent, broad-scale efforts have worked at improving America’s high schools (c.f., Cohen, 2001; Conklin, Curran, & Gandal, 2005; NASSP, 1996), and this persistent need to improve high school has enjoyed significant new attention from the philanthropic community of late. One effort in particular, funded by the Bill and Melinda Gates Foundation, has invested \$1.2 billion into supporting over 2,000 small high schools in 41 states.² The Gates Foundation effort has unfolded in several forms and one main emphasis has supported the conversion of large comprehensive high schools into collections of smaller schools. Underlying this effort is a theory of action that aims to personalize the high school experience for students and in the process, reculture the way high school teachers work.

A Rationale for Small Schools

The theory of action supporting this brand of high school change work is rooted in some promising research on perceived benefits of smaller schools for students. Since the mid-1990s, a number of scholarly accounts suggest that small schools enhance a variety of social and cultural conditions in schools, including greater personalization for students (Cotton, 2001; Raywid, 1996; Wasley et al., 2000). Relationships that embody and rest on greater levels of trust among teachers and students have been suggested as more pervasive in smaller schools (American Institutes for Research/SRI International, 2005; Jordan, McPartland, Legters, & Balfanz, 2000; Sporte, Correa, Kahne, & Easton, 2003), as well as stronger personal bonds between teachers and students (Gregory, 2000). Other studies have suggested that in small schools violent behaviors and student discipline issues diminish (Cotton, 1996; Legters, 1999), attendance is improved (Jordan, et al., 2000; Kemple, Connell, Klem, Legters, & Eccles, 2005; Quint, Bloom, Black, & Stephens, 2005;

²See <http://gatesfoundation.org/Education/RelatedInfo/EducationFactSheet-021201.htm>

Wasley et al., 2000) and extracurricular participation is higher than in larger schools (Cotton, 1996).

Findings on academic outcomes in small schools, while less prevalent than those noting perceived benefits to social dimensions of schooling, suggest that student achievement may be equal or superior to that in large schools, particularly for poor and minority students (Cotton, 1996; Howley & Bickel, 2000; Klonsky, 1998; Lee & Smith, 1995; Legters, 1999). A recent large-scale evaluation effort of student learning outcomes in Gates-funded conversion high schools reported finding a slight improvement in reading scores in the small schools, but none in mathematics (American Institutes for Research/SRI International, 2005). Others have suggested that small size can enable the possibility for other changes that matter for academic outcomes, such as improved communication and coherence across traditional curricular areas (Wasley et al., 2000), creation of conditions for changed instructional practice that may translate into greater student achievement (Eckman & Howley, 1997), or greater job satisfaction for teachers (Wasley et al., 2000).

Alongside perceived benefits, research findings are also clear that smallness alone is no panacea – creating new small schools, or converting large schools to smaller ones, does not, by itself, automatically equal better outcomes. Reports of the research suggest that smallness is a necessary but insufficient condition for creating a personalized and rigorous learning community (Cotton, 2001; Elmore, Peterson, & McCarthy, 1996; Fine, 2000; Wasley et al., 2000).

Much of the scholarship on small schools to date has focused on outcomes associated with brand new schools, created whole cloth (Meier, 1995, 1998). There exists relatively limited research to date on the particular challenges associated with converting existing large schools to collection of smaller schools. What is known highlights a vast array of factors that suggest the work of “getting small” is complex, arduous, and fraught with many challenges from alignment of curriculum and instruction (Lee & Ready, 2006) to decisions about new structures for leadership and governance (Allen w/Almeida & Steinberg, 2001; Wallach & Lear, 2005), to negotiation of new small school autonomy (Raywid, 2006). Findings highlight various barriers to converting large schools, including cost concerns, time, technical resource assistance, and district or system barriers – all are noted as problematic (Bryk, 1994; WestEd, 2001). Perhaps no concern poses a greater challenge than prevailing perceptions of what high school is, or should be, held by the general public (Johnson, Duffett, Farkas, & Collins, 2002). While smaller high schools appeal to people in concept, support for the traditions associated with the large comprehensive high school persist in many locales.

Given this focus on converting large high schools, we were interested in deep examination of the experience of several of these sites to document and analyze the daily life of those directly involved, over an extended period of time; in particular, our exploration took on questions of personalizing student learning and reculturing teaching. This remains relatively uncharted research territory. With very few recent exceptions (c.f., Lee & Ready, 2006), what the field lacks to date is deep, longitudinal description and analysis of the experience of administrators, teachers, and students in the context of high school conversion efforts.

This chapter summarizes key findings from a longitudinal, 3-year study of six small conversion high schools engaged in a Gates Foundation-supported reform effort to transform large, comprehensive high schools. Specifically, we explored two sets of questions:

1. *Personalization*: How do efforts to personalize teaching and learning play out in newly converted small high schools? What are teachers' and students' perceptions of efforts to make high school a more personalized experience?
2. *Reculturing Teaching*: What transpires inside teacher professional community in newly converted small high schools? To what extent, if at all, does the conversion effort result in (real or perceived) changes in teaching and learning?

The findings contribute new depth of understanding about the inside processes of change in the context of high school conversion efforts. In the sections that follow, we give a brief description of the study context, the schools involved, and relate key change lessons learned through the research effort in an effort to inform those who continue to pursue this kind of change.

Study Context

Nature of Philanthropic Support

All six Washington State schools included in the study were recipients of grant monies from the Bill and Melinda Gates Foundation that were to be used to support the redesign work. Gates grants in Washington were awarded directly to schools or districts, and went to rural, exurban, suburban, as well as urban areas. All grant recipients were expected to use both the attributes and components to guide their school redesign work. Grants were given under three different formats: district grants, school grants, and the *Achievers* Program. These grant programs are detailed briefly in Appendix 1.

The Schools

Each of the six schools in our sample, respectively named Alder, Birch, Cedar, Chestnut, Elm, and Hemlock for purposes of data analysis and reporting, were under 400 students in size, created out of large comprehensive high schools ranging in size from about 1,200 to nearly 2,000 students, in urban and suburban school districts in northwest Washington State. Small school faculty ranged from 11 to 17 members across the school sites. Most of the schools in the sample organized themselves around specific thematic emphases such as technology, the arts, or science. Appendix 2 contains more detailed information about each of the school sites.

Methods

Data Collection

Data collection occurred in the six study sites over three consecutive school years, between autumn 2003 and spring 2006. During this time, members of the research team conducted on-site observations, interviews, focus groups, and surveys and gathered relevant documents including meeting notes, agendas, and a series of sampled student journal responses. More specifically, methods included:

- *Student Journals*: A volunteer sample of students ($n=31$) from across the school sites responded to a series of four open-ended question prompts via e-mail. Students were given a week to respond to each question.
- *Electronic Surveys*: Over the course of the study, five surveys were sent out to administrators and a representative sample of teachers and students at the schools. Survey questions were developed iteratively on topical issues of particular relevance, including leadership, personalization, teacher practice, professional community, and student perspectives. Only five schools participated in the student perspectives survey.
- *Student Focus Groups*: Freshman student focus groups in each school captured impressions of students who were new to the small school. Junior student focus groups in each small school captured impressions of students who straddled the school restructuring work between the old “large” school structure and the new small school.
- *Interviews*: Repeated interviews were conducted with the superintendent or key district administrator from each district, the building principal, assistant principals or administrator assigned to each small school, teacher-leader(s) from each small school, and six to eight teachers from each small school, representing approximately 50% of the staff and including teachers from the core academic areas, electives, vocational, special education, and school counselors.
- *Meeting Observations*: Repeated observations of teacher work groups, and curriculum and program planning meetings were conducted. Whole staff (large school) meetings and leadership team meetings at three of the six schools were also included.
- *Document Collection*: Relevant small school documents, policies, procedures, schedules, professional development plans, meeting agendas, meeting minutes, school brochures, and other documents were gathered, most commonly in the context of meeting observations.

Data Analysis

All interviews, focus group meetings, and observation notes were transcribed for analysis. A strategy of ongoing inductive inquiry was employed to make sense of the data as the study unfolded and to shape each successive round of data collection,

including refining protocols, observation strategies, survey items, and focus group questions for each new round of data collection visits to the school sites.

Categories and subcategories were defined over time around themes that emerged from the data analysis. Individual quotes and data extracts were coded iteratively into files and subfiles that reflected themes in the data that emerged over time. This detailed theme analysis provided the foundation for the narrative account of findings that follows.

Findings

For purposes of this chapter, we present findings that shed light on key themes in relation to our main research questions. The findings are unique in that they reference lessons learned about the high school conversions from the perspectives of both students inside the schools and the adults who worked with them. The synthesis highlights what we learned about issues of personalization in the newly converted small schools and the development of teaching culture in the context of the conversion effort, including real or potential influences on classroom instructional practice over 3 years.

Efforts Aimed Toward Improving Personalization

Our study revealed key findings about efforts to personalize the educational experience that highlight the perspectives of both the adults and the students who inhabited these six converted schools.

Personalization Defined

Our inquiry began with a realization that the rhetoric of “personalization” could take us in several different directions and was absent some definition of the construct that would guide analysis. Conceptually, efforts to personalize learning have referred to the “structures, policies, and practices that promote relationships based on mutual respect, trust, collaboration, and support (Breulin et al., 2005). We developed and utilized a particular frame for analyzing the data for evidence of personalization. We operationally defined personalization to be reflected in evidence of: (1) expressed perceptions or actions of adults in the school which indicated they knew students and families well enough to intentionally tailor teaching and learning opportunities to individual student needs or actions that suggested this was occurring; (2) students’ expressed perceptions (written or verbal) indicating their positive sense of belonging to the school, or that they viewed their small school teachers as possessing the moral authority (or caring enough about them) to make greater demands on them as learners.

Overall, our data illustrated a general acknowledgement among teachers of the need for greater personalization early in our study, followed by the development and

implementation of structures designed to improve implementation that all schools worked through over time, realizing varying levels of success. We also explored student perspectives on personalization in the school, including the extent to which they perceived teachers to be engaging with them in ways that made the high school experience meaningful and relevant.

Acknowledgement of the Need for Greater Personalization

Evidence collected early in the study suggested that the overwhelming majority of teachers in each small school recognized the need for greater personalization of students' educational experience and worked to leverage the benefits of "getting small" through development and implementation of structures to support personalization. While not universal, many believed that personalization was reason enough to convert to smaller schools, as one teacher's comment illustrated: "The reason we are [moving to small schools] is personalization."

Teachers in our sample generally shared a belief that efforts to personalize high school would account for important changes, as illustrated by this Elm teacher's quote:

[Students] are going to feel that there are people watching out for them and caring for them, whether they like it or not. They are going to be able to buy into their education because they are part of a smaller group and everybody is interconnected.

The principal of Cedar put it this way:

We have a high at-risk population (from) a very transient community. We have a large number of non-English speaking households and a very diverse cultural community . . . a lot of dropouts and a lot of kids not succeeding. . . . So if the kids are put in smaller environments where we get to know each other better, teachers have a chance to connect with our students, and they with us. If they feel more a part of school, they are more apt to succeed.

Structures Within the Small School Designed to Enable Greater Personalization

As the study unfolded, all six schools engaged in efforts to redesign and adapt structures in support of greater personalization, with mixed results. Structural changes from the conversion meant that teachers were for the most part in contact with fewer students than in the previous comprehensive structure and shared a high majority of their students in common with teachers from other content areas. In four out of six of our study schools – Elm, Alder, Chestnut, and Cedar – small school classrooms were assigned to be physically proximal where possible, so as to enable less movement for students between classes and the potential for greater daily collegial contact among faculty. Other structures specifically designed to enable personalization included new structures for inclusion of special education students in the regular education classroom, block scheduling of classes that featured longer periods of contact in core courses, and advisory periods structured into the school day focused largely on affective dimensions of schooling.

In some cases, these new structures appeared to work in favor of greater personalized understanding of students' learning needs. Data from a majority of teachers suggested they felt they knew their students well, and in many cases better than in the previous comprehensive structure. Comments like this one from a special education teacher at Chestnut provided insights about feeling more successful in this new structure: "I really get a good sense of where the kids are, to track them, and am able to go out to the classroom with some of them."

Small school teachers focused a high degree of attention on structural problems in early meetings; in half our study schools this predominant focus on problem-solving structural issues continued throughout the 3 years of our study. These conversations frequently focused on strategies intended to enhance personalization for students. All schools, for example, implemented advisory programs as a means to enhance personal contact between teachers and students. Advisory program structures took different forms across the six sites and realized mixed results. Some schools struggled over the entire study term to make advisories effective; others seem satisfied with the direction and results from their efforts in advisory. We found evidence of focused contact between advisory teachers and struggling students, greater parent or familial contacts from advisory teachers, and advisory teachers taking advocacy roles for students with other teachers. At Elm, where teachers met advisees twice a week for 30 min, a teacher's comment illustrated how she used the structure to connect with students:

If they're having a bad day in [advisory], I kind of keep it in mind in class, touch base, say 'okay how are things going now?' It also allows me to ride them a little bit more if their grade in class drops from missing assignments. I can pull them aside in [advisory and ask], 'What's going on? How can I help? How's this going?'

Equally dominant themes in the data suggest that teachers struggled to make new structures work in service of greater personalization. Well into the conversion effort, Alder teachers, for example, still lacked consensus that advisories provided a useful way to improve personalization of the students' experience. Teacher perspectives suggested that relationships seem to be built during class, passing in the halls and being in a small area together, rather than primarily through advisory, and that relationships with students were better in settings other than advisory. A teacher noted,

I don't feel that I am at all closer with advisory kids. As a matter of fact, it is more difficult to pull them aside. [I prefer] spend[ing] a bit of time talking to that student who is resistant and having problems in school [when] no one in the room knows what you two are talking about.

Other structures focused on improving personalization included more intentional orientation activities for new and entering students, regularly scheduled meetings for parents of students in the converted small schools, and small school staff meeting discussions that focused on one or two struggling "students of concern."

Students' Perspectives on Personalization in the Converted Small Schools

The inclusion of students' perspectives on the conversion effort helped round out our understanding of what was transpiring in the six sites with regard to issues of personalization. Although our data suggest most broadly that students' day-to-day school experience did not look or feel very different in the newly converted small schools, as compared with the daily student experience in the previous "large" school structure, we did uncover evidence from all the schools that efforts to personalize the educational experience shaped students' feelings about their teachers and their schools.

Data revealed a cross section of students from all sites who perceived strong personal relationships between themselves and their teachers and that these relationships were important in fostering their sense of belonging and level of educational aspiration. This trend was more prevalent in our freshman student sample, who were "new" to the "new" school at the beginning of the study, and less true for those from our junior class sample, who tended to hold more mixed feelings and opinions, and on occasion compared ways their old school (the comprehensive structure) worked better than the new small school. More juniors in our student sample, for example, expressed dismay at a loss of a richer array of elective choices in the comprehensive structure, or at the prospect of having to "crossover" into other small schools to maintain their participation in elective programs.

However, over time, as we asked students about their experiences with personalization at school, evidence suggested trends among a preponderance of students that they were known by their teachers, felt cared for, and felt comfortable with a cohort of peers. These qualities were most frequently heard from students who took all their classes within one small school and experienced working with some of the same teachers repeatedly.

Student: Our teachers care about us. They make sure we're doing okay. If we're having a down day, they'll ask us if we're okay and everything. They come up to us and help us. INT: HOW DO YOU KNOW TEACHERS HERE CARE ABOUT YOU? Student: They show it. . . They tell us. . . They say, "I care about you." . . . The teachers know all of our names."

[Teachers] get to know you and so they know how to connect with you in ways that you'll understand. . . they know what to expect. . . and then we know what to expect too.

Students at all six schools provided repeated and specific examples of how their teachers knew them well and were able to not only provide attention to their individual needs, but often combined this attention with a push for further challenge. Having already built a relationship with a particular teacher or group of teachers over the course of a year or multiple years, a number of students in our sample indicated this was helpful because they entered teachers' classrooms already aware of the structure of their classes and the nature of teachers' expectations. Student voices illustrate,

Basically when I have that teacher for more than one class or year, we find ways to work together and I try harder because they expect a little more out of me.

Being in his class a second year went well because he knew exactly how to push me or motivate me to do my work and we're so close that I wouldn't have any problems asking questions or getting to work.

Another line of analysis suggested that when advisories were relevant to students' concerns, students viewed them more positively, as illustrated in this quote:

The teachers . . . have decided to have advisory groups where a student has a certain teacher, usually one that they have [for class], and you get together with them and talk about things such as scholarships and college and if something is bugging you, your advisor is there to help you, to give you support within school to do your best at all times. I really appreciate the time teachers take out of their busy schedule just to make you feel more comfortable.

While data clearly support the idea that many students perceived teachers were working to personalize relationships in order to improve their experience in the school, analysis also revealed a parallel trend from a cross section of students that gave a mixed review of personalization efforts, and in particular with regard to structures intended to support personalization, like advisory. In a number of cases, students were unenthusiastic about the inclusion of advisory programs, or perceived the structure to be unrelated to the creation of a more personalized high school experience. Some spoke of the new advisory structures as a waste of time, commenting, for example, that they "blew off" activities planned for that time. Comments like these were not uncommon in our data:

I think advisory is very much pointless unless, like, you really need to go do work for some reason.

Right now it's kind of like a waste of half an hour, because you can't do anything . . . it's only once a week.

Other personalization efforts were apparent to students in some of the sample schools. Students attending three of the sample schools – Alder, Cedar, and Chestnut – described how teachers regularly checked on their progress and communicated with them via email, phone calls, and informal meetings and conversations outside of class. At Cedar, for example, a student described one teacher who regularly encouraged students to come in before or after class "if you have a question on your paper or just [want] to talk about anything, your life, or explain your problems." At Alder, to illustrate, this freshman reported teachers were comfortable approaching students in informal settings:

They want you to do good and they like talk to you even when it's like not class. . . . Like if you're not doing good in the class and you're sitting there playing cards during lunch, they just might come and talk to you and tell you that you need to, you know, work during lunch . . . and then they'll tell all your friends to get you to work.

The sum of efforts to personalize the high school experience in the converted schools largely involved teachers providing additional supports via programmatic structures like advisory and "looping" with classes, enhanced communication efforts with students and families, and before and afterschool opportunities for tutorial assistance. All of these strategies were essentially added on practices that operated external to teachers' core classroom practice.

Efforts Aimed Toward Reculturing Teaching

Our second key question focused on the issue of the culture of teaching in the schools, in an effort to understand where and how practice was influenced by the conversion effort.

Reculturing Defined

As with personalization, we adopted a definition of “recultured teaching” to help guide our inquiry. Miller (1998) argues that school change is wrapped up most centrally in fundamental shifts in the ways that teachers conduct their business and lays out six key shifts in recultured practice that are evident in schools where this process is occurring. Paraphrasing Miller (1998), these shifts move:

- *From individualism to professional practice.* Teachers’ work norms shift from individual private practice conducted in isolation to norms that favor collegiality, openness, and trust.
- *From teaching at the center to learning at the center.* The focus of the work in teacher planning and instruction takes its cue from evidence of what students are (and are not) learning.
- *From technical work to inquiry.* The foundation of quality teaching practice is best understood as inquiry-based problem-solving activity, where new approaches and ideas are continuously invented and tried out in real time in response to presented problems, rather than as a technical exercise of selecting from among a set of tools that are fully known and routinely applied.
- *From control to accountability.* Teacher accountability for ensuring student learning takes the place of teacher responsibility for controlling student behavior.
- *From managed work to leadership.* Teachers move from cogs in a factory wheel, taking orders from superiors about what to do, and how to do it, to leaders of the continual improvement of their own practice, and of student learning. In the process, students are empowered to share equal responsibility for their own learning.
- *From classroom to whole school focus.* Practice reflects a move from insular, individual classroom-focused concerns to broader concerns for the whole school’s development.

Building from this basic set of concepts, we focused data collection on the “reculturing” question on observations of changes in professional community as noted in the structures, processes, and dialogue. We listened for ways in which teachers talked about their students, and their work in relation to student learning. We also were interested to hear students’ perspectives about the culture of learning in the schools. In the end, we came to understand that the efficacy of adults’ efforts to personalize the students’ experience in the small schools were integrally linked to the nature and practices in efforts to reculture teaching in our six small schools. The sections that follow relate findings that focus on the nature of professional relationships

among small school teachers, the quality of talk about students within the teacher communities, and student reflections on their experience of teaching and learning in their small schools.

Nature of Professional Community

The nature of professional communities in the six sites emerged as a key analytic strand. Data collected from four of our sites – Alder, Elm, Cedar, and Chestnut – suggested teachers had a stronger sense of shared purpose for their schools, greater clarity about the nature of their work together, and experienced change from isolated practice to more collaborative work, which led to heightened professional accountability. Teachers from these sites characterized the shift away from isolation as creating an inability to “hide” in the new smaller professional community, as these comments exemplify:

I think that it's harder to be a lazy teacher because . . . in this particular space and with this particular group of people where we're constantly talking about what we're doing, it would be very obvious and apparent if you were lazy.

Here I am in my small school team now and I am not in isolation . . . the teachers can't hide.

I have always known that personally I need to be accountable for what goes on in my classroom and I need to make sure that they are getting the best possible. The difference now is that I have more people who are going to be aware of how I'm doing. So that means that I need to be even more conscious of if they are not getting it, how can I bring it around so they can get it?

Trends in the data from teachers in these four schools attributed this new sense of accountability to the small size of their staff and their shared commitment to a set of goals for their school and students: “I think the main thing is that being in this smaller cohort of staff, we are able to not only keep tabs on our students, but keep tabs on each other.” Teachers at Elm expressed knowing more about each other's work, and how this was important for both their individual and their collective practice because it reduced their sense of isolation: “In the classroom you are usually left on your own. . . . Through these discussions I am hearing and seeing what people do with the kids.”

Teachers in the two other small schools, Birch and Hemlock, demonstrated less clarity about their school vision and expressed less shared understanding of a school focus. In these schools, staff members also appeared to experience less camaraderie and collaboration in their work together. We also saw less evidence of shared conversations focused on students across the teacher communities in these schools. Both schools had what we came to understand as a divided staff where a small, but vocal group of teachers did not fully support the idea of moving to small schools and believed that the restructuring effort would not be sustainable. Tension resulted from this fundamental disagreement about the need to redesign the school at all, as well as decision-making processes that were at times unclear and inconsistent:

It gets frustrating. [You show up, do the work] and then you come back the next day and you see an e-mail that says, “Oh, we changed what we decided.”

I will outlast the small schools project. . . . I fully believe that. . . I think that it will eventually go away. . . . I don't think that there is the core support here for it to be able to be sustainable.

Data also revealed evidence of professional communities in these two schools struggling to move forward. Teachers described one school as being “stuck” because of the way decisions, such as the length of block schedule, were made and remade:

We've got to quit this crises management stuff and get back to looking at our curriculum and how we're meeting the kids' needs. Get back to that instead of trying to fix things. We're just sort of spinning our wheels.

A significant number of the teachers felt like they were “effective the way it was before and that a lot of [the redesign] isn't necessary.

“Elevated Conversations” About Students' Learning Needs

As our data collection progressed, the nature of adult talk appeared to deepen in sites we perceived as possessing stronger professional community and commitments. Talk included what we came to refer to as *elevated conversations* as school staffs gathered and examined quantifiable data, including test scores, attendance, course passing rates, discipline referrals, dropouts, graduation, and college entrance rates, and engaged in questioning the data and each other about how to understand the nature of problems they were encountering, and what to do about them. In three of our six sample schools, Alder, Cedar, and Chestnut, we routinely observed these efforts to critically examine and learn from student data over time in practice. These ongoing efforts to critically examine student data appeared to be one mechanism that worked at developing collective teacher understanding of their students' learning challenges and needs.

One teacher's experience at Alder exemplifies what we viewed as a positive shift in the professional community in that small school: During 12 years of teaching at a comprehensive high school, she never went to the lunchroom because she didn't want to listen to the “isolated conversations going on about things outside of school.” She described the lunchtime conversations within her small school team as completely different:

We talk about students, we talk about their problems, we talk about small school problems and how we can solve them; we talk about curriculum and problems; we get ideas from each other and a lot more collegial contact time. It pushes me to really strive to be as good as they are.

During the third year of our study, we found ongoing evidence of the professional communities at Alder, Cedar, and Chestnut engaging in elevated conversations as a regular part of their work, as these comments from teacher interviews corroborate:

I've been impressed that a lot of time is devoted to talking about teaching and learning and not just talking about housekeeping stuff. . . . There is a lot of attention given to what happens in the classroom, what we are striving for . . . how we can be better teachers.

This year they've brought back the [comprehensive school] departments meetings. . . . But the difference is, when we meet as a math department, we have to talk about the important

curriculum things, but not a single teacher in the room has the same students I do . . . but when we meet as a [small school], all of my students' other teachers are in that same room, so the focus shifts from curriculum to kids . . . and that's our main topic. 'Does anyone have so and so in their class? How are they doing?' Or, 'What are you doing that is working for them?' And I think that's an important shift. We need to do more than just deliver information.

At all three schools, evidence suggested that teachers' individual concerns about students and strategies they used to assist student progress were shared more broadly by others in the professional community. These strategies shared in meeting settings tended to focus on efforts to shore up external support for students. A snippet of dialogue, for example, from a teacher meeting illustrates a communication about connecting with a particular student's parent:

Teacher 1: How is [student] doing for you in math? I'm having a heck of a hard time getting him to do much of anything in my room.

Teacher 2: He's back on track. I don't waste time anymore. I just call the parent as soon as something slips. You should just call her. She wants to know, and she works with him.

Teacher 3: Yeah, I've had good luck with her too.

These meetings occurred as part of the regular business during weekly small school team meetings and were viewed as valuable means for dialogue about student progress. As expressed by a teacher-leader,

There is a sense of community with Cedar, that if I'm having trouble with a student, it's not just my problem, it's Cedar's problem.

While our conversations with teachers and observations in teachers' meetings revealed these glimpses into ways in which the small school staffs were working to know their students and address their progress more directly, evidence of influence on or change in instructional practices to meet the needs of individual learners was less prevalent. One teacher's comment captured this trend well:

The good news is that there's conversation about kids; both good and hard situations, we're able to talk about kids. There's progress, but I haven't seen real fundamental change in what's happening in the classrooms yet.

The perception that practice was slow to change was consistent with survey results from a sample of teachers. Results revealed that over 80% ranked the three most important factors in their teaching practice as: (1) making instruction more rigorous and relevant for students; (2) integrating new classroom practices; and (3) meeting with colleagues to discuss issues related to instruction. At the same time, fewer than half of teachers surveyed (41%) agreed or strongly agreed that teachers in their small school made instructional change a priority. While two-thirds (63%) agreed or strongly agreed that teachers in their small school talked about making changes to classroom practice, only one-third (34%) agreed or strongly agreed that teachers actually acted together to make those changes.

Moreover, it appeared from our conversations with teachers and observations in classrooms that despite apparent deeper understanding of individual student needs among small school teachers realized through the data analysis processes and ongoing dialogue, these processes had relatively little effect on collective changes in

instructional practice designed to take advantage of the greater personal relationships teachers claimed with students. Rather, efforts in classrooms, similar to talk in meetings, focused more on ways to shore up support external to the classroom, through the introduction of study halls, extra or “double content” periods for students who fell behind, more teacher–parent contacts about student progress, or early morning or afterschool tutoring opportunities, and so on in an effort to help students move through their high school experience more successfully. Far less prevalent in our data were instances that provided evidence of teachers looking inwardly into their own individual or collective practice to question whether and how they might rethink the processes of teaching and learning in order to make students’ experience as relevant as possible.

Efforts to Reculture Teaching

The greatest evidence of “reculturing” efforts came from the three schools we observed as having the strongest professional communities – Alder, Cedar, and Chestnut. By the third year of the study, we viewed the teachers at each of these schools as engaged in moving from talk to action. Actions ranged on a continuum from efforts teachers made in their own classrooms to reinforce practices they knew were occurring in others’ classrooms, to actual collaborative teaching with each other that involved greater interdependence.

Reinforcement of practice typically involved teachers sharing with one another what they were planning to cover in their discipline-specific curricula and looking for connections they could make to the curriculum in other subject areas. The goal, as illustrated by this comment from the Chestnut teacher-leader was “to get the students to understand the relationships [between classes], instead of just moving from one class to the other and just doing random things.” The Cedar teacher-leader agreed, “Kids see more connection than they did before and that’s due to our efforts to try to connect our work, so it isn’t just French class to math class to English class to science class.”

Chestnut teachers gave multiple examples of how they attempted to reinforce one another’s classroom practice:

Last year I shared a lesson that I do in photography, where I held up a picture . . . the kids had to write a story about “what’s that picture all about” . . . so we’re kind of reinforcing some [content] they do in the English classes when they write a paper.

In my earth science class . . . I’m going to ask them to write a paragraph stating their opinion about global warming . . . so I went to [the humanities teacher] and got the rubric for a paragraph and talked with her a bit.

When I have . . . something in math like scientific notation [the math teacher] does it two or three weeks later and [the students] say, “We got this in science!” No kidding.

Collaboration efforts appeared to go a level deeper with teachers in these three sites and was most evident in our data from Alder. A collaboration effort we observed among Alder’s humanities teachers, for example, focused on looking at student work together in an effort to clarify and systematize expectations across the

small school. The Alder school administrator described the humanities staff's collaboration efforts and their interest in learning not only from one another, but from other Alder teachers:

I think that there have been some real aha's on their part. . . . When should they be teaching how to write a paragraph and when should they be thinking more [about] conventions in paragraph writing, or how putting voice in too soon might be confusing for kids. . . . It was a little risky for them initially, but they got to the point where they actually invited their other colleagues to come and sit with them and listen and then given them feedback on what they heard.

Other data suggested that collaboration at Alder was spreading across disciplines and included efforts to begin to deprivative practice, as these comments illustrate:

I know that conversation among colleagues occurs at all schools, but the kind of relationships we've developed allows us and encourages us to share our work much more openly. We can literally walk into each other's rooms and share a lesson, an idea, or just watch.

People seem really open to talking about what they're doing in their classes, whether it's going well or not.

Students' Perspectives on Efforts to Reculture Teaching and Learning

As we studied the students' experience in the conversion schools, we sought to understand whether and how teacher efforts to know students better, to collaborate with colleagues about student learning issues, and to spend more time reflecting on instruction would correspond with students' perspectives on the nature of teaching and learning in classrooms.

Issues of curricular and pedagogical relevance and level of teacher expectation ran throughout our student data. Not surprisingly, students were very articulate about what they consider to be "good" teaching; we also learned that they are rarely asked by teachers or other adults at school to describe teaching that works for them. Our data revealed multiple examples of students' descriptions of teachers who make the work interesting and help them succeed, as these comments illustrate:

She encourages you to voice your opinion about it no matter what it is you're studying. . . . When she's excited, we get excited.

[My English teacher will] assign us books . . . and he'll analyze with us and he'll, like, help us find the hidden meanings so when we read on our own, we can do that. . . . That way, you know, later on when you're reading on your own or you get to college, you'll understand what they're doing.

[My favorite core class is] math and this week we worked in small groups to solve a problem. We had to work together to come up with an idea for a poster and then make a poster with the three problems on it and then make a graph and come up with a title for it.

For many students, relevance in the classroom seemed to equate with opportunities to actively participating in their learning. Students waxed enthusiastic about hands-on learning opportunities in relatively few classrooms:

Like the tech-showcase we had—we worked in groups and we discussed what to do and we made plans for it and it's better than doing a worksheet all day, or the teacher talking

all period. We got to put something together and then go and set it up somewhere and tell people what we'd learned and then go and see what other schools and other classes learned.

Last year we did more hands-on [activities] and got to like build certain, like DNA structures, stuff like that . . . we did experiments. . . . [Projects] make you . . . understand it more. It makes you feel, like, more focused and I guess you can pay attention more because it's right there in front of you.

More prevalent in our student data from all six schools, however, were instances of students' expressions of disappointment and perceptions that course content did not seem to relate to their lives or their futures or that pedagogical approaches did not embed much active student participation. One student expressed a belief that resonated with other opinions, suggesting that the important topics covered in classes were, by nature, not exciting "because when they're important a teacher lectures about [it to you]. . . . it makes me want to go to sleep." Other student perspectives seconded this idea:

History—I like to study it and I enjoy it—but the way the teachers teach it, it doesn't really fit very much with how I study it. They . . . touch on very shallow [aspects of] the subject and then they move on to a different area. It kind of gives this feeling of a sort of not-so-useful class by having that happen where you're learning a small amount, but you're not learning certain things that could help you understand the culture. . . ."

It just doesn't seem like you really need the stuff that they teach in this school or any other school.

. . . Our school has not, in the time that we have had small schools, done a good job in applying the arts to the students' [experience]. We have discussions every once in a while but we really don't get to explore our education in an artist way like [I thought we would]. I think that there should be more of a direct line to the arts in our general studies and not just electives.

On the whole, student descriptions of classroom practice across all six of the schools, as well as data from our student surveys, reflected a fairly traditional picture of high school classrooms. Survey results gathered from students suggested that lectures, worksheets, answering questions out of textbooks, and going over homework in class remained the norm.

That said, data from students in the three schools with stronger professional communities (Alder, Cedar, and Chestnut) trended more positively with regard to their experience of teaching and learning. Students viewed their educational experience in the small school as most relevant when there was a direct connection between classroom work and broader themes of study, when there was a connection to future plans (including college readiness), and when teachers created opportunities for them to actively participate in learning. Key student comments illustrate this theme:

[In the] last few months . . . I've learned how to put on a news broadcast. I learned how to shoot a video, input the video into the computer, edit it, like, movie-wise, like cut this scene and put in transition where it swirls around and where it's like movie-like, and put in, like, sound effects and music, export that video, put it into, ah . . . what do they call it? . . . screener—it's a big word . . . put it into that machine and then in the morning broadcast it to all the students in school.

Variables are what we deal with [in algebra class], but . . . creative ones. Like sometimes we're trying to find a rate for how fast bacteria are multiplying somewhere, or like, how

fast horses multiply. . . . [The teacher] comes up with ways of showing us how every type of problem is important . . . he shows an example in a real-world situation.

In the computer classes I take I'm usually excited because when I grow up I want to do something with computers. . . . Most of the stuff I do is new to me, so I'm learning it for the first time. So I kind of like that part of it.

Consistent with data collected from teacher interviews and observations, data from Alder students provided the strongest evidence from any site that instruction was focusing more on the relationship of coursework to the overall theme of the academy (innovation), and as such related more directly to students' perceptions of the relevance of activities to their interests:

Things I like about [my small school] include: the wonderful art oriented assemblies we have because personally I like many kinds of art. For example we do poster projects, article projects and scenes, things of that nature. I like this because I enjoy making and doing art rather than doing something boring like reading and responding.

All of our learning is mostly revolved around computers and technology. I like this because I used to be obsessed with anything there is to do about computers. And now that I get to use them so often, I'm not quite as obsessed with them but I had such a longing to know so much about them, I kept my ears open and learned a whole bunch.

In sum, teacher and student perspectives related to the question of reculturing teaching in the conversion schools both support the notion that little change had permeated the classrooms in the majority of schools. The clearest example of a real shift in the culture of teaching appears to be evident in data from Alder school, where both teachers and students articulated ways in which the vision for the small school was driving changes in teaching and learning.

Discussion and Conclusions

In stepping back from the data arrayed above, three key points are relevant for the field's learning about efforts to change high schools through conversions to small schools. First, structures for personalization appear to matter less than cultures that make personalization a priority and link greater knowledge of students to changes in classroom practice. Said another way, programmatic shifts or structural innovations like advisory programs are only as good as the professional cultures in which they sit; many teachers in our schools knew their students better, but this knowledge did not translate into real instructional change. Data from both teachers and students suggest personalization efforts in our sample of schools largely remained distant from instruction, and where there was a connection, it was mostly about ways to assist students to accomplish learning tasks that remained virtually unchanged from those that had been expected before the conversion.

Second, elevated professional dialogue about student needs, even when routinized, does not necessarily trigger instructional change. Three schools in our sample routinely made struggling students the focus of their small school dialogue and saw this as a crucial aspect of their practice as a small school. But the fixes discussed and chosen were primarily focused on shoring up supports external to the

classroom – ways to help struggling students jump through the existing hoops with greater success. Fixes that focused on changing the nature of classroom instruction, either related to content or pedagogy, occurred with far less frequency, and only in any depth at Alder school, where we saw teachers in the beginning stages of opening up their practice in ways consistent with Miller's (1998) framework for reculturing teaching introduced earlier. At the conclusion of our study, Alder teachers appeared closest to shifting norms from individual private practice conducted in isolation to norms that favored collegiality, openness, and trust. There was some evidence of the focus of their work in planning and instruction taking its cue from evidence of what students were (and were not) learning, but this effort was early, and still somewhat tentative.

Finally, the professional communities in our schools remained largely locked into a worldview of teaching as a technical endeavor and this hampered efforts to capitalize on the deeper knowledge they shared about students. Only at Alder school did we perceive a developing understanding of teaching practice as inquiry-based problem-solving activity, where new approaches and ideas were invented and tried out in real time in response to presented problems, rather than as a technical exercise of selecting from among a set of tools that are fully known and routinely applied. While we saw limited evidence of this by the conclusion of our study, we remained most hopeful about Alder's efforts, in terms of sustaining deeper change associated with the conversion reforms.

Interestingly, a close friend of one of the authors recently was hired as a central office administrator overseeing teaching and learning in the school district in which Alder is located. In a conversation over breakfast one morning, he was lamenting the nature of instruction that he saw occurring while making his first round of visits to high schools across the district. But in the midst of his travels, there was one outstanding exception – one small school where he poked his head into classrooms and was amazed by the outstanding teaching and extraordinarily interested and engaged students he observed. The site? Alder school. Nearly 2 years after our data collection ended, this casual, unsolicited observation offered from a new district administrator provided evidence that Alder's effort to personalize learning and reculture teaching may still be alive and growing.

Appendix 1: Nature of Bill and Melinda Gates Foundation Grants to Study Schools

District Grants. One of the schools included in the study was part of a Gates model district grant. These were awarded to increase the capacity of 11 Washington school districts and all their schools to improve academic achievement, infuse technology into the learning environment, increase professional development opportunities, and strengthen home and community partnerships. A major focus of these 5-year grants, which were awarded beginning in spring 2000, was to change district operations in ways that more clearly supported school-level work. District grant guidelines were not explicit about the foundation's expectations for small schools or conversions.

School Grants. One of the schools in this study received a model school grant, designed to support schools in developing a common focus, high expectations, data-driven decisions, and time for teachers to collaborate – in service of helping all students achieve at higher levels. Over 50 elementary, middle, and high schools received 3-year grants beginning in 2001 to create and implement new designs.

Achiever Grants. The remaining four study schools received *Achievers* 5-year grants beginning in 2001 designed to support school redesign within 16 Washington State high schools serving large populations of low-income students. The program's \$100 million in resources were focused on improving college access for low-income students and combined academic readiness with scholarship opportunities over a 10-year period. High-achieving students from low-income families were eligible to compete for one of five hundred *Achievers* scholarships given annually to graduates of *Achiever* high schools. Students receiving the *Achievers* scholarship were supported with a 4-year full ride to a state college or university.

Appendix 2: The Schools

Elm is one of six small schools in a rural high school complex that was part of a district-wide grant from the Gates Foundation. At the time of the redesign effort, the large comprehensive high school that gave birth to Elm housed 1,650 students, almost all Caucasian, and was the only high school in the district. About 46% of the student body passed three sections (reading, writing, and math) of the state standardized test in 2005 and 12.9% qualified for free or reduced-price meals.

Elm serves approximately 315 students and has a staff of 14 teachers, including two teacher-leaders. The student population is over 75% male, possibly due to a strong focus on hands-on projects involving technology, math, and science. The school and district administrative leadership has remained constant since the grant was awarded.

Alder is one of five small schools in a comprehensive high school complex that received a school grant from the Gates Foundation. At the time of the redesign effort, the large comprehensive high school in this suburban district out of which Alder was created housed 94 teachers and 1,700 students. The majority of students are Caucasian. Approximately 40% of the students passed three sections of the state test in 2005 and 20% qualified for free or reduced-price meals.

Alder has approximately 320 students and 15 teachers, including all three industrial technology teachers in the building. Because of this focus and the school's vocational image, the student population was primarily male in the first year of implementation. Recruitment efforts by the female teachers evened out the student body in year two.

Chestnut is one of six small schools in an *Achievers* grant high school complex. The overall building housed 1,560 students at the start of the redesign effort, more than half of whom represented minority populations. Approximately 16% of the student body passed three sections of the state test in 2005 and about two-thirds

qualified for free or reduced-price meals. A small group of teachers worked on the initial grant proposal. Teachers formed a leadership team to research small schools and developed an RFP process. Students helped craft and critique the small school proposals.

Chestnut serves approximately 250 students with 11 teachers. Student representatives help plan advisory and other activities, such as student recognition and field trips, through a student council. Counselors were slow to adapt to the small schools structure, though in the second year of implementation they divided students by small school rather than alphabetically.

Cedar is one of six small schools at an Achievers high school complex in a smaller suburban district. At the beginning of the redesign effort, the comprehensive high school complex was one of two high schools in the district, serving a working-class neighborhood consisting of 2,100 students, two-thirds of whom were Caucasian. Approximately 33% of the student body passed three sections of the state test in 2005 and 50% qualified for free or reduced-price meals.

Cedar has international, global studies, communications, and technology themes and serves 394 students with 17 full- or part-time teachers. Teachers have spent a year planning a major curricular program that will direct instruction for the ninth and tenth grades. It continues a program from one of the district's middle schools, whose students Cedar would like to recruit.

Hemlock is one of three small schools at an Achievers high school complex—the only high school in an urban fringe district with a highly transient immigrant population. The comprehensive high school complex housed 750 ethnically diverse students overall. Approximately 27% of the student body passed three sections of the state test in 2005 and over half of the students qualified for free or reduced-price meals. The school has been a member of the Coalition of Essential Schools since 2000.

Hemlock has 320 students and 16 staff, including all of the building's visual and performing arts teachers. The staffing is a reflection of the school's intended arts focus. The longtime and supportive superintendent left the district early in the grant's third year and was replaced with an interim. A new superintendent, serving in his first superintendency, was hired at the end of the third year. At the beginning of the grant's fifth year, a new building principal and assistant principal were hired.

Birch is one of five small schools at an Achievers high school complex located in a large urban fringe district. The building housed a diverse student population and was one of four comprehensive high schools in the district, serving almost 1,900 students in grades 9–12 at the start of the redesign effort. This number represented a significant growth in recent years due to an influx of 1,200 new students and 36 new teachers in the fall of 2004 when the ninth grade joined the high school. Approximately 31% of the student body passed three sections of the state test in 2005 and over half of the students qualified for free or reduced-price meals. One of four new small schools redesigned out of the larger comprehensive structure, Birch serves 340 students.

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Improving Schools in Challenging Contexts

Alma Harris

In many countries, economic, social and political forces have amalgamated to produce a climate in which schools feel continued pressure to improve and raise levels of achievement. This pressure is felt most acutely in schools in areas of socio-economic disadvantage where improving achievement is particularly hard fought and hard won (Lupton, 2004). Schools located in such areas face a wide range of challenges as a direct result of high levels of poverty and disadvantage. On a daily basis, schools face the task of educating young people who are “disadvantaged, disconnected and dislocated” from society through no fault of their own (Barr & Parrett, 2007). These students represent a growing underclass of young people who have been locked out of the world of opportunity and advantage that many of their more affluent peers simply take for granted.

The net effect of poverty on educational achievement is stark. Educational outcomes in deprived areas are worse than those in non-deprived areas, whether they are measured in terms of qualification, attendance, exclusions or “staying on” rates. Inner-city areas in particular feature as having low educational outcomes. It continues to be the case that children attending high poverty schools are not likely to achieve as well as their peers in more favourable school contexts (West & Pennell, 2003; Whitty, 2001).

Although the academic performance of poor children has generally increased, the achievement gap between children from low income and high income families persists throughout schooling. In England, the gap between the numbers of rich and poor pupils obtaining good grades at 16 has widened. In the USA, the Trends in International Mathematics and Science Study, known as TIMSS (2003), shows that schools with wealthier students had the highest average scores in mathematics and science and the schools with the poorest students had students who scored the lowest (Gonzales et al., 2005). This pattern of underperformance is pervasive and resilient to change.

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Socio-economic differences remain a powerful predictor of subsequent educational achievement (Robinson, 2000). Certain groups of students in many schools and school systems consistently fail to reach their potential, while other groups of pupils consistently succeed. Children from low income families do not on average overcome the hurdle of lower initial attainment (West & Pennell, 2003). Differences in ethnicity, gender, class and economic well-being affect children long before they start school and have a powerful continuing influence as they get older. Socio-economic status explains more than *half* the variation in pupil achievement and low family income in childhood years makes a significant difference to subsequent educational outcomes. Part of the reason for the decline in social mobility in many countries is the strong bond between low levels of family income and subsequent educational attainment (Blanden & Gregg, 2005, p. 3).

Study after study highlights how students who live in extreme poverty fall well below international averages across a wide range of measures (Berliner, 2006). However many of these studies fail to highlight that students who live in extreme poverty are doubly disadvantaged because of the social composition of the school they attend. Berliner (2006, p. 965) highlights how in the USA only 1% of white students go to schools that have over 90% non-white students. Eighty-eight percent of white children attend schools that are majority white and in contrast almost all African-American and Latino students are in schools where students are very much like them racially and socio-economically. In the majority of cases, children from African-American and Latino backgrounds tend also to be in low SES families.

Children with low or average SES tend to have better educational outcomes if they attend a school with high average SES. If they attend a school where the mix is predominantly low SES, they are unlikely to make as much progress. In short, the social composition and the context of the school matters in terms of subsequent student attainment and achievement. It has a powerful effect on academic performance and educational outcomes over and above the effects associated with the child's individual family background. If children from low SES families are in low SES schools, they are doubly disadvantaged by their socio-economic status and the socio-economic status of their peers (Thrupp, 1999).

The benefits of attending a high SES school are clear. These benefits include high expectations of school staff and parents, positive peer interaction and higher parental engagement in learning. In schools where the composition of pupils is mainly low SES, there is often an absence of the norms, expectations and values associated with high academic achievement and success. The absence of the social capital, so abundant in middle-class schools, makes it much more difficult for schools in disadvantaged circumstances to convince young people of the merits or benefits of education and achievement. Many young people in schools in challenging circumstances come from homes where there are several generations of unemployment and where schools are viewed as a problem rather than a solution.

Recent policies to tackle underperformance in schools in challenging circumstances have failed to acknowledge the full extent of the socio-economic challenges facing many young people. Governments continue to impose standardised models of school intervention and improvement even though the evidence suggests that this

is counterproductive to schools located in the most vulnerable communities (Harris, Clarke, James, Harris, & Gunraj, 2006). High stakes testing and tight accountability measures may achieve some instant improvements but often they are unsustainable. The strategies that accompany the “no excuses” or “zero tolerance” rhetoric of accountability can actually harm the very schools they are seeking to improve (Stoll, 2004). Improvement strategies for turning around such schools *are too little, too late, work only on part of the problem and unwittingly establish conditions that actually guarantee unsustainability* (Fullan, 2006, p. 20).

So the question is *what will work*? This chapter addresses this question by exploring what we know about improving schools in challenging circumstances. The chapter is in three sections. The first questions whether improvement in challenging contexts is possible. The second considers progress so far in improving schools in challenging circumstances. It reviews the evidence concerning improving schools in challenging circumstances and highlights eight components of successful intervention in such contexts. The third considers the arguments for more differentiated and contextualized approaches to school improvement in challenging contexts. It argues that improving schools in challenging circumstances is likely to be more successful if there is an integrated model of improvement which combines differentiated and contextualized improvement approaches, networked school support and economic investment and community regeneration.

Is Improvement Possible?

There is a strong belief among policy makers and practitioners that schools can overcome social disadvantage and make a difference to the life chances of the most disadvantaged students. This belief is well founded, as the international literature reinforces the fact that effective schools in disadvantaged communities contribute more to relative academic performance than effective schools in more affluent areas (Hopkins, 2001a; Maden, 2001). Schools can provide the most vulnerable students with the social and emotional support structures often lacking in the home along with the press for academic achievement. But not all schools in challenging circumstances add such value, and many are not performing well. Hopkins (2007) suggests that in England 25% of secondary schools are “underperforming” and failing to add value to the progress of their students.

Within the category of “underperforming” schools, schools in challenging circumstances are disproportionately represented. The extent of their representation means that the label “challenging circumstances” is often taken as a proxy for underachievement. However, this can be both inaccurate and misleading. While a large proportion of schools in challenging circumstances do underperform, it is not unequivocally the case that all schools in this category are underachieving. A significant number of schools in challenging contexts add significant value to the academic achievements and life chances of young people (Harris et al., 2006). These schools are able to overcome the negative influences of social disadvantage through a variety

of strategies, approaches and interventions all centrally and persistently aimed at improving teaching and learning (Hargreaves & Shirley, 2007; Reynolds, Hopkins, Potter, & Chapman, 2001). It is certainly possible to improve schools in the most disadvantaged contexts, but it is a hard and relentless work.

For every school in challenging circumstances that “succeeds against the odds”, there are many more that find it difficult to get to the starting line of improvement (Maden, 2001). The powerful socio-economic forces that bear down on schools in challenging circumstances make improvement much more elusive than for schools in more favourable circumstances. Many schools in high poverty contexts tend to perform below national norms, and these performance trends prevail and persist (Muijs, Harris, Chapman, Stoll, & Russ, 2004).

Schools in challenging circumstances face multiple problems. They are most likely to have higher than average numbers of pupils with low literacy levels on entry. They are also likely to have a higher proportion of refugee children or students that have been excluded from other schools. Incidents of violence, crime and drugs also tend to be more prevalent in communities where poverty and disadvantage are endemic. These powerful, interlocking variables make the daily business of educating young people demanding and often dangerous for teachers.

The school improvement movement has often been criticized for ignoring the powerful socio-economic influences that impact upon schools and for offering naïve and sometimes simplistic solutions to complex social problems (Thrupp, 1999). Certainly, there is some basis to this position, but those contributing such critique rarely offer any concrete suggestions about alternative ways forward. It is laudable to propose that we need “multi-disciplinary studies that incorporate measures of social composition” (Thrupp, Lupton, & Brown, 2007), but while we wait for these studies to take place, several cohorts of young people will have left school without any hope of a successful future.

Those of us who are committed to working with schools in challenging circumstances know only too well how imperfect and inadequate school improvement approaches in such contexts can be. But if the alternative is to curtail our current efforts in the hope of better solutions, sometime in the distant future, then we essentially choose to do nothing. Unsurprisingly, this is a position that those in the school improvement field find unpalatable and unacceptable.

Progress to Date

Over the last decade, the school improvement movement has focused increasing effort and research attention on improving schools in the most difficult or challenging contexts (Harris, Muijs, Chapman, Stoll, & Russ, 2003; Hopkins, 2001a; Reynolds, Hopkins, Potter, & Chapman, 2001). The extent and nature of the challenges facing schools have not been underestimated, nor has the task of intervening in such school contexts been taken lightly. No one close to schools in challenging circumstances thinks the process of improvement is easy or straightforward. It is fraught with difficulty, frustration and inherent complexity (Harris et al., 2006).

Yet despite such exigent problems, there has been a steady stream of initiatives and programmes aimed at improving schools in the most challenging circumstances. Approaches to improvement have incorporated new leadership practices (Harris & Chapman, 2002), additional resources (Brady, 2003), targeted developmental programmes (Harris et al., 2006), and professional development opportunities (Harris et al., 2003; Hopkins, 2001a; Reynolds et al., 2001).

At the extreme end, “reconstitution” and “takeover” have been deployed in a number of countries to address the problems of chronically underperforming schools (Brady, 2003). The majority of these schools, if not all, are located in areas of extreme poverty and disadvantage. In England, many “failing” schools have been reconstituted as “academies” which are schools that are renamed, relocated and rebuilt with private sponsorship. In the USA, nineteen states have policies that allow them to reconstitute failing schools, and in one estimate at least, nine districts have reconstituted schools (Brady, 2003). Supporters of this practice suggest that it secures the radical changes needed to boost student performance. Opponents argue that takeovers and reconstitution do little to address the underlying causes of school failure (NASBE, 2002).

On balance, attempts to improve schools in challenging circumstances have so far yielded mixed results. The success of particular interventions largely depends on individual circumstances and context. As Brady (2003) notes “there is no specific strategy that has resulted in compelling evidence that it is superior to other interventions in terms of effectiveness”. However, the evidence shows that what distinguishes successful school improvement programmes is their detailed attention to the individual needs of schools and communities (NASBE, 2002).

Attention to context is of paramount importance when seeking strategies for improvement in schools in difficulty. It is also evident from the research literature that there are key components or features of success associated with improving schools in areas of challenge (Chapman & Harris, 2004). A review of the literature on improving schools in disadvantaged contexts (Muijs et al., 2004) and evidence from a meta-analysis of research evidence on high performing, high poverty schools (Barr & Parrett, 2007) suggests that there are seven components of successful intervention or improvement in schools in challenging circumstances (see also Chapman & Harris, 2004; Hopkins, 2001a).

Improving the Learning Environment

Schools in challenging circumstances are often located in areas where the physical surroundings are very poor. In many cases, school buildings are equally run down, and the school is seen as part of the considerable deprivation the community has to face. Schools that improve in high poverty settings make deliberate efforts to change the school environment. Graffiti and litter are removed; broken furniture is replaced, and classrooms are bright and welcoming. Every effort is made to ensure that the school environment is conducive to learning as part of the process of improvement. Improving the environment is an immediate sign that change is

taking place at the school. It reinforces to staff, students and parents that the school has high expectations and is serious about learning and achievement (Chapman & Harris, 2004).

Effective Leadership

Stories of successful “turnaround” in high poverty contexts are not in short supply (Murphy & Meyers, 2008). While every example is unique, all stories highlight the centrality of effective leadership as a critical and common component of success. There are very few examples of schools that have improved without some change in leadership or leadership practice. The research base shows that while effective leaders tend to enact the same set of core practices, these are much more context related and specific in schools in challenging circumstances (Leithwood, Sammons, Harris, & Hopkins, 2007). It also shows that effective heads or principals of high poverty schools tend to have a very strong moral purpose and maintain high expectations for student achievement. They develop and support teacher leaders and invest in widely distributed leadership practices (Harris & Chapman, 2002). They are also “system” leaders because they recognize that they are able to “translate their vision and moral purpose into operational principles that have tangible outcomes” (Hopkins, 2007, p. 166). They strive for equity and inclusion by shaping school culture and engagement with the local community.

At the district level, effective leadership is also important for raising achievement in schools in high poverty contexts. The traditional management function of superintendents, central office staff and school boards is giving way to a wide assortment of essential targeted skills, all of which are focused on ensuring that all student subgroups, including poor and minority students, are achieving academic proficiency (Barr & Parrett, 2007). High poverty schools can achieve high academic performance, but the evidence shows that this is unlikely to be accomplished without effective “system-wide” leadership that ensures that at the district and the school level there is relentless support for teachers and a vision of high achievement for all students.

Building Instructional Capacity

Schools in challenging circumstances can be subject to a wide range of external interventions that compete for time, energy and resources. The demands of such initiatives can prove to be counterproductive in securing improvement, particularly where there are multiple foci and changing priorities. A clear focus on a limited number of instructional goals has been identified as an important contributory factor in school improvement in challenging contexts (Hopkins, 2001b). Highly structured lessons and an emphasis on basic skills can have positive impact on student achievement in schools in challenging contexts (Reynolds et al., 2006).

The meta-analysis by Barr and Parlett (2007) reinforces the view that high performing schools in high poverty settings tend to have instructional programme coherence, use collaboration and teamwork, set instructional benchmarks, use research-based instructional practices (such as study groups), deploy differentiated instruction and have clear strategies for English language learners. A great emphasis is placed on the teacher's ability to assess the individual child's needs and to provide an appropriate set of teaching approaches so that learning is maximized. There is a relentless focus on improving the quality of teaching and learning in schools in challenging circumstances that are successfully raising achievement.

Data and Assessment

Virtually every study of high performing, high poverty schools identifies the capacity to collect, analyze and monitor data as a key building block of success. Data richness has long been found to be an important contributory component of effective and improving schools in studies in the UK, USA and Canada. Reynolds et al. (2006) found that the ability to use data was strongly related to measures of school performance. However, being data rich does not simply mean collecting of data but actively using that data to select, refine and assess instructional strategies (Joyce et al., 1999; William et al., 2004). Assessment for learning means going beyond the standardized test information to build student confidence and to improve learning capability. Creating an environment of assessment for learning is a critical component in helping all children learn to succeed. For children in high poverty contexts, it is even more important that teachers are assessment literate as this has been shown to secure dramatic gains in student achievement (Barr & Parlett, 2007).

Building Professional Learning Communities

A significant body of research has established that successful schools are characterized by strong professional learning communities (Stoll & Louis, 2007). These schools are open to enquiry, change and challenge and invest in high quality professional development. Creating a learning community in schools in challenging circumstances necessitates that considerable time and effort is placed on continuous professional development. The "teacher as learner" is central to building instructional capacity, and changing teachers' classroom practices is essential if improvements in learning are to follow.

Eventually schools in trouble have to face up to issues about the quality of teaching and these issues are best addressed by securing greater internal accountability rather than the imposition of external accountability measures. As Elmore (2003, p. 13) argues, "[H]olding schools accountable for their performance depends on having people in schools with the knowledge, skill and judgment to make improvements that will increase student performance." The key to improving schools in

challenging circumstances is building internal capacity and that is best achieved by securing greater coherence and agreement among teachers about expectations and effective instructional practices.

Networking and Collaboration

Many schools in challenging circumstances want to improve but lack the infrastructure or support at the local level to make this a reality. Networks can provide schools with a means of facilitating innovation and change as they provide both support and challenge through various forms of linkage and collaboration between schools. Hargreaves (2003) suggests that networks offer the basis for an innovative system of education premised upon a mix of vertical-central and lateral-local reform strategies necessary for transformation.

Hopkins (2007, p. 151) argues that networks are a powerful means of school renewal, particularly for schools facing the greatest challenge. He suggests that “all failing and underperforming schools (and potentially low achieving schools) should have a leading school that works with them in either a formal group federation (where the leading school principal or head assumes overall control and accountability) or in more informal partnerships.” There is certainly evidence that networks can help underperforming schools improve. Evaluation evidence from England has underlined the contribution that networks of schools can make, particularly to schools in challenging circumstances (Hargreaves & Shirley, 2007). The Network of Performance Based Schools, in Canada, is also a good illustration of the way in which collective and individual school performance can improve through school collaboration and support (Halbert & Kaser, 2002).

Engaging Parents to Work as Partners

Developing and sustaining effective partnerships between the home, the community and the school is, without question, the most important component of success in securing improvement in schools in challenging circumstances (Harris & Goodall, 2008). When such partnerships are developed and sustained, children in high poverty settings learn far more effectively. Clearly, engaging parents in schooling in highly disadvantaged communities is not without its difficulties, but where this is achieved, the benefits can be significant.

Epstein and Sheldon (2000) suggest that there are six critical practices that schools can use to enrich parents/community partnerships:

- Assist families with parenting skills
- Improve communication with families
- Increase volunteer opportunities with families
- Increase family involvement in student learning in the home

- Involve families in school decision making
- Increase collaboration with the community.

Schools that have succeeded in improving their performance are also schools where teaching and learning are maximized and where the relationships with the local community are positive. Effective schools partner with families and build two-way communication. Many parents considered “hard to reach” by schools actually see the school as “hard to reach”; therefore communication and collaboration with parents, in all forms, are at the heart of improving schools in the most challenging communities.

The predominant message from the research base is that *all* schools have the potential to improve and that there are certain conditions that make success more likely (Harris & Chapman, 2002; Hopkins, 2001a, b). These conditions, however, are not intended as a recipe or blueprint for change as inevitably the amalgam of improvement strategies will depend on context and the particular “growth state” of the school (Hopkins, 2007). Also, these conditions are certainly not restricted only to schools facing high degrees of challenge, but they are the approaches most likely to secure achievement gains and improved school performance in such contexts.

Context Is All

There are inevitable limits to school-based reform, alone. Many external interventions aimed at improving school performance, particularly in the most challenging circumstances, have failed to achieve this end. While resources have increased dramatically and significantly, improvements in educational performance have not always necessarily followed (McKinsey, 2007). It is possible that many well-resourced or well-intentioned initiatives have simply underestimated the difficulty of the terrain and the potency of the socio-economic context. It is also possible that such interventions have not taken adequate account of the need to differentiate schools and the improvement strategies required (Harris et al., 2006).

Although schools in high poverty contexts tend to share certain socio-economic characteristics and face similar external challenges, this is where the similarity ends. As Hargreaves (2004, p. 30) notes these *schools are not all alike, and the reasons for their underperformance vary greatly*. Unlike “effective” or “improving” schools, which research shows consistently share the same characteristics (Townsend, 2007), the sheer range of complex variables affecting schools in high poverty areas means that they are very different from one another. Despite sharing similar sets of socio-economic characteristics or facing similar sets of external challenges, schools in challenging circumstances are far from homogeneous (Harris et al., 2006). Consequently, they require highly differentiated approaches to improvement. As Stoll (2004) suggests, there is not just one type of “failing” school.

Initial work on the differentiation of schools and improvement strategies undertaken by Hopkins, Harris, and Jackson (1997) suggested that improvement

approaches needed to match the “growth state” of the school. However failing or ineffective schools were not highly differentiated. Subsequent work tried to do this and produced typologies of “failing” schools. Myers and Goldsein (1998) describe three distinct categories of “troubled schools” – striving, swaying and sliding. Stoll and Fink (1996) identified sinking and struggling schools within their category of ineffective schools, while Chapman and Harris (2004) talk about immobile schools in their typology of schools in difficulty. Hopkins (2007) has recently extended his work on this topic to categorise three types of “failing” school – underperforming, low attaining and failing.

While these categories or types of schools are acknowledged to be relatively crude, without some way of diagnosing a school’s growth state, it is almost impossible to select appropriate improvement strategies that *fit* the developmental needs of the school. However, critics have suggested that such attempts at differentiating schools, so that improvement approaches are more context specific, are relatively weak and “that contextualisation in terms of external factors remains largely an aspiration for school improvement research” (Thrupp et al., 2007, p. 118).

While the school improvement literature (Hopkins, 2001b; Hopkins et al., 1997; Stoll, Reynolds, Creemers, & Hopkins, 1996) has reinforced the importance of context, effective context-specific programmes of improvement have been in relatively short supply. But how is context-specific school improvement achieved in practice? Lupton’s (2004) work argues that there are serious policy issues that need to be embraced to generate greater alignment between the needs of the school and the forms of improvement interventions employed. In terms of funding, she argues that current funding mechanisms are based on measures that are too crude and therefore mask deep inequalities and differences.

Another implication for policy makers is to recognise that practice in schools in disadvantaged contexts might vary from practice in other schools and that aim of replicating the teaching and learning processes in a “good school” may not be appropriate. As Lupton (2004, p. 35) argues *at the level of the school we need a better understanding of effective practice in particular circumstances, in addition to the generic practice lessons that are already available*. For example, what is the optimum size of groups for students in difficult school contexts with emotional and behavioural needs? What are the benefits to different groups of students from mixed ability or streamed groups in such schools? How are parents engaged most effectively in challenging circumstances? More radically, we may need to consider alternative models of schooling for students who find it difficult to learn within the standard organisational framework of a school.

A contextualised school improvement programme would undoubtedly need a high degree of flexibility and diversity to meet the needs of different types of students in different types of school. Hargreaves (2004) also highlights the *apartheid of professional development and school improvement*. He argues that while schools that are performing well enjoy *earned autonomy*, those categorised as *failing or close to failing have prescribed programmes and endlessly intrusive monitoring and inspection* (Hargreaves, 2004, p. 190). He notes that often schools in difficulty are

in receipt of multiple innovations; *while the cruising schools with coasting teachers who ride in the slip stream of middle class academic achievers get off scot free* (Hargreaves, 2004, p. 190).

The implication of a contextualised approach to school improvement is to remove this disparity and to allow schools in the most disadvantaged contexts the opportunities to innovate, experiment and divert, if necessary, from the educational norms of schools in more favourable settings. It also implies a steady supply of well qualified teachers who are recruited and retained in poorer areas. As Lupton (2004) notes, this will only be achieved if there are the right financial and career incentives in place to attract the best teachers to some of the most difficult teaching contexts. It is also possible that both initial training and ongoing professional development programmes need to be more carefully differentiated to prepare teachers for the particular challenges of disadvantaged schools.

Towards an Integrated Model

As the long term patterning of educational inequality looks set to remain, to rely on standard or standardised approaches to school improvement would seem both risky and unwise. There is evidence that the improvements secured by such means are declining, and any early increases in performance are reaching a plateau. The evidence would suggest that more locally owned and developed improvement strategies are needed that appreciate school context, match prevailing conditions and build the internal capacity for development within the school and the community.

More context-specific, differentiated approaches to improvement are undoubtedly required for schools in the most challenging circumstances. Where they are appropriately deployed, such interventions can make a difference to school performance and student achievement (Harris et al., 2006). But there is a warning light. In such school contexts, the impact of improvement interventions can be patchy, and success is often temporary (Gray, 2002). Many schools in challenging circumstances revert to normative practice once the resources and pressure and support from external sources are removed (Harris et al., 2006). Stand-alone school-based intervention is not the answer. So what is?

Essentially, we need a new integrated model of improvement for schools in challenging contexts. This model needs to encompass three dimensions:

- context specificity and programme differentiation;
- school-to-school networking and support;
- strategic and targeted approaches to economic regeneration.

In order to have the most impact, future improvement interventions not only need to be more context sensitive and specific but they also need to be located within a robust infrastructure of network support where schools to work together

and support each other (Hopkins, 2007). This will need to be combined with targeted programmes of social intervention and economic regeneration that address the broader needs of the community and the young people who live there (Harris & Chapman, 2004; Lupton, 2004).

The stubborn relationship between social disadvantage and underachievement is more likely to be broken through localised and community-based action than through the external, dispassionate and disengaged forces of accountability or standardization (Harris & Ranson, 2005). If we are serious about raising standards of attainment for all students, rather than for some, this will only be achieved by moving significant resources to schools in the most disadvantaged communities and engaging them in integrated forms of intervention and support that the best meet their needs.

We have two choices. We can either continue to believe that sanctions and compliance will resolve school failure and that we just need to keep looking for the right “silver bullet” remedy that will eradicate underachievement and underperformance. Alternatively, we can introduce targeted resources and integrated forms of support that empower schools and communities located in the most challenging contexts to generate and sustain improvement, on their terms.

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Knowledge-Based Organizational Learning for Instructional Improvement

Jonathan Supovitz

In the business literature, a line of reasoning about harnessing knowledge for organizational improvement goes something like this: Knowledge is a highly valuable asset to the firm because it contributes to solutions to pressing organizational problems. However, knowledge is difficult to tap into, either because it is diffused across members of the organization and, as such, is not visible to the organization as a whole or because it resides outside of the organization altogether. Therefore, the challenge to organizational leaders is to collect, make explicit, and disseminate the knowledge that tacitly resides within and outside of the organization to help the organization succeed. The extent to which leaders can tap the knowledge of organizational members and/or capture outside knowledge and distribute it across the organization will contribute to the firm's ability to maximize its advantages, improve as an organization, and successfully operate in a competitive environment.

This way of thinking about learning as a central means of organizational improvement is highly relevant to school district leaders. While there is an ongoing debate in education circles about the applicability of some business concepts to educational contexts, effectively utilizing relevant knowledge applies directly to the challenge that district leaders face as they try to improve instruction not just in individual schools but across systems of schools. Can school district leaders facilitate ways for organizational members to identify and apply effective instructional practices across their system of schools?

This challenge implies that among their central tasks, district leaders must

- identify ways to tap the knowledge and expertise that reside within organizational members;
- create systems for storing knowledge that is valuable to the organization;
- create opportunities for organizational members to share ideas and knowledge with peers, thereby spreading knowledge across the organization; and
- develop the means to embed valuable knowledge in the regular practices of organizational members.

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These concepts are core to a particular conceptualization of organizational learning that shall be explored in this chapter. The chapter begins with a brief summary of the different perspectives of organizational learning depicted in the literature. I use these perspectives to develop a framework for knowledge-based organizational learning, here defined as *systems designed to collect, synthesize, and disseminate knowledge valuable to the organization as a whole*. Using the examples of specific systems developed by two large urban school districts, I provide descriptions of what knowledge-based organizational learning systems might look like. Next, guided by the framework, I discuss the design decisions inherent in the construction of these two systems. The paper concludes with a discussion of the implications for districts that focuses more attention on knowledge-based organizational learning.

Different Conceptions of Organizational Learning

Organizational learning is the idea that an organization can learn in and of itself, distinct from the learning of individual members. This is a controversial notion, as some believe that learning is a human quality and can only occur within the minds of individuals. Theories of how organizations may learn – as distinct from the learning of individuals within organizations – have a long history in the business and social science literature. Many organizational learning scholars (see, e.g., Kim, 1993; Ortenblad, 2005) have argued that all organizations inevitably change through the process of their experiences and that change, for better or worse, is the product of their learning. As Kim (1993) stated, “All organizations learn, whether they consciously choose to or not – it is a fundamental requirement for their sustained existence” (p. 37).

There are at least three theoretical conceptions of organizational learning. The first conception views organizational learning as essentially the sum of individual learning within an organization. Early thinkers in the field focused on individual activity done for the good of the organization. Argyris (1976), one of the first academics to talk about organizational learning, defined it as “the detection and correction of errors” by individuals acting as agents for the firm (p. 365). Nonaka (1991) conceived of organizational learning as “the transforming of an individual’s personal knowledge into organizational knowledge valuable to the company as a whole” (p. 97). These authors emphasized individuals’ knowledge that was utilized for organizational purposes.

The second conception of organizational learning is quite distinct from the first in that it views learning not as an attribute of individuals but as a cultural attribute of the organization as a whole. This perspective is perhaps best exemplified in the work of Cook and Yanow (1993), who conceived of organizational learning as a collective activity. As an example, Cook and Yanow described an orchestra learning to play a symphony as a collective activity. They argued that it is impossible to take a person from another orchestra and let him or her perform without practicing with the new orchestra, even if he or she knows the piece. In this perspective, organizational learning is embedded in the deeply held beliefs and shared conceptualizations that

develop among members of the organization over time as particular understandings and practices evolve through unconscious and regular interactions.

The third conception of organizational learning emphasizes systems that organizational leaders actively construct to foster learning among organizational members. In this vein, Huber (1991) conceived of organizational learning as the processing of information to change the range of potential behaviors so that "...organizational units develop uniform comprehensions" (p. 90). Kim (1993) viewed organizational learning as "a system for capturing the learning of its individual members" (p. 40). In this perspective, organizational learning can be facilitated by the development of systems that capture, synthesize, and disseminate knowledge that help the organization carry out its mission. Both the cultural and system views of organizational learning emphasize the importance of organizational routines, procedures, and processes as conduits for the flow of knowledge (Cohen, 1991; Levitt & March, 1988).

Systems for organizational learning are often discussed in combination with knowledge management systems, but they are not synonymous. Knowledge management typically refers to information technology systems that are used to collect and/or disseminate data, and information technology systems are often an important component of organizational learning systems. Organizational learning is the process by which *meaning* is made from the data provided by such systems. Vera and Crossnan (2003) stress this distinction when they state that "knowledge management is mainly concerned with providing managers with information technology solutions while ... organizational learning primarily emphasizes the processes through which knowledge changes or flows" (p. 128).

In this chapter, I focus on the third definition of organizational learning discussed above – that is, systems to capture, synthesize, and diffuse knowledge across an organization. Before proceeding to examine two education systems that employ elements of such organizational learning systems, it is useful to devise a framework with which to examine their attributes and design considerations.

The Cyclical Nature of Converting Data into Knowledge

The object of an organizational learning system is the systematic acquisition of knowledge useful to the organization as a whole. The question of defining what exactly is useful knowledge is important, but is beyond the scope of this chapter. For the purposes of this paper, I focus on organizational (as opposed to individual) knowledge that is explicit (as opposed to tacit).¹

The central challenge to organizational learning is that of accruing knowledge. One useful way to think about this is to consider how data are converted into

¹The distinctions between, and conversion of, tacit and explicit knowledge are discussed in the work of Polanyi (1967), Nonaka (1994), Stonehouse and Pemberton (1999), and Tsoukas and Vladimirov (2001).

knowledge. Several authors have developed frameworks that construct the conceptual progression of data to information to knowledge. These frameworks generally consider *data* to be raw numbers and facts, *information* to be processed data, and *knowledge* to be authenticated information (Ackoff, 1989; Alavi & Leidner, 2001). Logan and Stokes (2003) distinguished between information, describing it as a resource, and knowledge, which they characterized as the capability to exploit information.

The progression of data to information to knowledge can be embedded within a cyclical process of continuous improvement (Deming, 1986; Senge, 1990). Daft and Weick (1984) viewed organizations as interpretation systems where the main processes are to *scan* the environment for information to inform decisions, to *interpret* the collected data, and to *take action* based on the results. This process is repeated on a regular basis, creating cyclical improvement. Huber (1991) thought of organizational learning as the repetitive process of knowledge acquisition, information distribution, information interpretation, and organizational memory. Other renditions are similarly represented as cyclical to convey the notion that decision-making processes ought to be recursive and iterative (Kim, 1993; Preskill & Torres, 1999).

In this paper, I employ a framework that combines the data-to-information-to-knowledge progression nested within a cyclical process to inform organizational leaders for the purposes of organizational learning and continuous improvement. The framework is depicted in Fig. 1.

In the first component of Fig. 1, organizational members decide what data are related to the core processes of the organization and are important for them to investigate (and representations of these processes are captured within a single indicator or group of indicators). Second, organizational leaders devise a meaning-making process by which data are interpreted, thereby converting data into information. This component is essential because the meaning-making process helps establish the legitimacy and sense of ownership of the interpreted data. The third component of the framework concerns the ways in which the resulting information is shared across the organization. This is a key component in the framework because it contributes to the extent to which organization members are provided opportunities to learn about ways to improve their practice. Finally, the resulting information must be tested against the realities of organizational conditions and challenges, thereby authenticating information into knowledge. The end result of this final step of the process is to embed the newly gained knowledge into the regular processes of the organization so that regular procedures and practices reflect the deeper understandings acquired

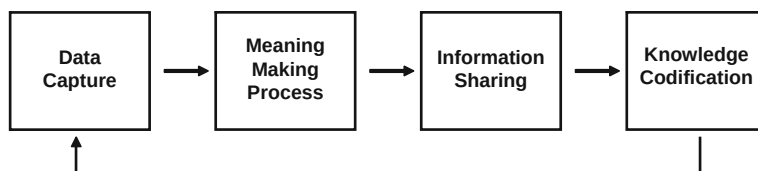


Fig. 1 Framework for knowledge-based organizational learning

through the process of producing knowledge. It is this final step, as we shall see, that is the hardest for educational organizations to enact.

Organizational Learning in Education

The conventional wisdom is that education systems as organizations are particularly resistant to learning. Despite attention to organizational learning in other sectors, relatively few efforts introduce organizational learning concepts and systems into education. One reason that organizational learning is perceived as a particularly difficult undertaking in education is because education is thought of as a loosely coupled system. Organizational learning requires the identification of stable and valid knowledge that can be disseminated. Yet education systems are notorious for the instability of relationships between practices and outcomes. Weick (1976, 1982) was the first to characterize the education system as “loosely coupled” – that is, one in which elements are connected, but the links between actions and effects are diffused and uncertain. Indeed, the imprecise connections between educational inputs and outputs characterize the loosely coupled nature of education.² One implication of such a system, in which there are rarely clear connections between components of the system, is a constant state of ambiguity (March & Olsen, 1975).

Education can be seen as a system rife with ambiguity. Tight connections between teaching and learning are elusive for multiple reasons, including the complexities and uncertainties of how people learn, the slow accumulations of the learning process, and the myriad intervening variables that influence learning. These complex conditions are further exacerbated by the current policy context, with its obsession for high-stakes annual exams, but with almost no attention to measuring the instruction that produces performance. The result is that the current system is ill-equipped to produce the information necessary to create feedback loops that can be mined for organizational learning. That is the case even though in environments where the connections between inputs and outcomes are unclear, useful feedback to change performance is particularly crucial.

Despite these difficulties, ideas associated with organizational learning are beginning to seep into the education sector. Initially on the management side of the operation, and sometimes on the instructional side, notions of total quality management and continuous improvement are increasingly being applied (Deming, 1986; Senge, 1990). Two such examples – the Standards Implementation Snapshot System in Duval County, Florida, and the SchoolStat system in Philadelphia, Pennsylvania – are described in detail below.

²There is a debate among educators whether education should be characterized as a loosely coupled system because of the tight control on working conditions and environments that typically exist (see e.g., Ingersoll, 1993; Rowan, 1990). But this debate has more to do with disagreements about autonomy within educational organizations than with the nature of the endeavor itself.

The Snapshot System in Duval County, Florida

The Duval County Public School system (DCPS), in Jacksonville, Florida, is the 20th largest school district in the United States, serving approximately 127,000 students in 149 schools. From 1998 to 2006, John Fryer, a retired Air Force major general, served as superintendent. During Fryer's tenure, his leadership team implemented a comprehensive form of standards-based reform in the district. At the core of Duval's standards-based reform effort was an emphasis on standards for student performance.³

As a means of monitoring its standards-based reform efforts, from 2002 to 2007, the DCPS implemented a system to collect data on the implementation of core district initiatives. The system was called the Standards Implementation Snapshot System. The snapshots were in essence representations at a particular point in time of the extent to which schools and/or teachers in Duval County were implementing key elements of the district's reform vision.

The snapshots focused on a list of 3–5 broad topics that were carefully chosen by district leaders each year to reflect on key elements of the district's reform efforts. Snapshots included such topics as understanding and using standards, safety nets, data-driven decision making, and reading and mathematics instruction. Each of the topics became the focus of 1–2 school visits across the year.

Well before snapshot visits to schools were to occur, a team of district experts on a particular topic would meet to develop a rubric on that area, specifying observable characteristics at the school, classroom, and student levels that would comprise different levels of implementation. The team also constructed an evidence form – a short list of interview questions to be asked of school leaders, teachers, and/or students – as well as a list of artifacts that the data collectors should look for in the school. The rubrics were then circulated throughout the district and vetted.

Snapshot visits occurred monthly during the school year and were conducted in each school by 2–3 trained principals and district administrators. In 2005, over 190 principals, assistant principals, district regional superintendents and directors, content-area supervisors, coaches, and other personnel received training in interviewing and observation and participated in snapshots. Each month the data collectors visited a representative sample of schools in the district to collect data on a particular element of the district's reform efforts. The subset of district schools that were to be visited for each snapshot were selected to represent the district in terms of prior achievement, reform experience, grade ranges, and region. Approximately 35–37 schools were visited for each snapshot topic.

The snapshot data-collection teams visited each school in the sample for approximately 3 h. Meeting first with the school's principal, the team developed a sampling frame of individuals and classrooms to visit and talk to in particular grades and subjects (depending on the topic of the snapshot). After completing the data collection, the team assessed the school on the areas outlined in the rubric, using the evidence

³For a more detailed discussion of the DCPS reform efforts, see Supovitz (2006).

collected during their visits/interviews. Using this evidence, the team made judgments about the degree to which the school had implemented the components of the snapshot rubric. After coming to consensus, the team met with the school's principal to debrief and provide constructive feedback, carefully relaying what they observed and why they reached the conclusions that they did.

The results of the snapshots from the sample of schools were aggregated to produce a picture of implementation of that particular topic across the district. Importantly, the aggregation provided anonymity to teachers and schools, reinforcing the stated purpose of the snapshots to capture the *districtwide* depth of implementation of elements of the district's frameworks. The presentations included graphical representations of the results as well as comments from the snapshot teams.

The snapshot results were produced in time for the district's monthly principals' meetings. In preparation, the district's five regional directors examined the results, discussed possible meaning, and developed a set of questions to guide principals as they examined the snapshot results for themselves. Then, during breakout sessions, the regional directors (each responsible for about 35 schools) facilitated conversations with their principals, seeking to identify areas where the district was strongly implementing barriers to implementation, and areas where implementation could be deepened, as well as seeking to cross-germinate and capture innovative strategies that schools were using. Studies of snapshot results showed deepening implementation on many of the snapshot topics (Supovitz & Taylor, 2005).

SchoolStat in Philadelphia, Pennsylvania

The School District of Philadelphia (SDP) is the eighth largest in the United States, with 291 schools organized into nine regions with approximately 184,000 students.⁴ Philadelphia is characterized by high levels of poverty and high percentages of minority students. About 65% of the students in the district are African American, 16% Hispanic, 13% white, and 6% Asian. The district is perennially underfunded, with chronic budget problems. In 2002, the district was taken over by the state for low performance, and a reform commission was put into place with members named by the city mayor and governor. The reform commission hired Paul Vallas, the former superintendent of the Chicago Public Schools, to run the Philadelphia schools. Vallas ran the district from 2002 to 2007. During that time, he contracted with several education management organizations (EMOs), including Edison, Victory, Foundations, Temple University, and the University of Pennsylvania, to run 45 of the lowest-performing schools in the district. While EMOs had their own curriculum, the district schools used a centralized curriculum and pacing schedule.

⁴The following section is a summary of the project's description as written by Patusky, Botwinik, and Shelley (2007).

Under Vallas, the district also implemented SchoolStat, which was implemented in the district schools from 2004 to 2008. SchoolStat was the product of a partnership between the district and the University of Pennsylvania's Fels Institute of Government, and was an adaptation of the successful New York City Police Department CompStat and Baltimore CitiStat programs. The overarching goal of the program was to incorporate data-driven practices into an integrated management system to focus the district's efforts on measurable improvement.

The Philadelphia SchoolStat program included two core components – data collection and initial analysis and meetings to make meaning of the data. The data component of the program was represented by seven data measures, or key performance indicators (KPIs), that quantified school and student performance across several areas. The KPIs were organized into three categories – instructional, attendance, and school climate. The instructional KPIs were (1) 6-week districtwide benchmark tests in mathematics, reading, and science in grades 3–8, (2) reading levels on teacher-administered biannual assessments, and (3) the number of students referred to the district's comprehensive student assistance process. The attendance KPIs were (1) staff daily attendance rate and (2) student daily attendance rate. The climate KPIs were (1) the number of reported serious incidents and (2) the percentage of students suspended. Together, the KPIs formed a type of dashboard instrument that told principals and district administrators how well or poorly each school was doing month to month and year to year.

The SchoolStat meetings, held each month, were central to the SchoolStat program. The district's chief academic officer facilitated meetings with the 12 regional superintendents, and the regional superintendents, in turn, facilitated meetings with the principals they supervised. At the monthly meetings, leaders reviewed school or regional performance, shared information and experiences, developed and tracked action plans to improve operational and instructional performance, and monitored changes in the performance data.

By having key district staff work through this structured process month after month, SchoolStat sought to drive a cycle of improvement in school operations and instruction that would ultimately increase student achievement. To encourage this type of data-driven improvement process, the district adopted the plan-do-study-act (PDSA) cycle to provide a framework for facilitating the meetings. PDSA is a continuous improvement model developed by Walter Shewhart to increase quality control (Johnson, 2002).

Studies of SchoolStat results in Philadelphia showed movement on the indicators that the program emphasized. Patusky and Botwinik (2006) reported several differences in the KPIs from 2005 to 2006. These included a decline in teacher absence rates by 2%, a slight (0.57%) increase in student attendance, a 23% drop in suspensions, and an 18% decline in serious incidents.

Data Systems for Knowledge-Based Organizational Learning

In the final section of this chapter, I analyze the design features of the Duval County and Philadelphia systems in the context of the framework for knowledge-based

organizational learning that was presented earlier. Breaking down the systems into the components of the framework, I examine the critical design features of both districts' systems, contrasting them where appropriate, to uncover the implications of these design considerations. My purpose in this chapter is not to assess the impact of the systems, but rather to explore the extent to which the designs of the systems facilitate organizational learning as described by the framework.

Before proceeding, I offer a caveat about these observations and analyses. Both the Snapshot and SchoolStat systems are but single components in a complex range of district strategies that use data to inform teachers, principals, district administrators, parents, and students about performance of individuals and groups within their systems. The purpose of this paper is to isolate these subsystems to examine how their designs facilitate organizational learning. The absence or lack of emphasis within either system of a particular attribute of data use or organizational learning does not necessarily mean that it is not occurring elsewhere in the system.

Data Capture

All organizational learning systems start with some form of data from which people draw conclusions about the operations and functioning of the system. Embedded within the decisions around data capture are two critical issues: (1) the choices that surround which data should be examined – that is, which data best represent the essential processes of the organization – and (2) considerations about what process to use to capture these data.

Choices About What Data to Collect

In the current educational environment, with growing technical capacity, leaders could conceivably collect data on just about any aspect of their organization. They must therefore carefully choose which indicators to use to represent the current state of organizational performance. Bernhardt (1998) identified four categories of data for districts and schools: demographic data, instructional process data, perception data, and student-achievement data. She argued that selectively representing these categories would produce a powerful indicators system. Foley et al. (2008) used the term *leading indicators* to distinguish *lagging* indicators, which characterize past performance, *coincident* indicators, which describe current performance, and *leading* indicators, which portray future performance. They argued that leading indicators are the most powerful because they can serve as *signals of progress* that precede gains that are likely to be achieved eventually. The message underlying the work of these authors is that what data leaders choose to represent and measure about their organizations will determine the utility of the ensuing information.

The examples of Philadelphia and Duval County represent distinct perspectives on the choices implicit in what data are collected. The designers of the Philadelphia SchoolStat system chose a certain set of key performance indicators (KPIs). The KPIs included three student-achievement indicators, two attendance indicators (teacher and student), and two climate indicators (suspensions and serious

incidents). The Philadelphia indicators were made up largely of existing data that had long been collected across the system.

In Duval County, by contrast, district leaders chose snapshot indicators that focused on the processes of instruction and other supportive efforts in the schools rather than student-performance outcomes. These indicators examined the activities of teachers and school leaders rather than the inputs to, or products of, their efforts.

The indicators chosen by the leaders of the two districts represented careful considerations about what data best reflected the mission and focus of each district. Duval leaders carefully selected the snapshot topics to align with the district's focus on standards-based reform (Supovitz & Weathers, 2004). The selection of the KPIs in Philadelphia was the product of much consideration on the part of district leaders to present a clear picture of school and student performance (Patusky, Botwinik, & Shelley, 2007).

Several critical design distinctions are implicit in the construction of these two approaches. Essentially, Philadelphia chose to focus on preconditions (attendance, discipline) and output (achievement) indicators, while Duval County chose to focus on process indicators. In terms of teaching and learning, what was captured in Duval County was what teachers were doing, whereas what was captured in Philadelphia was how students were performing.⁵ Each approach has its limits. A focus on instructional processes provides rich details about the qualities of instructional practice that occur inside of classrooms, but provides no leverage for answering questions about the learning outcomes that these practices produce. By contrast, a focus on output information presents a picture of student learning but contributes little insight into the instructional practices that produced those learning outcomes. Neither system folded these indicators together.

The choice of what indicators to use also may have impacted other design considerations. The complexity and customization required for collecting data on instructional practice in Duval County contributed to decisions to collect data from a sample of the 149 schools in the district each month rather than from all schools in the district. By contrast, Philadelphia's decision to use existing indicators allowed the district to collect data on all 291 schools. The districts' choices of data on which to base their systems also influenced the regularity of data becoming available. The Philadelphia indicators were collected more regularly, while the Duval snapshots were changing every month. Thus, in Duval, the trend data were more elongated.

The Process of Data Capture

A second critical design consideration is the process by which data are collected. In Duval County, the decision to construct indicators from scratch required substantial emphasis on rubric design, data collector training, and issues of reliability and

⁵This is not to say that Duval did not collect and report back student performance data, nor that Philadelphia did not measure instructional processes, but that these particular systems did not provide insight into these areas.

validity (Supovitz & Weathers, 2004). By contrast, Philadelphia's decision to use existing indicators sidestepped most of these issues.

There were several tradeoffs associated with these choices. The Duval County data were only collected in a sample of schools because of the time and resource commitment involved in collecting the data, whereas the Philadelphia data existed for all schools in the system. A consequence of this was that Philadelphia reported back school-level results each month, while Duval County focused on districtwide trends. Those Duval County schools in which data were collected viewed their own results, whereas other schools had to make inferences about the implications for their site from districtwide ratings.

A further implication of this design decision was the richness of the learning opportunities for participants. Cousins (1998) found that practitioners who participated in data collection and analysis learned more than those who were just consumers of the results. In research on the snapshot system, Supovitz and Weathers (2004) found that the entire snapshot experience – from the scrutiny of the snapshot rubrics to the visits to schools with colleagues to the examination of the snapshot results – provided powerful learning opportunities for those involved. The training sessions for new rubrics became important professional-development opportunities for the snapshot data collectors. Cross-school visitations provided valuable learning opportunities for school and district leaders: Not only did they get to share ideas about how to help improve instruction in their schools or regions, but their visits also provided direct observation of different approaches to teaching and learning that served as points of comparison and reflection for generating ideas on how to improve one's own school.

Meaning-Making Process

The process by which individuals and groups make meaning of the data provided to them is an essential step in the organizational learning process. Individual, social, and organizational factors influence peoples' interpretations of data (Supovitz, 2008). First, the cognitive process of individual sense making plays a major role in the interpretive process (Spillane, Reiser, & Reimer, 2002). In addition, the social interaction is in itself a powerful influence as participants define social norms, create obligations, and provide opportunities to negotiate meaning and share understanding (Coburn, 2001; Coleman, 1988; Lin, 2001; Spillane, Reiser, & Gomez, 2006; Wenger, 1998). A third influence on the meaning-making process – that of organizational processes and structures – also is emerging (Supovitz, 2008). Because of their regular nature, organizational structures and routines contribute to the course of action that actors consider and bound opportunities for interaction (Gersick & Hackman, 1990; Langlois & Everett, 1994).

Both Philadelphia and Duval County developed fairly elaborate systems through which school leaders grappled with the meaning of the data. In Philadelphia, subsets of principals met with their regional directors, and the regional directors met with the district's chief academic officer. During these meetings, which were held each

month, the leaders reviewed the trends in the district's KPIs, discussed what might be driving the trends, and agreed upon strategies to move the indicators in a positive direction. A similar process occurred in Duval County. The superintendent's cabinet reviewed snapshot results, discussed their meaning, and brainstormed implications for district professional development and support services. At the monthly principals' meetings, time was set aside for regional directors to facilitate discussions with principals about the meaning of the districtwide results. As one Duval County principal explained: "We sit in meetings and we get a lot of information. . . . [But] there are very few times when we really sit and talk to another professionally about what's happening in our school and what's working. I think it's really powerful . . . just hearing another person talk about the words they use in conversations with teachers helps. It has given opportunities for administrators to really talk about best practices and what they could do to help their school improve."

In both districts, the processes allowed individuals and groups to generate meaning from the data. By structuring them as group processes, the designers provided the space for people to derive their own interpretations. This is in sharp contrast to other conceptions where individual leaders or small groups do the interpretive work and relay the *official* explanation to others.

Information Sharing

The third component of the knowledge-based organizational learning framework is the way that the information that comes from examination of the data is shared across the system. By developing the means to share information across an organization, leaders are contributing to the development of shared conceptualizations and understandings (Stonehouse & Pemberton, 1999). Senge (1992) speaks about how group learning is impeded by the different ways that organizational members view the world around them and how the development of shared mental models contributes to shared understanding and more collaborative problem solving in decision-making situations.

One important design distinction between Philadelphia and Duval County lay in how information was shared: Results were provided to individual schools in Philadelphia, whereas Duval County purposefully aggregated results to the district level (albeit broken down at the elementary, middle school, and high school levels). In Duval, only that subset of individual schools that participated in a snapshot visit got back their school's results; other schools had to examine districtwide patterns from the aggregated data and infer their own standing. By contrast, every school in Philadelphia received feedback on a monthly basis. The unit of available data clearly had implications for the sharing of information. While local school leaders in Philadelphia acquired timely data to share directly with faculty, district-level results in Duval County proved more difficult for individual school faculties to interpret and act upon.

One potential benefit of knowledge-based organizational learning systems is that more than just outcome information is produced by such systems. In the cases of the

two districts, the processes produced valuable information that was shared across the systems. In Duval County, the data-collection processes were rich, and there was substantial evidence that schools were making individual use of the snapshot instruments. The district posted the rubrics, data-collection forms, and results of the snapshots on its website, so that all school faculties and district personnel could utilize the instruments and examine the results, regardless of whether a school participated in a particular snapshot. Supovitz and Weathers (2004) reported that the snapshots became a means of cross-pollinating ideas across the district. Further, the snapshot rubrics and processes spawned a variety of local uses – for example, principals using the snapshot rubrics in their classroom observations, accessing the expertise of the snapshot data collectors, and using the snapshot rubrics in self-constructed performance evaluation systems. Special-education teachers also reported modifying the snapshot rubrics for assessing special-education classes. In Philadelphia, leaders of the Fels Institute at the University of Pennsylvania, the developers of SchoolStat, argued that the process was giving school leaders a good opportunity to share ideas in meetings. “There is so much more sharing of ideas and strategies than there ever was. Principals were so siloed in their schools, and there was never any time for them to work together. And now they are sharing ideas in meetings,” said the Fels SchoolStat Director.

Knowledge Codification

The final component of the knowledge-based organizational learning framework is the codification of knowledge. Knowledge codification occurs when knowledge that is produced from the organizational learning process is confirmed as replicable and embedded into the regular procedures and practices of the organization. This step essentially completes an organizational learning cycle, because information that emerges through the data collection and analysis process becomes formally embedded in organizational practices as a whole and becomes available to all members through the normal course of their job functions. With that, the knowledge base of the organization expands.

In the two districts examined in this chapter, knowledge codification would occur if strategies for increasing attendance (in the case of Philadelphia), or approaches to implementing safety nets for at-risk students (in the case of Duval County), or effective instructional approaches emerged from either district. Subsequently, district leaders would view these strategies as appropriate for use across their systems and embed them in officially advocated approaches.

This final step in the knowledge-based organizational learning process is the hardest for leaders to enact for several reasons. First, while certain practices may gain a reputation as replicable, such practices often spread through informal networks rather than through the official policy apparatus. Second, practices that emerge as useful often are contextualized and therefore difficult to codify at the policy level. Third, knowledge codification implies that district leaders are looking for generalizable practices that may emerge from their organizational learning

system and that they have the expertise to identify them and embed them in official practices.

Even so, there were glimmers that knowledge codification may have occurred in both sites, although it appeared to be rare. In Duval County, district leaders talked about how the snapshot results informed district professional-development practices, in terms of both the sequence of training and the content of training. In an example from Philadelphia, district leaders noticed a dropoff in student attendance after the state assessments, and in response, they adjusted policies and practices the following year to reinforce the message that school was not over until the end of the school year rather than after the state exams were completed. Monitoring of the impact of these efforts on spring attendance data has been ongoing (Patusky et al., 2007). Despite these examples, knowledge codification appeared to be the exception, rather than a regular practice, in each site.

The Potential of Knowledge-Based Organizational Learning in Education

There is a tremendous volume of untapped knowledge in school districts that can be used to improve instructional and organizational functioning. Knowledge-based organizational learning systems offer one potentially powerful way to access that knowledge and harness it for organizational improvement. Both Duval's Snapshot system and Philadelphia's SchoolStat system provide concrete, albeit imperfect, examples of the potential of knowledge-based organizational learning in education. Both systems embody the powerful idea that data useful to the organization as a whole can be systematically collected and collectively examined to produce knowledge that can help the organization to further its mission of improving the quality of teaching and learning.

Central to the concept of both of these systems is the conviction that instruction can be improved by systematically collecting data about the teaching and learning process and examining it for insights into how that process can be informed, adjusted, and improved. These are small, yet important, steps away from more traditional reform emphases that focus on the organizational structures surrounding classrooms and schools but that do not probe the core instructional processes that influence the opportunities and experiences of children (Elmore, 1996).

It also is important to note that a precursor to these organizational learning efforts is that the district as a whole must be working toward developing a clear vision of what effective instruction looks like. The uniform curriculum of Philadelphia and the standards-based instructional emphasis of Duval County made it possible to examine the instructional process in a systematic way because there was a common conception of teaching in each of the systems. Lacking a common conception would make it impossible for organizationwide learning about instruction to occur, leaving education systems to face the problems described by Weick (1982) in his depiction of loosely coupled systems.

Several attributes distinguish a superior knowledge-based organizational learning system. First, the system is based upon data that are collected from across a system. Second, the system pays considerable attention to the ways in which organizational members are invited to construct meaning from the collected data; such a system does not determine and disseminate findings, but provides rich opportunities for people to reach their own meaning and determine the actions that result from those interpretations. In the best of cases, the system not only documents the resulting plans for action but also holds people accountable for enacting those plans and at the same time assesses whether the plans have had the intended effect. Third, the system provides opportunities – both formal and informal – for people to share the information they gain from their experiences. Finally, once leaders are comfortable with the veracity of the conclusions, the organizational learning system finds ways to embed the gained knowledge into the regular routines and practices of the organization so that the new knowledge is codified and practiced by all.

Design considerations have a tremendous influence on the ways in which such systems evolve and the influence that they have. This can be seen in the distinctly different approaches taken by Duval County and Philadelphia to the challenge of using knowledge derived from data to improve the quality of the teaching and learning process. In these two examples, district leaders made decisions concerning the levels of the units of data collected and presented (school level versus that of the district as a whole), the processes by which data were collected, and whether to focus on the instructional process (Duval County) or student outcomes (Philadelphia) – decisions that had profound effects on the results achieved. Further, the design of the knowledge management system impacts the ways in which meaning is made from data and how these interpretations spread across the organization, are embraced by leaders, and ultimately influence regular practice.

As educators grapple with ways to improve education to meet the challenges of the twenty-first century, organizational learning systems offer a powerful means of enhancing systemwide knowledge and practice. Due to the historically idiosyncratic way in which education has been organized, organizational learning systems have been an underutilized approach in the management of educational systems. As school districts seek increased internal coherence, knowledge-based organizational learning systems offer a potentially powerful way to incrementally and systematically improve the quality of educational experiences for our future citizenry.

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Federations and System Leadership

Rob Higham

Executive Headship refers to those head teachers in England who lead two or more schools that have entered into a Federation. A common federative model involves a lead school working to support and improve a partner school (or schools). The Executive Heads of these federations, and their wider leadership teams, constitute one of an emerging set of practices in England that has been termed System Leadership, or as working for the success and welfare of students in other schools as well as one's own. To date, there is only a small and emerging research literature and thus no well-developed analysis of how these roles are being organised. In seeking to contribute to this literature, this chapter elaborates the concepts of "support federations" and system leadership in three main ways. First, it explores the historical and policy contexts out of which these roles have developed. Second, it analyses not only how such roles are being undertaken but also what forms of expertise and capacity are mobilised in the pursuit of another school's improvement. Third, it considers how these leadership roles might provide alternative solutions to problems that have traditionally become the responsibility and preserve of the central apparatus of the state. The chapter concludes by suggesting that professionally led system leadership may offer a means for self-managed schools, emerging from an era of competition, to work together for greater social equity by amongst other things taking more joint responsibility for students in their locality. There are, however, some important caveats to this argument that are also discussed.

System Renewal in England

The New Labour Government came to power in England in 1997 having coined the now famous slogan "Education, Education, Education". The promise was for

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educational renewal and a healthy dose of “progressive universalism” aimed at improving school standards and social equity simultaneously. In reality, at the systemic level, New Labour’s approach was to evolve and technically mature the more radical reforms introduced in the 1980s under Margaret Thatcher, albeit in a context of significantly higher public spending. Thatcher’s Conservatives had introduced an educational market to unleash competition-driven improvements. New Labour sought to advance market effectiveness through greater parental choice coupled with the diversification of schools away from a common comprehensive model and towards institutional differentiation including by curriculum specialisms. Similarly, where the Conservatives had introduced the National Curriculum and National Tests, New Labour developed accompanying National Strategies that summarised a range of effective pedagogic approaches and prescribed a minimum set that schools and teachers should implement.

At the more specific level of schools facing challenging circumstances, New Labour unleashed a battery of funded initiatives aimed at school renewal for social equity. The Excellence in Cities programme sought to share capacity across urban schools for teaching, learning and community engagement. The Leadership Incentive Grant aimed to strengthen leadership in schools through collaborative professional development and mentoring. The Leading Edge Programme (originally Beacon schools) connected high performing schools with (usually) lower achieving partner schools with the objective of sharing innovations in teaching and in tackling barriers to learning. The list went on. The unifying thread was a significant commitment to collaboration between schools for mutual improvement. This might have appeared contradictory to the broader approach of market-led competition, but this was New Labour and its “Third Way” philosophy that prioritised eclectic pragmatism over ideological chastity. Thus, the forces of market competition, external standards and Government regulation of minimum floor targets for student attainment were combined with collaboration, the sharing of best practice and increasing professional status for school leaders.

The Government claimed system-wide success, for instance, “in narrowing the gap between high performing and worse performing schools . . . mostly because of our zero-tolerance to failure” (Jim Knight, Minister of State for School Standards, 2007). Yet, whilst a range of schools in challenging circumstances has improved faster than the national average, and this should be celebrated, socio-economic disadvantage remains a key determinant of educational achievement. Moreover, whilst there are now just over 250 schools in Special Measures, half the number of 1997, there has been a relatively continuous supply of schools over the decade entering this formal, externally imposed, improvement category.

Of course, sustaining improvement, achieving reliability and renewing schools before their performance peaks are difficult. There is a range of usual suspects: lack of know-how, change fatigue, complacency, unforeseen shocks, a number of key leadership retirements and no succession plans. The first few turns of a downward spiral can begin. In most cases the commitment and experience of staff and the social capital of the community can arrest or conceal decline (Elmore, 2004). However, there is also a set of structural forces that may act against such agency: the impacts of

market-driven competition on fragile institutions (Lamb, 2007), falling rolls due to demographic changes (Taylor, Gorard, & Fitz, 2000) and the more general difficulty of sustaining high standards in contexts of social deprivation (Lupton, 2005; Thrupp, 1999).

Where such factors lead to a fall in results below national floor targets, a sequential response is laid out by the national accountability system in England. For some schools this external intervention is the wake up call they needed (NAO, 2006). For others it can lead to more superficial change or, worse, a longer term slide into “sink school” status (Taylor et al., 2000). In such circumstances, a key question is whether there are alternative responses to low attainment that are capable of improving teaching quality for students through more effective methodologies. In other words, what are the alternatives to intervention by central Government for achieving sustainable and higher valued-added performance? In addition, in contexts where the historical fortunes of several local schools may have been inversely related, can renewal become more mutually beneficial to both schools?

A potential answer may lie in a set of professional practices emerging in England and elsewhere¹ that have been termed “system leadership” (Fullan, 2004; Hopkins, 2007; NCSL, 2006). The guiding principle of system leadership can be proposed as “working for the success and welfare of students in other schools as well as one’s own” (Hopkins & Higham, 2007). This, it seems, is not the same as the on average four to five collaborative activities in which schools in England are now involved (Hill, 2006). Instead, system leadership implies a significantly more substantive and sophisticated engagement with other schools. Take for instance the school in Special Measures. Ofsted (2006) judges that poor leadership and poor teaching are the two main reasons behind such a school’s inadequacy. Strong leadership is thus vital to turn the school around, and yet it is often such schools that are the least able to attract suitable leaders. Informal collaboration may provide some assistance. Yet for access to well-developed school improvement intelligence and leadership best practice, as well as to assistance in refining these practices into their own context, the school may be better served by a sustained engagement with an experienced leader and the wider capabilities and capacities of the leader’s school.

This chapter is concerned with how such wider system working by experienced school leaders might provide alternative solutions to problems that have traditionally been the responsibility and preserve of the central apparatus of the state. The focus is on the formal role of Executive Headship that is defined here as the leadership of two or more schools that have entered into a support Federation in which a lead school works to improve a partner school (or schools).

¹The federative model is common amongst primary schools in the Netherlands. There are currently around 7,000 primary schools in the Netherlands of which 80% (5,600) have one governing board for two or more schools. The average size of these federations comprises 11 schools, with 237 staff members and 2,471 pupils (NCSL, 2006).

Federations

The power for schools in England to federate was conferred by legislation in 2002 (DfES, 2004). This allowed up to five schools to create a single governing body, pooled budgets and common management structure, effectively making one leadership group accountable for two or more schools. Such arrangements have become known as “hard” federations. In practice, the legislation extended and formalised a range of pre-existing professional practices, some of which were developed out of necessity by small rural village primary schools clubbing together to ensure survival whilst retaining their own autonomy. These looser structures have become known as “soft” federations. The strength of the legislation is that it allows for a range of soft and hard federative forms to be developed in different contexts and to serve different purposes. The most common of these include raising student attainment, innovating and sharing resources and/or delivering curricula or welfare provision that one school alone cannot.

The focus here is on hard federations that seek to raise attainment in low-achieving schools. This usually occurs between a higher value adding “lead” school and a low-performing “partner” in need of support. We term these “hard support federations” (after Potter, 2005). Since the 2002 legislation, it has become gradually more common for such hard federations to be considered as an effective means to support and renew low-achieving schools. There is little prescription, guidance or professional development on how these support federations should or could be most effectively undertaken. As such, Executive Heads, other senior leaders and Governing Bodies, often in conjunction with their Local Authority, have brokered, negotiated and developed their own locally specific approaches. A range of models is being developed, yet there is to date only a small and emerging research literature (Ainscow, West, & Nicolaidou, 2005; Harris, Brown, & Abbott, 2006; Higham & Hopkins, 2007; Lindsay et al., 2007; NCSL, 2006; Potter, 2005) and thus no well-developed analysis on how hard support federations are being organised.

In seeking to contribute to this literature, this chapter analyses the key common practices and characteristics of six hard support federations. Four of these were between one lead and one partner school. One was between a lead and two partners. In the last, the lead had had three partner schools, two of which had recently migrated out of the support relationship. All the federations included only secondary schools. In most cases, the Local Authority had been a lead or supportive partner in working to help broker the federation as part of its own response to low attainment.

A Framework of Practice

Each federation was committed to significant change in teaching practice and school ethos in the partner schools, based on a deeply held set of principles. These commonly included a core belief that every pupil can achieve high standards; every pupil should be working towards explicit targets in each subject; every teacher should use

assessment, diagnosis and data to inform their planning and evaluate their impact on pupil performance; there should be an awareness of underperformance and clear improvement priorities; as well as a strong commitment to community involvement.

Perhaps the greatest challenge to achieving these improvements was the contexts in which rapid transformation was attempted. Not only was there usually a legacy of very low student attainment, low expectations and broader social deprivation, but also there was not always agreement in the partner school that a federation was required and so pockets of palpable resentment could often be found. Such resistance appeared at odds with research findings that point to voluntarism, equality and open learning relationships as essential ingredients in successful school partnerships more generally (Arnold, 2006; Spender, 2006). However, in the sample we discuss here, there appeared to be (at least) four central aspects of a hard support federative approach that were significant to overcoming resistance and achieving improvement in the partner school(s) or, conversely, to the stalling of progress. These are set out in turn.

Lead Schools

The internal capacity and capability for improvement within the lead school appears to be a prerequisite for success. Several points emerged. First, there was often a recent history of significant whole-school improvement in the lead school. In several cases this had occurred in the same community or a similar socio-economic context to that of the partner school. This was a strength and lent greater credibility. In other cases, partner school staff were more likely to explain away the lead school's achievements in terms of higher prior student attainment rather than acknowledging the impacts of renewal in teaching, learning and school organisation. This may be linked to more partner school staff started to act as blockers to change. Second, the lead schools in many of the federations had developed a clear programme for their own school improvement with high-quality learning environments and outcomes in a majority of departments and robust and effective management systems. Where this did not occur, progress in the partner appeared slow. For instance, in one case a radically new model for renewal had been introduced across the federation as it evolved from a soft to a hard support structure under a new Executive Head. The model focused on a project-based learning curriculum, widespread use of technology and large flexible learning spaces instead of classrooms. There was therefore less clear and proven expertise, practices or systems to export from the lead school or against which progress in the partner could be benchmarked. A variety of innovation occurred, but with mixed success. Third, nearly all the lead schools had had experience of working with and into other schools. Their staff had gained experience of discussing and clarifying their own curricular and pedagogic strategies. Middle leaders were often capable of taking on coaching and mentoring roles. Senior leaders were skilled at managing boundary relationships, gaining and creatively deploying additional funding and organising their own school to interface with others.

Leadership Models

Each federation was characterised by a strong and resilient leadership team, a judgement emphasised by Ofsted inspections where these had recently taken place. In this context, two main senior leadership models had developed. In the first, the model was of an Executive Head deeply involved in the day-to-day leadership of both schools and working in unison with an Associate Head based in the partner school. The Associate role can best be described as a very senior Deputy. This model was more common in federations between one lead and one partner. In the second model, the Executive Head had taken on a more strategic and less operational role. Each school, including the lead, had appointed a Head of School. The Executive Head worked closely with each, but behind the scenes, with one suggesting he would have failed if students started to identify him as their head teacher. This model was more common in federations of two or more partner schools.

Both models, however, shared several key characteristics. First, in every case significant changes were made in the partner school's senior leadership team. There were no examples where the Executive Head worked successfully with the original head teacher who either resigned or less commonly agreed to move into a deputy post in the lead school. Their replacement was often either a deputy from the lead school or an external senior leader known to and recruited by the Executive Head. Second, Executive Heads were clear that they were not "super-heads" who achieved through their own skills alone. Instead they sought to orchestrate the skills of others, drawing them into the decision-making process and in doing so building the capacity of others to take on wider leadership roles. Harris et al. (2006) refer to this as the "lateral expansion of existing leadership capabilities" with the Executive Head taking responsibility for developing a distributed leadership team capable of transforming practice. However, importantly in our respondent schools, developing this capability often meant (at least initially) the colonisation of a number of senior and middle management posts by lead school staff (on promotion, secondment, or both). This was seen as a quick and effective means to build and deploy trust and capacity in key posts of the partner school and to ensure a clear understanding of the improvement approach and a commitment to its implementation.

Entry into the Partner School

The preparation carried out immediately prior to and during the first months of the federation was seen by leadership respondents as being crucial in building strong federation foundations. There were two highlights. First, there needed to be a clear mandate and ground rules agreed by all key stakeholders often in the form of a written contract. This was usually brokered by the Local Authority and included clear processes of accountability, improvement targets, governance arrangements, defined leadership autonomies and resources and, where appropriate, an end date and exit strategy. Bedding these down almost always took time, but nearly all the Executive Heads stressed the importance of being able to return to their mandate

when the going got tough. Second, there was a need for diagnosis in the partner school. As Harris et al. (2006) have shown, partner schools frequently have detailed long-term plans, but “what is often missing is a clear link between self-review, action, impact and evaluation” (p. 404). The new leadership team often instigated an immediate external inspection or more informal internal review to audit departmental strengths and weaknesses and benchmark future progress. Staff, student and parental surveys were often also undertaken. The findings, in conjunction with relevant national and comparative value-added data, were used to identify and target improvement strategies from across the federation. In a number of cases this included the transfer of good practice from the *partner* school to the lead. Often this was from one or two subject departments that had maintained good teaching strategies, curricular resources and student outcomes in spite of the overall school context. Where this did occur it was often well publicised to partner school staff to emphasise the joint and “objective” features of the approach.

The Improvement Process in the Partner School(s)

Finally, and in the heartland of the federative mission, there was inevitably a range of practices that constituted the actual improvement process in each different context. In earlier work on Federations with David Hopkins (Higham & Hopkins, 2005), we found it useful to summarise the core common components of a federative improvement process with reference to Leithwood and Riehl’s (2003) framework of three leadership practices.

To summarise, first *Setting Direction* concerned the leadership work necessary to build commitment to a vision of every learner reaching their potential. In these federations this was seen to be combined in the partner schools with a sense of real urgency coupled with clear practical steps for change, usually focused on teaching and learning, curriculum and behaviour. Second, *Developing People* in the federations often included the introduction of “standard operating procedures” in teaching and learning, against which partner school staff were held accountable and training needs were identified (with appropriate professional development provided through mentoring and coaching). Lead school staff often played a key role here by directly supporting the delivery of new practices particularly in core subjects and Assessment for Learning. In several cases, this developed in the longer term into a collaborative professional learning community in which lead and partner school staff worked collegially to establish new practices and innovations. Third, *Developing the Organisation* in these cases referred to implementing effective school systems to ensure reliability in for instance behaviour, student tracking, pastoral care, staffing and timetabling (that often replaced a reliance on a few individuals) (Potter, 2005). There was also often a focus on improving the environment with an immediate clean-up campaign and the medium term upgrading of poor quality buildings.

Throughout this work, the actual approach taken to put the lead school’s knowledge and experience at the service of the partner school’s improvement was of importance. In examining the more general transfer of good practice between

schools in England, Fielding et al. (2005, p. 72) argue that instead of “transfer” the term “joint practice development” should be used as it “explicitly articulates a more learner-centred approach and provides a better description of what teachers aspired to and what they actually achieved together”. Their research also suggests that the “‘transfer’ model seems to be associated with delivery of ‘validated’ packages of pre-formed practice seen by others to be good for the recipient” but which has “little validity amongst teachers” (ibid). To a large extent, however, the transfer model appears to have a strong fit with the majority of federations in our sample. Moreover, the reality was often more nuanced than Fielding et al.’s dialectic. Indeed as Potter (2005, p. 2) argues, in the specific context of support federations, the “principles and basic standard operating procedures are replicated” in the first stages of the federation, and “more sophisticated elements of practice are co-constructed or customized” in later phases.

In this sense, the transfer of key elements of practice, such as management, behaviour, curriculum and teaching, might be best described as *highly specified frameworks capable of being refined into context*. To be effective such refinement appeared to demand committed leadership, well-resourced management, coaching in the partner school by lead school teachers and clear communication about the overall approach being pursued. In cases where these were lacking, problems emerged. For example, where leaders had not built a clear understanding that a range of practices would be replicated, lead school middle leaders reported frustration at having planned refinements that were never implemented and partner school staff reported feeling threatened and of working to preserve their own approaches.

A number of federative approaches also met with strategic and/or implementation difficulties across and beyond the four areas we have reviewed. Indeed, most of the Executive Heads stressed the importance of developing a culture of openness and trust that was above all blame-free so that lessons really could be learnt from problems and cul-de-sacs. Many of the federations were successful in achieving this professional learning ethos. In a small minority, the schools’ original approaches remained dominant over a common federative drive and, as a result, trust and in some cases progress stalled. Given this range of experience a broader question concerns the overall outcomes and benefits for students of federative working.

Outcomes and Benefits

In reviewing the existing literature on Executive Heads and a range of federative forms, Glatter and Harvey (2006, p. 4) argue that the “clearest conclusion to emerge for us is the paucity of evidence available”. The subsequent evaluation of the Government’s Federation Programme provided some additional evidence (Lindsay et al., 2007). The Programme encompasses 37 federations – pilot-funded over 3 years – that vary across the country in terms of size, purpose and (hard to soft)

federative form.² The study found that nearly all the head teachers judged their federation to have been at least “somewhat” successful in raising achievement over 3 years, but only a quarter suggested they had been “very successful”. No statistically significant differences were found between federative schools in the programme and non-programme schools nationally in terms of pupil achievement at 11, 13 or 15 years old (with the latter measured in terms of the percentage of pupils achieving 5 or more A* to C grades at GCSE). At the wider measure of GCSE achievement (that of 5 A* to G grades) there was a higher percentage of pupils in programme schools, recorded 93.6%, compared to 91.3% for non-programme schools. Unfortunately, in the specific case of hard support federations, two of the evaluation’s three case studies declined to continue in the evaluation so that no cross-case conclusions could be made.

In many senses therefore the evidence-based jury is still out on federations. Further research is required and not only in terms of outcomes, but also more simply in terms of the overall number and distribution in existence. Hopkins and Higham (2007) report from a “mapping exercise of the System Leadership landscape” that there may already be more than 100 federations of all forms in existence in England. Yet, stemming from questionnaire responses from Local Authorities, this finding needs to be corroborated with the identified schools themselves.

In the sample reported on here, student attainment data were available for all the lead and partner schools as each had completed at least one full academic year within a federation. The impact on student attainment in each partner school at the benchmark of 5 A* to C grades at GCSE is set out below in Fig. 1 (in which the first entry for each school represents the year preceding the creation of a hard federation). This demonstrates an impressive trend towards significant improvement. In summary, eight out of nine partner schools had achieved improvements; in each case this had resulted in at least another 10% of the student cohort reaching the GCSE benchmark; in many there had been an almost doubling of student achievement in

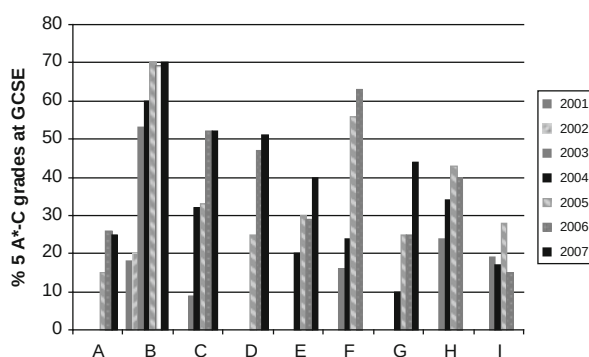


Fig. 1 The percentage of partner school students achieving at the GCSE benchmark (with partner schools represented as A to I)

²The 37 federations receive varying levels of Government funding amounting to £16 million overall. Half contain schools that are “in Ofsted categories, low-attaining or under-performing” (NAO, 2006).

the first year; in several attainment had increased from under 20% to over 50% over a 2- or 3-year period. In addition, two partner schools had already finished their federative association with the same lead school and both had subsequently sustained student attainment. For instance, the highest achieving school in Fig. 1 exited its federation after the 2005 results and sustained that level of attainment in both 2006 and 2007.

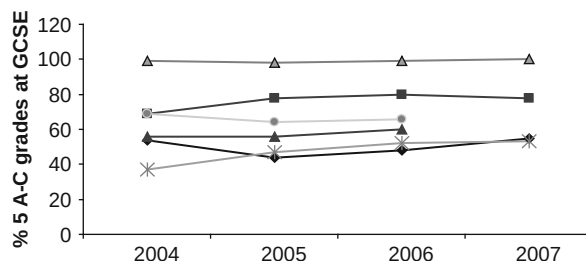
The only two partner schools not to raise student achievement were part of the same federation. In this case, however, a soft support federation had already been in existence during the previous 2 years (for which results are included in the graph in Fig. 1). In this longer analysis, one partner had made significant progress whilst the other had not. The latter school – clearly identifiable as the lowest achiever in 2006 – had in fact avoided re-entering Special Measures in 2007. A reprieve was based directly on the evidence the Federation had been able to provide Ofsted both on the level and focus of federative support and on the predictions for progress that year.

In the majority of the federations these increases in student attainment were dovetailed with progress on student attendance, student welfare and, where it had previously been of concern, behaviour (as reported by staff). Overall, for students, there was a strong sense that real renewal had taken or was taking place. These findings are consistent with two recent research reports that have a degree of interpretation on outcomes for students (NCSL, 2005a; Potter, 2005). Potter reports that “it is the firm belief of all interviewees that all schools, lead as well as partner, have made more rapid progress in federation than they would have alone” (ibid, p. 1). The NCSL (2005a, p. 27) argues that the “positive outcomes for the partner schools were very evident . . . in terms of: Speed of transformation; . . . Improved behaviour and attendance; A rigorous focus on learning and achievement; Enhanced school community confidence in the potential for the school to secure improvement”. It is however recognised here that this chapter’s sample displays the characteristics of mainly successful hard support federations. There is a need for further work to look for and at instances where federations have failed or dissolved. This may provide a different set of common characteristics, high on the list of which we may anticipate a lack of trust, communication and distributed leadership capability.

Finally, it is noted that standards of student attainment were sustained in each of the lead schools over the period of the federative leadership. This is demonstrated in Fig. 2 below in terms of GCSE benchmark. Each school also sustained a contextual valued score of above 1,010. This is important given, as NCSL (2005b, p. 4) argue, “the demands on the lead school can be substantial [so] it is essential that it has the capacity to provide support without putting the education of its own pupils at risk”.

One may speculate that these schools, particularly those at lower levels of attainment, may have been better able to sustain their own progress off the plateau (identified in Fig. 2) if they had not been leading a hard support federation. This is a hypothetical argument about the opportunity cost of deploying their capacity for improvement elsewhere, for which there was some qualitative evidence. The majority reported a range of professional development benefits for their own staff, yet it might be at the level of senior leadership that the greater opportunity costs are experienced.

Fig. 2 The percentage of lead school students achieving at the GCSE benchmark



Implications for System-Wide Renewal

In the past 20 years, England has seen a remarkable movement from the classroom as a “secret garden” to significantly higher levels of external accountability, competition and more latterly self-evaluation and collaboration. During this evolution it has become widely agreed that very low achieving schools, especially those in challenging circumstances, usually require external support to improve (Harris, Brown, & Abbott, 2006). This is an argument given real clarity by Elmore’s (2004, p. 253) research into what he says others call “failing schools”:

Teachers were generally doing what they knew how to do, rather than doing what was necessary to produce the results they were trying to produce. In absence of specific guidance . . . they would, other things being equal, continue to do what they regarded as ‘good teaching’. In order to get different results, they would have to learn to do something they didn’t know how to do, and in order to do that they would have to have access to skills and knowledge that would help them understand and enact those practices in their classroom. . . . The systems exhort schools and localities to provide support and professional development for schools in need of help, but don’t actually invest in the infrastructure required to make sure that *that help gets to the right schools at the right time with the right technical expertise* (emphasis added).

The challenge Elmore presents is clear. Yet it is one the dominant paradigm of state-led challenge and accountability combined with an often postcode lottery of support has never been adequately designed to fulfil. In this context, federations, developed appropriately to context, may offer a glimpse of a new methodology for tailoring professional expertise to specific local need. Certainly the sample of hard support federations present here was, as a whole, already achieving deep and authentic renewal in teaching quality, institutional culture and student outcomes in contexts of historically low attainment and deprivation. As was also clear, this had been predicated on strong and distributed external leadership and the wider capabilities and capacities of a lead school.

As such, proponents of a wider application of support federations (or similar approaches) to the larger scale needs of 250 schools in Special Measures (and at least as many low-attaining schools) must firstly identify a cadre of ready and willing leaders and lead schools. The National College for School Leadership is in the vanguard of such a search. In advice on “complex schools” to the Secretary of State for Education, the College argued that support federations and executive heads were an effective model to turn round low-achieving schools (NCSL, 2005b).

Subsequently, the Government and the College have initiated a new status group of National Leaders of Education (NLEs) and respectively their so-called National Support Schools (NSS). The College states that the “prime focus of the work of NLEs and NSSs is to assist the client school in making significant progress in emerging from an Ofsted category – or in avoiding going into one” (NCSL website, July 2007). Recruitment of these NLEs and NSSs is already taking place. The target is for 500 by 2010, and at the last count about 200 will have been accredited by the summer of 2008.

How should we interpret these developments? There are two main and opposing future narratives. The first looks to a new era of “school led reform” in which informed professional judgements substantially replace state prescription on the basis of more sophisticated engagements between schools. This would include but not be limited to providing professional, as opposed to state, intervention for improvement. It would also, in the much wider sense, be led by the sharing of expertise, facilities and resources, specialisms, innovation and creativity, leadership, management and support through specific partnerships and across wider networks (Fullan, 2004).³ These might develop from, for instance, the NCSL’s network learning communities, the Specialist Schools and Academies Trust (SSAT’s) professional networks and more local collaborative and federations. The role of NLEs, NSSs and an increasing pool of other leaders would be to act as System Leaders, with the commitment and capacity to work for sustainable improvement both in their own schools and for the wider system, driving systemic renewal from within (Hopkins & Higham, 2007). For some, it is also “fundamental to this approach that the problems – and solutions – [for renewal] should be those of the schools themselves, rather than being identified by others” (Hannon, 2007, p. 137).

This is the dividing line, for the second narrative sees NLEs and NSSs not as System Leaders but as System Managers. The argument is that the new raft of nationally developed, funded and administered leadership roles, such as Consultant Leaders, School Improvement Partners (SIPs) and Mentor Heads, are in fact only extensions of the state’s prescriptive arm. Their role is less informed professionalism and more local management of national performance targets. Such critiques point to the burdensome accountability functions of SIPs; to the alleged new “independence” for state schools as being focused on governance structures rather than curriculum or pedagogic freedoms; and to covert state pressure. Indeed, there is qualitative evidence that beyond its own sponsored pilots the Government is pressuring Local

³The rationale for such national systemic working is well articulated by Michael Fullan. In *Systems Thinkers in Action: Moving beyond the standards plateau*, Fullan (2004) argues for the importance of school leaders acting as agents of change for the system as a whole, through collective commitment and the opportunity to engage in a wider arena. Such engagement might come through forms of lateral networking or in specific capacity-building roles. But for Fullan the important factor is the opportunity for professionals “to interact beyond their own situation in order to change the larger context” (p. 11).

Authorities to federate low-achieving schools with other potential lead schools. The threat is that Authorities will otherwise miss out on the next phase of multi-million pound capital investments promised in the Building Schools for the Future programme. In this way, “what began as an intention to develop leaders to innovate and *transform* the system has been reduced to a capacity building systems management strategy” (Carol Whitty, personal communication, 10 July 2007.)

In reality, both narratives are probably already occurring in different contexts across the country. There are, and will remain for the foreseeable future, school leaders working between the contradictions of Government-led reform and locally-led renewal. There is however no mistaking a broader trend towards school collaboration to which both forms of system working contribute. These contemporary moves have several roots. First is the increasingly widespread acknowledgment that self-managed schools operating independently in educational markets do not necessarily deliver widespread progress (Ainscow et al., 2005). Second, progress in market-dominated systems is least likely to occur in poor urban areas where, as Lamb (2007) has shown in the case of Australia, a concentration of students from disadvantaged backgrounds can become the residue of others’ advancement – left behind in smaller schools drained of resources. Third, schools are inevitably interdependent, a fact perversely clarified by educational markets most notably in terms of admissions and exclusions. Fourth, moral purpose remains a powerful motivational force within the teaching profession. Fifth, there are real tangible benefits to be gained from effective collaboration. As we have seen in the extreme case of hard support federations, these roots can also be the foundation for schools to work together for greater social equity by amongst other things taking more joint responsibility for more of the students in their locality.

In this way, our findings point to the very real potential for federations to break local cycles of school decline by renewing low value-added institutions whilst simultaneously demanding sustainable high standards in their lead partners. This stems not only from joint responsibility, but also from a collaborative organisational structure in which to transfer effective practice, widen student learning pathways, deliver joined up children’s services, target students at risk, strategically manage falling roles, insure against unplanned principal succession and/or recruit and retain staff across a wider career ladder. Yet if we are to realise these benefits and enable schools to work together to find new ways not only to “compensate for society” (Bernstein, 1970) but also to change contexts and raise aspirations, there are other implications of which we must take heed. In particular, the practice of system leadership seems less likely to provide new solutions if it is prescribed or enforced. For instance, in the sample presented here progress was often contextually negotiated, and where common characteristics did exist these would appear to demand at the very least significant refinement into other circumstances. This in turn would be predicated on professional decision making to develop other fit-for-purpose federative models.

At its core, this is an issue of re-establishing Government trust in the education professional that has been gradually but steadily eroding over the past three or

more decades. This is a long-term project that demands reciprocal capacity building in for instance self-evaluation and professional standards, but it highlights the need now for a new compact between school leaders, local government, national agencies and central Government. In particular, this concerns a rebalancing from challenge towards support for school leaders, so that in return for the more effective leadership of learning schools gain less centrally prescribed priorities, less short-term initiatives and less bureaucratic demands.

It is of course important not to over claim what is possible. We are reminded by Geoff Whitty (1997, p. 151) not to resort to “false optimism, [by] exaggerating the extent to which local agency can challenge structural inequality”. Federations are not a panacea. As has been shown, they are above all a means to improve the quality of leadership in pursuit of good teaching and learning. There are also complexities to manage. For instance, in conjunction with other new structures such as Educational Improvement Partnerships and Trusts, Federations will create an increasing distance between the governance of some schools and the influence of Local Authorities (and hence local democratic accountability). It remains to be seen how strategic local leadership of both standards and equity can be assured across and between these increasingly independent groups of state schools. Yet this is vital, because it would be truly perverse to bring new meaning to the concept of a cycle of decline by replacing high- and low-achieving schools with a national system of high- and low-achieving federations.

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Every School a Great School – Realising the Potential of System Leadership

David Hopkins

For a country to succeed it needs both a competitive economy and an inclusive society. That requires an education system with high standards, which transmits and develops knowledge and culture from one generation to the next, promotes respect for and engagement with learning, broadens horizons and develops high expectations. We want to ensure all young people progressively develop the knowledge, understanding, skills, attitudes and values in the curriculum, and become effective, enthusiastic and independent learners, committed to lifelong learning and able to handle the demands of adult life. This is a pretty good description of an educational system committed to ensuring that every school is at least a good school and that most are on the journey to becoming great.

This aspiration reflects the now-almost global concern over standards of student learning and achievement which has led since the mid-1990s to a renewed interest in large-scale change. Many national and local governments began to advocate programmes commonly called “performance based reform” in an effort to raise standards across local and regional boundaries. The general approach was to set targets for performance and then hold schools responsible for meeting them. This fairly crude approach to raising standards predictably had little positive impact on student achievement (Leithwood, Jantzi, & Mascal, 1999). Although the impact of large-scale change on student achievement is notoriously fickle, the fact that these reform strategies neglected to focus on teaching and learning and capacity building must have contributed to their inability to impact positively on student achievement. The argument being made in this chapter is that unless reform strategies address the context of teaching and learning, as well as capacity building at the school level, the expectations societies have of their educational systems will never be realised.

In making the case in this chapter for the potential of systemic reform to enable every student to reach his or her potential and for every school to be great, and focusing on England, I will stress on the following:

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- refer to the experience of primary schooling in England as a paradigmatic example of the transition from large-scale to system-wide reform;
- clarify the central policy conundrum of balancing national prescription with schools leading reform;
- identify the four key drivers that underpin system change;
- propose the concept of and model for system leadership;
- consider the internal and external aspects of system leaders; and
- suggest a model for coherent system reform.

The Case of Primary Schooling in England

Although the reform effort in England has involved both primary (elementary education for 5–11-year-olds) and secondary schools (ages 11–16 or 11–18 for those schools with “sixth forms”) the focus of this section will reflect the performance of students within the 5–11-year age range during the first two terms of the New Labour government. The reason is because it is here where the link between reform strategy and student performance is most clearly seen.

England has since 1997 taken the opportunity to achieve high standards across an entire system of 24,000 schools and over 7 million school students. In order to move from the evidently underperforming system of the mid-1990s the government put in place a policy approach best described as “high challenge, high support”. The way in which the principles of “high challenge, high support” are turned into practical policies to drive school improvement is summarised in Fig. 1 (Barber, 2001, p. 4).

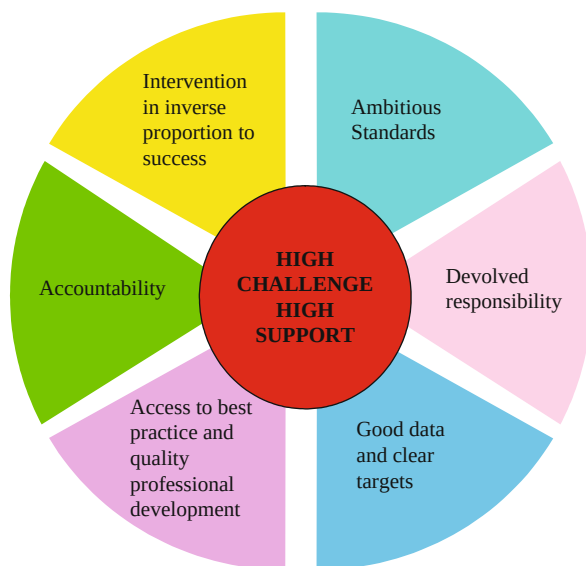


Fig. 1 The “high challenge, high support” policy framework

Table 1 Complementary policies to drive school improvement

<i>Ambitious standards</i>	<i>Access to best practice and quality professional development</i>
High standards set out in the national curriculum	Universal professional development in national priorities (e.g., literacy, numeracy and ICT)
National tests at age 7, 11, 14, and 16	Leadership development as an entitlement
<i>Accountability</i>	<i>Devolved responsibility</i>
National inspection system for schools and LEAs	School as a unit of accountability
Publication annually of school/district level performance data and targets	Devolution of resources and employment powers to schools
<i>Good data/clear targets</i>	<i>Intervention in inverse proportion to success</i>
Individual pupil-level data collected nationally	School improvement grant to assist implementation of post-inspection action plan
Statutory target-setting at district and school level	Monitoring of performance by LEA (district)

The policies for each segment (starting at 12 o'clock position) are set out in the chart below (Table 1). The important point is that the policy mix was complementary and mutually supportive (Barber, 2001, p. 4).

The positive influence of the National Literacy and Numeracy Strategies on student performance attracted worldwide attention. A graphic illustration of the impact that the strategies have had on the system as a whole is seen in the following series of maps. Figure 2 below gives an indication of the number of local education authorities in England in 1998 where 75%+ of 11-year-old students were reading at their chronological age. This by itself provides sufficient justification for introducing the strategies (the map for numeracy was similar). The situation in 2002 is illustrated in Fig. 3 and in 2004 in Fig. 4. The picture for numeracy in 2002 and 2004 was also similar. Although there is still progress to be made the transformation of the national picture in 6 years is striking.

The analysis of this success is however not entirely straightforward. Following an initial and significant increase over the first 3 years there was a levelling-off performance for the next 3 years, and only recently has further progress been made. This is a trend that has been noted in virtually every large-scale reform initiative. What usually happens is that early success is followed by a stalling in progress and a subsequent lack of commitment to the programme of reform.

Let us now draw from this narrative a general lesson for large-scale/systemic reform. It is in the logic of large-scale reform that an early narrow focus on key skills produces an initial rapid increase in standards. To move beyond this plateau of achievement requires a system-wide school improvement approach that can deliver continuous improvement beyond the early gains. In other words, large-scale reform has characteristically focused on short-term objectives, whereas systemic change envisages a multi-phased process that ensures that early gains do not level off, but continue to improve as a consequence of employing strategies that at the same time

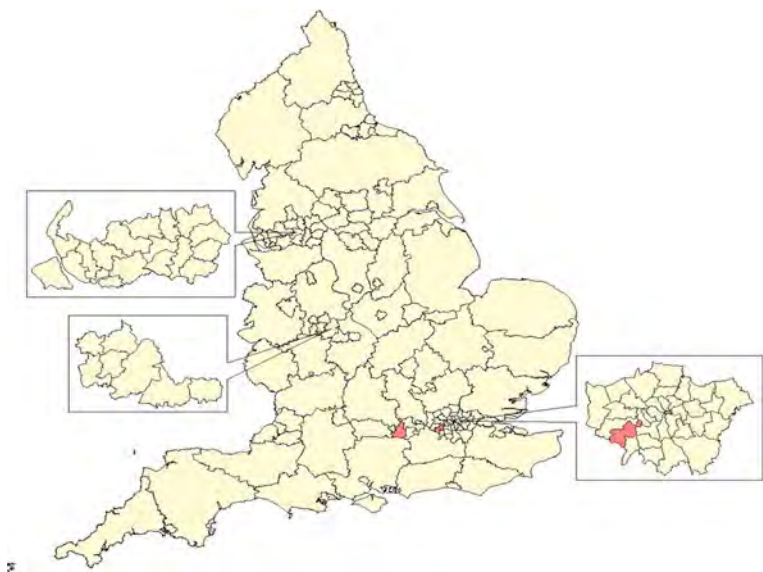


Fig. 2 LEAs achieving 75%+ level 4 English 1998

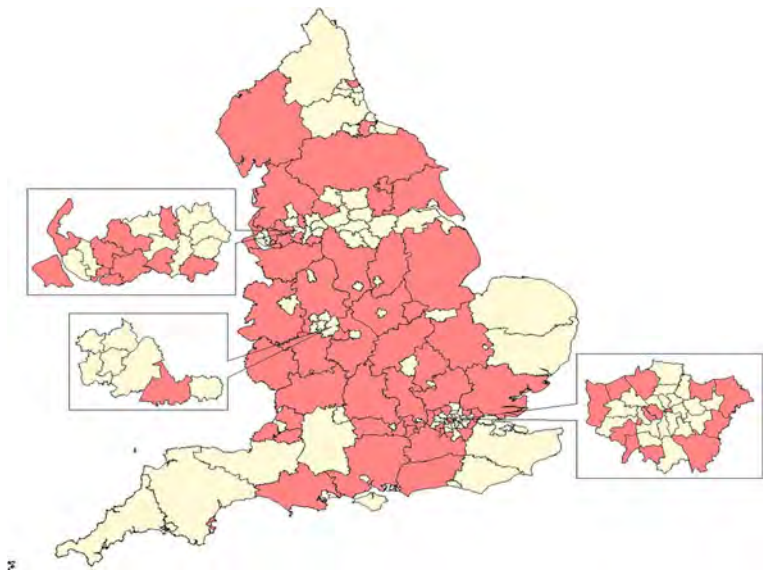


Fig. 3 LEAs achieving 75%+ level 4 English in 2002

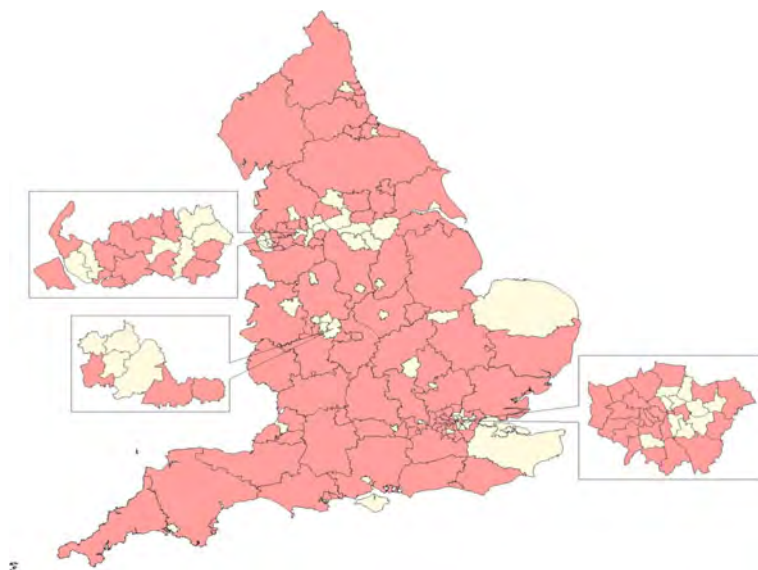


Fig. 4 LEAs achieving 75%+ level 4 English in 2004

raise achievement and build capacity. Still using the English experience as the point of departure, we explore the implications of this observation in more detail in the following section.

The Crucial Policy Conundrum

The argument I am making is that there is a growing recognition that schools need to lead the next phase of reform. Using the analysis of the English experiment with large-scale reform the argument goes something like this:

- Most agreed that standards were too low and too varied in the 1970s and 1980s and that some form of direct state intervention was necessary. The resultant “national prescription” proved very successful particularly in raising standards in primary schools – progress confirmed by international comparisons.
- But as we have seen, progress plateaued in the second term and whilst a bit more improvement might be squeezed out nationally, and perhaps a lot more in under-performing schools, one has to question whether the prescription still offers the recipe for sustained large-scale reform in the medium term.
- There is a growing recognition that schools need to lead the next phase of reform. But if the hypothesis is correct, and this is much contested terrain, it must categorically not be a naïve return to the not-so-halcyon days of the 1970s when a

thousand flowers bloomed and the educational life chances of too many of our children wilted.

- The implication is that we need a transition from an era of prescription to an era of professionalism – in which the balance between national prescription and schools leading reform will change.

However, achieving this shift is not straightforward. As Michael Fullan (2003, p. 7) has said, it takes capacity to build capacity, and if there is insufficient capacity to begin with it is folly to announce that a move to “professionalism” provides the basis of a new approach. The key question is “How do we get there?”, because we cannot simply move from one era to the other without self-consciously building professional capacity throughout the system. It is this progression that is illustrated in Fig. 5 and discussed at length in *Every School a Great School* (Hopkins, 2007).

It is worth taking a little more time unpacking the thinking underlying the diagram. This is because it is fundamental to an understanding of the argument being made in this chapter. Five points need to be mentioned:

- First, this is not an argument against “top down” change. It is clear that neither “top down” nor “bottom up” change work just by themselves; they have to be in balance – in creative tension. The balance between the two at any one time will of course depend on context.
- Second, it must be realised that in England in 1997 it was obvious that more central direction was needed. This reflects the balance towards national prescription as shown in the left-hand segment of the diagram. If we assume that time moves from left to right in the diagram, then in the case of England it is most probably correct to say that in terms of both policy and practice the balance is currently located in the middle segment of the diagram.
- Third, it should be no surprise to realise that the right-hand segment is relatively an unknown territory. It implies horizontal and lateral ways of working with assumptions and governance arrangements very different from what is generally known now. The main difficulty in imagining this landscape is that the thinking

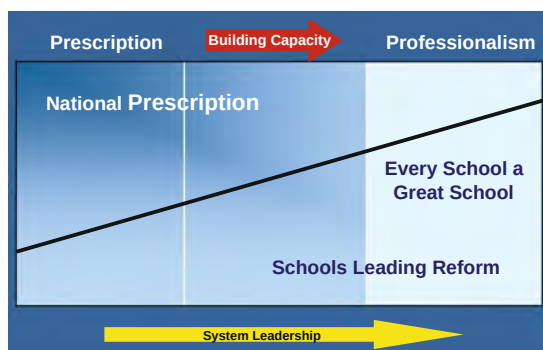


Fig. 5 Towards system-wide sustainable reform

of most people is constrained by their experiences within the power structure and norms of the left-hand segment of the diagram.

- Fourth, which is a point both complex and critical, in terms of the diagram, effective system-wide sustainable reform requires a movement from the left- to the right-hand segment. The left to right movement is necessarily incremental as it builds on, rather than contradicts, the success of previous phases. Yet, and this is the crucial point, the achievement of creating the educational landscape implied by the right-hand segment represents a step change from what has gone before. Yes, the difference between left- and right-hand segments represents a radical change or a transformation; but the process or journey from left to right will be incremental, building on past success and re-shaping in light of learning from experience. It is in this way that the language of school improvement (logical incremental steps building on past experience) and transformation (a qualitatively different state from what was known previously) is reconciled.
- Finally, of course I am not suggesting that one always has to start from the left-hand side of the diagram and move in some sort of uniform way to the right. That is just how it was in England in 1997. Other systems may well be in the middle and need to move left briefly to firm up certain conditions before rapidly proceeding into the right-hand segment. Some may believe that they are already in the right-hand segment. If this diagram has any value it is as a heuristic – its purpose is to help people think rather than tell them what to do.

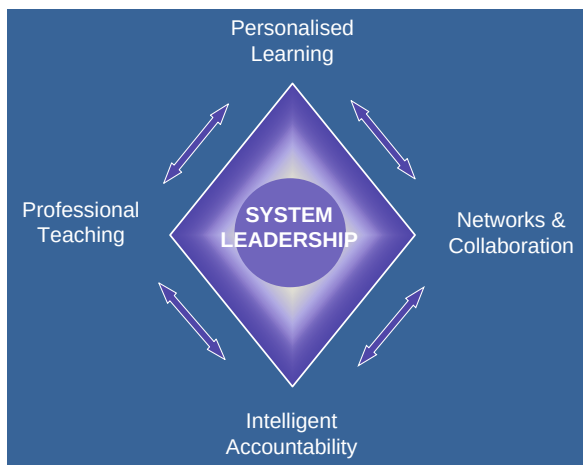
Four Drivers for System Reform

It is important to reiterate here that the transition from “prescription” to “professionalism” is not straightforward. In order to move from one to the other strategies are required that not only continue to raise standards but also build capacity within the system. This point is key. One cannot just drive to continue to raise standards in an instrumental way, one also needs to develop social, intellectual and organisational capital. Building capacity demands that we replace numerous central initiatives with a national consensus on a limited number of educational trends. There seems to me to be four key drivers that if pursued relentlessly and deeply will deliver both higher standards and enhanced professional capacity. These are personalised learning, professionalised teaching, networks and collaboration, and intelligent accountability.

As seen in the “diamond of reform” below (Fig. 6) the four trends coalesce and mould to context through the exercise of responsible system leadership. Before elucidating the concept of system leadership it is instructive to briefly describe each of the drivers.

Personalised learning – The current focus on personalisation is about putting students at the heart of the education process so as to tailor teaching to individual need, interest and aptitude in order to fulfil every young person’s potential. Many schools and teachers have tailored curriculum and teaching methods to meet the needs of children and young people with great success for many years. What

Fig. 6 Four key drivers underpinning system reform



is new is the drive to make the best practices universal. A successful system of personalised learning means clear learning pathways through the education system and the motivation to become independent, e-literate, fulfilled, lifelong learners. Obviously personalised learning demands both curriculum entitlement and choice that deliver a breadth of study and personal relevance, as well as emphasise the development of the student's meta-cognitive capacity; in other words, "learning how to learn."

Professionalised teaching – Significant empirical evidence suggests that teaching quality is the most significant factor influencing student learning that is under the control of the school. It is also clear that the forms of teaching that promote high levels of student learning vary in some instances quite dramatically from country to country. The phrase "professionalised teaching" implies that teachers are on a par with other professions in terms of diagnosis, the application of evidence based practices and professional pride. The image here is of teachers who use data to evaluate the learning needs of their students, and are consistently expanding their repertoire of pedagogic strategies to personalise learning for all students. It also implies schools that adopt innovative approaches to time-tabling and the deployment of increasingly differentiated staffing models.

Intelligent accountability – Because of the resilience of external forms of accountability, it is often necessary to compensate by increasing the emphasis on internal forms of accountability. The most common approaches would be the use of teacher assessment, bottom up target setting, value added measures of school performance and the school itself holding itself publicly accountable through publishing its own profile of strengths and weaknesses and benchmark comparisons giving a more rounded picture of the schools performance. It is these forms of accountability that (a) allow a sharper fix on the focus of personalisation; and (b) develop the professional skill of the teaching staff involved. As a consequence, when the balance

between external and internal accountability become more even, it also becomes more “intelligent.” The assumption also is that over time, as schools increasingly lead reform, internal forms of accountability will become the more important.

Networking and collaboration – This relates to the various ways in which networks of schools can stimulate and spread innovation as well as collaborate to provide curriculum diversity, extended services and community support. The prevalence of networking practice supports the contention that there is no contradiction between strong, independent schools and strong networks, rather the reverse. Neither is there a contradiction between collaboration and competition – many sectors of the economy are demonstrating that the combination of competition and collaboration delivers the most rapid improvements. Although evidence of effectiveness is still accumulating, it is becoming clear that networks support improvement and innovation by enabling schools to collaborate on building curriculum diversity, extended services and professional support to develop a vision of education that is shared and owned well beyond individual school gates.

Although these key drivers provide a core strategy for systemic improvement, it is system leadership that adapts them to particular and individual school contexts. This is leadership that enables systemic reform to be both generic in terms of overall strategy and specific in adapting to individual and particular situations. It is system leaders who reach beyond their own school to create networks and collaborative arrangements that not only add richness and excellence to the learning of students, but also act as agents of educational transformation.

System Leadership – The Concept and the Model

“System leaders” are those head teachers who are willing to shoulder system leadership roles: who care about and work for the success of other schools as well as their own. In England there appears to be an emerging cadre of these head teachers who stand in contrast to the competitive ethic of headship so prevalent in the nineties. It is these educators who by their own efforts and commitment are beginning to transform the nature of leadership and educational improvement in this country. Interestingly there is also evidence of this role emerging in other leading educational systems in Europe, North America and Australia (Pont, Moorman, & Hopkins, 2008).

The proposition is simple: *If our goal is “every school a great school” then policy and practice has to focus on system improvement. This means that a school head has to be almost as concerned about the success of other schools as he or she is about his or her own school. Sustained improvement of schools is not possible unless the whole system is moving forward.*

The first thing to say is that system leadership as Michael Fullan (2003, 2005) has argued is imbued with moral purpose. Without that, there would not be the passion to proceed or the encouragement for others to follow. In England, for example, where the regularities of improvement in teaching and learning are still not well understood, where deprivation is still too good a predictor of educational success and where the goal is for every school to be a great school, the leadership challenge

is surely a systemic one. This perspective gives a broader appreciation of what is meant by the moral purpose of system leadership.

I would argue that system leaders express their moral purpose through the following:

- measuring their success in terms of improving student learning and increasing achievement, and strive to both raise the bar and narrow the gap(s);
- being fundamentally committed to the improvement of teaching and learning. They engage deeply with the organisation of teaching, learning, curriculum and assessment in order to ensure that learning is personalised for all their students;
- developing their schools as personal and professional learning communities, with relationships built across and beyond each school to provide a range of learning experiences and professional development opportunities;
- striving for equity and inclusion through acting on context and culture. This is not just about eradicating poverty, as important as that is. It is also about giving communities a sense of worth and empowerment;
- realising in a deep way that the classroom, school and system levels all impact on each other. Crucially they understand that in order to change the larger system you have to engage with it in a meaningful way.

Although this degree of clarity is not necessarily obvious in the behaviour and practice of every head teacher, these aspirations are increasingly becoming part of the conventional wisdom of our best global educational leaders (Hopkins, 2007).

Building on these key capabilities, and combining them with the range of identified roles, it is possible to offer a model of system leadership practice that emerges inductively from the actions of our sample leaders. This is set out in Fig. 7 below.

The model exhibits a logic that flows from the “inside-out.”

At the centre, leaders driven by a moral purpose related to the enhancement of student learning, seek to empower teachers and others to make schools a critical force for improving communities. This is premised on the argument already made, that sustainable educational development requires educational leaders who are willing to shoulder broader leadership roles: who care about and work for the success of other schools as well as their own.

It is also clear from our research that system leaders share a characteristic set of behaviours and skills. As illustrated in the second inner ring of the diagram these are of two types. First, system leaders engage in “personal development” usually informally through benchmarking themselves against their peers and developing their skill base in response to the context they find themselves working in. Secondly, all the system leaders we have studied have a strategic capability; they are able to translate their vision or moral purpose into operational principles that have tangible outcomes.

Taken together these two central circles of the diagram reflect the core practice of “setting directions” as noted in the table above.



Fig. 7 A model of system leadership practice

As is denoted in the third ring of the model, the moral purpose, personal qualities and strategic capacity of the system leader find focus in three domains of the school detailed above – managing the teaching and learning process, developing people and developing the organisation.

Finally, although there are a growing number of outstanding leaders that exemplify these qualities and determinations, they are not necessarily “system leaders.” A system leader not only needs these aspirations and capabilities but in addition, as seen in the outer ring of the model, works to change other contexts by engaging with the wider system in a meaningful way. We have included in the outer ring the range of roles identified from the research that focuses on improving other schools, sharing curriculum innovations, empowering communities, and/or leading partnerships committed to enabling all schools to move forward.

The model represents a powerful combination of practices that give us a glimpse of leadership in a new educational landscape. Realising that landscape, however, may also require a bigger shift within the broader education system. We have attempted to describe the nature of this shift in detail elsewhere (Higham, Hopkins, & Matthews, 2009). Taking into consideration the limited space provided

for this chapter, the next sections will focus briefly on the *internal* and *external* aspects of system leadership.

Internal Aspects of System Leadership

A good way of focusing on the *internal aspects of system leadership* is to draw on Leithwood and Riehl's (2005) conceptualisation of the central tenants of successful school leadership. They summarise this as four central domains of setting direction, managing teaching and learning, developing people and developing the organisation. Table 2 below sets out these practices. This analysis reinforces the argument that enhancing learning and teaching is a key priority for school leadership. Contemporarily, trends towards personalising education to individual student

Table 2 A conceptualisation of the capabilities for school leaders based on Leithwood and Riehl (2005)

Core practices	Key system leadership components
<i>Setting direction</i>	Total commitment to enable every learner to reach his or her potential with a strategic vision that extends into the future and brings immediacy to the delivery of improvements for students Ability to translate vision into whole school programmes that extend the impact of pedagogic and curricular developments into other classrooms, departments and schools
<i>Managing teaching and learning</i>	Ensure every child is inspired and challenged through appropriate curriculum and a repertoire of teaching styles and skills that underpin personalised learning Develop a high degree of clarity about and consistency of teaching quality to both create the regularities of practice that sustain improvement and to enable sharing of best practice and innovation across the system
<i>Developing people</i>	Enable students to become more active learners, develop thinking and learning skills and take greater responsibility for their own learning. Involve parents and the communities to minimise the impact of challenging circumstances on expectations and achievement Develop schools as professional learning communities, with relationships built and fostered across and beyond schools to provide a range of learning experiences and professional development opportunities for staff
<i>Developing the organisation</i>	Create an evidence-based school, with decisions effectively informed by student data, with self-evaluation and external support used to seek out approaches to school improvement that are most appropriate to specific contextual needs and that build on other examples and practices in the system Extend an organisation's vision of learning to involve networks of schools collaborating to build, for instance, curriculum diversity, professional support, extended and welfare services and high expectations. In so doing, build a school's capacity to support wider system leadership roles

needs and interests, coupled with a greater responsibility for student welfare as part of the introduction of the Every Child Matters (ECM) agenda in England, represent real challenges for school leaders as they attempt to continue to raise school standards and offer a broad and balanced education.

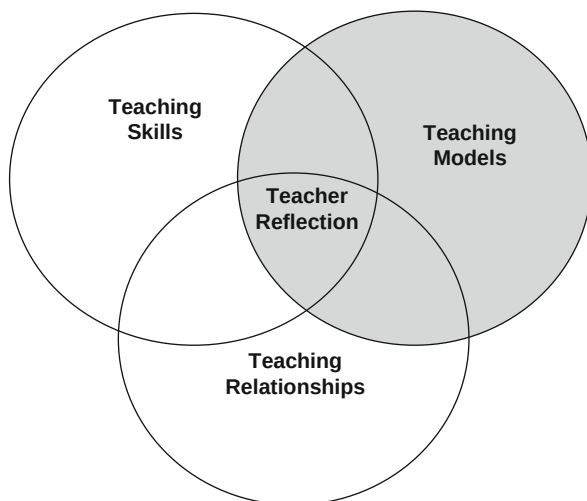
In any discussion of the “internal system leadership”, it is important to realise, as we have already seen, that at the heart of personalised learning is its impact, not just on test scores and examination results, but on the students’ learning capability. If the conditions can be created in the school where the teacher can teach the student how to learn at the same time as assisting them to acquire curriculum content, then the twin goals of learning and achievement can be met at the same time. This point was made in *Models of Learning – Tools for Teaching* (Joyce, Calhoun, & Hopkins, 2009) where it was argued that it is the teacher’s task not simply to “teach”, but to create powerful contexts for learning. This idea and the essence of personalised learning were expressed in this way: *Learning experiences are composed of content, process and social climate. As teachers we create for and with our children opportunities to explore and build important areas of knowledge, develop powerful tools for learning, and live in humanising social conditions.*

It is the integration of curriculum content, teaching and learning strategies and the school cultures that enhance self-confidence, which provides the parameters for the work of skilled teachers. But there is a significant barrier to progress in this area: despite the contemporary emphasis on the importance of classroom practice, the language or discourse about teaching remains in general at a restricted level. There is a need for a far more elaborate language in which to talk about teaching and more sophisticated frameworks against which to reflect on practice. Even in those instances where more precision of language is achieved, there are few operational definitions against which teachers can assess their own practice and thereby develop and expand their range of classroom practices. The key leadership challenge here is to ensure that quality teaching and learning is underpinned by more elaborate and explicit frameworks for learning and teaching.

In *School Improvement for Real* (Hopkins, 2001), a framework for thinking about teaching and learning was introduced. It is briefly referred to again here as it still seems to me to provide a useful starting point in the quest to develop a language and practice for teaching. Figure 8 illustrates the four elements of the framework that interestingly are often regarded as being contradictory rather than complementary. Let me briefly explain each of them in turn.

I begin with *Teaching Skills* because these are the basic building blocks of teacher competence. These are the everyday classroom management skills that most teachers became familiar with during their initial training and that they continue to refine as part of their reflection on professional practice. These are behaviours such as content coverage, engaged time (i.e., students learn more when they are on task for a high proportion of class time), active teaching, structuring information, wait time and effective questioning. There is an extensive research literature on teaching effects that are replete with cues and tactics necessary for effective teaching. An excellent summary is provided by Bert Creemers (1994) in his book *The Effective Classroom*.

Fig. 8 A framework for thinking about teaching



The second component is *Teaching Relationships*. These are less technical and are more related to the teacher's commitment to her/his students and belief in the power of high expectations. A supportive, rigorous and optimistic learning environment is fundamental for high levels of student achievement. A key aspect of teaching is the teacher's ability to generate and sustain an authentic relationship with her students. For example, the teacher "who made a difference" is a common topic of conversation following one's admission that "I am a teacher". To many educators a prime indicator of the "effective" school is one in which high proportion of pupils "have a good or 'vital' relationship with one or more teachers".

These two perspectives on high quality teaching are not discrete. It is the practice of teachers to combine these elements through a *process of reflection* to create an individual style. This is the third element of the framework. This is not reflection for reflection's sake, but reflection with the aim of continuing to develop a mastery of one's chosen craft. It is through reflection that the teacher harmonises, integrates and transcends the necessary classroom management skills and the personal aspects of teaching into a strategy that has meaning for students.

In my experience it is the integration of these three elements into a distinctive individual approach that most people would regard as being the definition of a good, indeed very good teacher. In England, for example, such a teacher would be highly regarded both by external inspectors and by her/his peers. But for me this is a necessary but not a sufficient condition for the quality of teaching required to personalise learning.

What is also required is a focus on the *models of teaching* that simultaneously defines the nature of the content, the learning strategies, and the arrangements for social interaction that create the learning environments of students. Models of teaching are also models of learning. How teaching is conducted has a large impact

on students’ abilities to educate themselves. Each model has its own core purpose that relates not only to how to organise teaching, but also to ways of learning.

Joyce et al. (2009) developed this approach in his pioneering work *Models of Teaching* that was first published in 1972 and is now in its eighth edition. Joyce describes and analyses over 30 different models of teaching – each with its own “syntax”, phases and guidelines – that are designed to bring about particular kinds of learning and to help students become more effective learners. It is in this way that the use of “teaching models” form part of an overall strategy for enhancing teacher professionalism and the key tool for personalising learning. Some examples of the relationship between teaching and learning strategy are given in Table 3. In both *Models of Learning – Tools for Teaching* (Joyce et al., 2009) and the *Creating Conditions for Teaching and Learning* (Hopkins, Harris, Singleton, & Watts, 2000) a range of contrasting and complementary teaching strategies are described in practical detail.

The purpose of this discussion of teaching for personalising learning has been to emphasise how important this focus is for leadership committed to ensuring that every student reaches his or her potential and that his or her school is on the path to greatness. Although the impact of leadership on student achievement and school effectiveness has been acknowledged for some time, it is only recently that we have begun to understand more fully the fine-grained nature of that relationship. A reasonably elegant summary of this evidence is as follows:

- the leadership develops *a narrative for improvement*
- the leadership is *highly focussed on improving the quality of teaching and learning* (and student welfare)
- the leadership explicitly *organises the school for improvement*
- the leadership creates *consistency (of the systems spread across school) and continuity (of the systems over time)*
- the leadership creates *internal accountability and reciprocity*
- the leadership works to *change context as a key component of its improvement strategy*
- the leadership provides *clarity (of the systems established)*

Table 3 Examples of the relationship between model of teaching and learning skills

Model of teaching	Learning skill
Advanced organiser (or whole class teaching model)	Extracting information and ideas from lectures and presentations
Group work	Working effectively with others to initiate and carry out cooperative tasks
Inductive teaching	Building hypotheses and theories through classification
Mnemonics	Memorising information
Concept attainment	Attaining concepts and how to invent them
Synectics	Using metaphors to think creatively

There are two relatively new features to this profile. The first is the emphasis on narrative and its impact on both on strategy and culture. It is student learning that is the central focus of the narrative which then presents a series of complex and interacting initiatives within a unifying story around the image of a journey. This is strategic in so far as it integrates a wide variety of initiatives and projects forward, and cultural in so far as it speaks both to the individual and collective contribution and the moral purpose of schooling.

The second is the emphasis on “systems” and the transferability and sustainability of best practice. It is here where there is the link with the external aspects of system leadership; and this is where we turn our attention to in the next section.

External Aspects of System Leadership

As mentioned above the emphasis on “systems” and the transferability and sustainability of best practice is where there is the link with the external aspects of system leadership is found. The characteristics of the “effective school” have been known for some time, but at a rather high level of generalisation. Again we have recently acquired more textured understanding of what these effective practices look like and how they combine together in a “whole school design”. We are now at a point when all of the key practices can be presented in an implementable and action-oriented form. It is these practices that provide the currency of interaction between system leaders as they increasingly engage with schools other than their own. It is the exchange of excellent and increasingly precise practices for the personalisation of learning that is becoming the stock in trade of the new breed of system leaders and inform the roles that they are adopting.

We have recently identified a variety of system leader roles emerging in England that are consistent with such a moral purpose. At present these are (Higham et al., 2009) as follows:

- Developing and *leading a successful educational improvement partnership* between several schools, often focused on a set of specific themes that have significant and clear outcomes that reach beyond the capacity of any one single institution.
- Choosing to *lead and improve a school in extremely challenging circumstances* and change local contexts by building a culture of success and then sustaining once low achieving schools as high valued added institutions.
- *Partnering another school facing difficulties and improving it*, either as an executive head of a federation or as the leader of a more informal improvement arrangement.
- Acting as a *community leader* to broker and shape partnerships and/or networks of wider relationships across local communities to support children’s welfare and potential, often through multi-agency work.

- Working as a *change agent* or expert leader within the system, identifying best classroom practice and transferring it to support improvement in others schools.

No doubt these roles will expand and mature over time; but what is significant about them is that they have evolved in response to the adaptive challenge of system change. If we want to transform systems as well as schools, then the knowledge encapsulated in the previous discussion is necessary but not sufficient. It is necessary, indeed essential, because these practices are the critical currency of school improvement. This is the language of school reform. This is inevitably the only focus of the conversations of system leaders, but it has to be coupled to a strategy for system-wide change. It is important to realise however that this aspiration of system transformation being facilitated by the degree of segmentation existing in the system only holds when certain conditions are in place. There are two crucial aspects to this:

- First, that there is increased clarity on the nature of intervention and support for schools at each phase of the performance cycle; and
- Second, that schools at each phase are clear as to the most productive ways in which to collaborate in order to capitalise on the diversity within the system.

To understand the dynamics involved it is helpful to look at Fig. 9. Here every secondary school in England, total 3,313, is represented in a category related to its effectiveness in terms of student achievement at age 16.

The six categories are as follows:

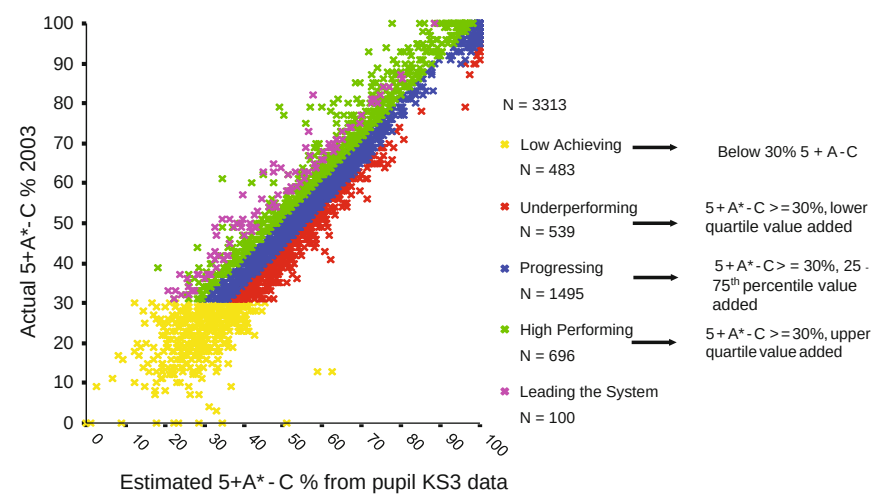


Fig. 9 The segmentation of the English secondary school system

- *Leading schools* (possibly 10% of secondary schools) – these are the highest performing schools that also have the capacity to lead others. Their route to further improvement and contribution to the system comes in at least two forms: first, becoming leading practitioners through disseminating best practice and networking; and second, through working more formally and systematically with lower performing schools through some “federation” arrangement to improve the partner school’s performance.
- *Succeeding, self-improving schools* (possibly 20% of secondary schools) – these are schools that have consistently above-average levels of value-added and that exhibit aspects of best practice that will benefit the system through further dissemination. Their route to further improvement and contribution to the system comes in networking their best practice in local networks using their leading teachers to mentor in other schools and to take students from local schools into their areas of specialism.
- *Succeeding schools but with significant areas of underperformance* (possibly 20% of secondary schools) – these schools although successful on published criteria have unacceptable numbers of underperforming teachers or departments who are masked by the averaging out of published results. Their route to further improvement and contribution to the system comes on the one hand contributing as above to other schools from their areas of strength and being the recipients of such support in their weaker areas.
- *Underperforming schools* (possibly 25% of secondary schools) – defined as those secondary schools in their lowest value added quartile of their distribution, who may have adequate or good headline results, but are consistently failing to add value to the progress of their students. Their route to further improvement is to use the data discussed with the School Improvement Partner (SIP) as a basis of a whole school raising standards plan. They will need sustained consultancy in the early stages of an improvement process from a school(s) with a similar intake, but far higher value added using a modified version of a “federations intervention”.
- *Low attaining schools* (possibly 20% of secondary schools) – defined as those secondary schools below the 30% A*–C GCSE floor target but with a capacity to improve. Their route to further improvement requires sustained support through some federation arrangement or involvement, consultancy support through the National Challenge and possibly the application of an improvement grant.
- *Failing schools* (possibly 5% of secondary schools) – defined as being well below the floor target and with little capacity to improve. At a minimum these schools will require intervention in the form of a “hard federation” or membership of the Intensive Support Programme. If these strategies are not successful in the short term, then closure, academy status or a school’s competition is the only other answer in order to sustain adequate provision for the students involved.

A summary of this “segmentation” approach is set out in Table 4. In the right-hand column is a basic taxonomy of schools based on the previous analysis. The

Table 4 The “segmentation approach” to school improvement

Type of school	Key strategies – responsive to context and need
Leading schools	Become leading practitioners Formal federation with lower performing schools
Succeeding, self-improving schools	Regular local networking for school leaders Between-school curriculum development
Succeeding schools with internal variations	Consistency interventions: Such as assessment for learning Subject specialist support to particular departments
Underperforming schools	Linked school support for underperforming departments Underperforming pupil programmes: Catch-up
Low attaining schools	Formal support in federation structure Consultancy in core subjects and best practice
Failing schools	Intensive support programme New provider such as an academy

number of categories and the terminology will vary from setting to setting, the crucial point being that not all schools are the same and each requires different forms of support. It is this that is the focus of the second column, where a range of strategies for supporting schools at different phases of their development is briefly described. Again these descriptions are grounded in the English context, but they do have a more universal applicability. There are three key points here:

- First, one size does not fit all.
- Second, these different forms of intervention and support are increasingly being provided by schools themselves, rather than being imposed and delivered by some external agency. This approach to system transformation relies fundamentally on school-to-school support as the basis of the improvement strategy.
- Third, this process can continue to evolve in an ad hoc or it can be orchestrated by national organisations with strong local roots.

This approach to system transformation requires a fair degree of boldness in setting system level expectations and conditions. There are four implications in particular that have to be grappled with:

- All failing and underperforming (and potentially low achieving) schools should have a leading school that works with them in either a formal grouping federation (where the leading school principal or head assumes overall control and accountability) or in more informal partnership. Evidence from existing federations, where the approach to replication described earlier was adopted, suggests that a national system of federations would be capable of delivering a sustainable step-change in improvement in relatively short periods of time. For example a number of “federated schools” have improved their 5 A*-Cs at GCSE from under 20% to over 50% in 2 years.

- Schools should take greater responsibility for neighbouring schools so that the move towards networking encourages groups of schools to form collaborative arrangements outside of local control. This would be on the condition that these schools provided extended services for all students within a geographic area, but equally on the acceptance that there would be incentives for doing so. Encouraging local schools to work together will build capacity for continuous improvement at local level.
- The incentives for greater system responsibility should include significantly enhanced funding for students most at risk to counter the predictive character of poverty noted earlier. Beyond incentivising local collaboratives, the potential effects for large-scale, long-term reform include the following:
- A more even distribution of “at risk” students and associated increases in standards, due to more schools seeking to admit a larger proportion of “at risk” students so as to increase their overall income.
- A significant reduction in “sink schools” even where “at risk” students are concentrated, as there would be much greater potential to respond to the socio-economic challenges (e.g., by paying more to attract the best teachers; or by developing excellent parental involvement and outreach services).
- A rationalisation of national and local agency functions and roles to allow the higher degree of national and regional coordination for this increasingly devolved system. At present there are too many national and local organisations acting in a competitive, uncoordinated and capricious way.

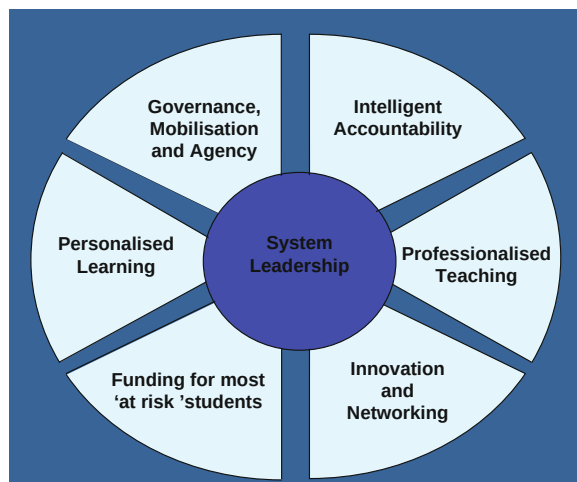
A Model for System Reform

Having described the pivotal role of the system leader, we are now in a position to revisit the policy framework that underpinned the success of the first-term New Labour educational reforms. The claim was that a national education strategy based on the principle of “High Challenge and High Support” – that contained a complementary cocktail of policies that linked together:

- High standards but with quality materials and professional development;
- Demanding targets but support for schools in the most challenging of circumstance; and
- External accountability but with increasing devolution of responsibility; – is highly effective at raising standards in the short term.

The “high challenge, high support” strategy was an outstandingly successful strategy for the policy objectives of the first-term New Labour government. But system-wide strategies are not immutable; they evolve with their societies and changing educational demands. The subsequent argument in the chapter has been to stress that for learning and achievement to continue to rise into the medium

Fig. 10 The “Every School a Great School” policy framework



to long term we need a different policy arrangement because of the need to re-balance national prescription with schools leading reform. This re-balancing is necessary for building capacity for sustained improvement and leads to a transformed and re-imagined educational landscape implied by the right-hand segment of our ubiquitous rectangle.

The argument that has been building is that the policy framework for “every school being great” is equally sophisticated in terms of its aspiration but is more reflective of a context that has increasingly lateral responsibilities and alignments. This framework, which the readers by now are familiar with, is shown in Fig. 10. In the centre is system leadership with the implication that it applies at a range of levels and roles within the system. The key policy drivers should also be familiar by now:

- The demand for personalisation requires a professional practice for teaching
- The systemic potential of networking and collaborations requires new arrangements for governance and agency; and
- The realisation of “intelligent accountability” within the school needs to be matched by a willingness to fund students who are most “at risk.”

For the sake of completeness one can see that the “every school a great school” policy framework is as appropriate for the right-hand segment of the rectangle as the original framework was to the left-hand segment in the early days of New Labour’s educational reforms. This equilibrium is captured in Fig. 11 below.

The substantive point that I have been making is that different stages of reform require different strategies. This though is not an “either-or” issue, but more an evolutionary process that respects the wide degree of differentiation or segmentation within the system.

It is interesting to realise that this analysis is equally important for individual schools or groups of schools as they are for national or local governments. What often happens however is that initiatives tend to be worked on individually; rarely is the entire framework considered at one time. What is needed is a framework to help governments (and schools) to reflect on how best to balance various strategies in a comprehensive approach to systemic educational change.

Figure 12 provides an example of such a framework. It seeks to identify three key elements of a coherent approach to school change. The framework also suggests how these three elements may interact and impact on the learning and achievement of students.



Fig. 11 Complementary policy frameworks for system reform

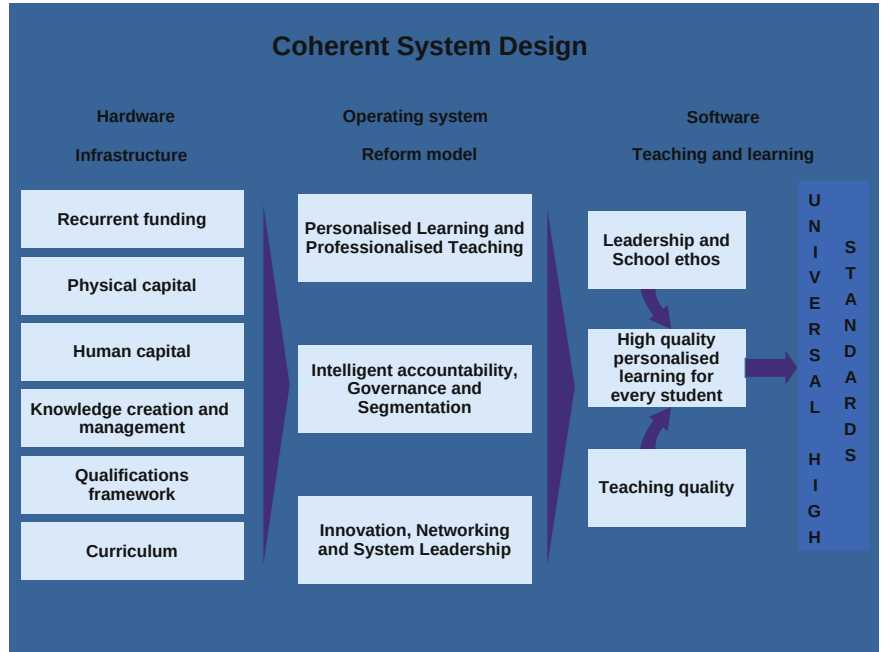


Fig. 12 A coherent system design framework

This educational model was developed by Michael Barber (2005) based on the Thomas Friedman's analogy (in his book *The Lexus and the Olive Tree*, 1999) of a nation's economy being compared to a computer system. Originally developed for educational systems it can also apply to schools. There is the hardware – the infrastructure, funding and physical resources as well as human and intellectual capital. There is also the software – the interaction between the school and the student, the process of teaching and learning infused by the leadership of the school. In between the two there is the operating system, or the strategy for change the school or system chooses, or not, to employ to develop itself as a whole.

Many schools, as well as ministries of education, assume that there is a direct link between the hardware and the software – as long as the resources are in place then student learning will be satisfactory. This is rarely the case and the reason is simple. We need a change strategy to link inputs to outputs: without it student and school outcomes will remain unpredictable. With it, schools will be more likely to translate their resources more directly into better learning environments and therefore enhanced learning outcomes for their pupils.

In many ways the structure and argument of this chapter also reflect this framework. Earlier, we discussed aspects of various national policies that provide the hardware or infrastructure for system improvement. The “drivers” especially those related to the learning and teaching aspects reflect the software aspects of the diagram. The concepts of system leadership, accountability and networking relate to the operating system. The key issue to remember is that operating systems are, as was said earlier, not immutable; they need to reflect their context. The two policy frameworks described earlier in this section are a good example of how strategies or “operating systems” evolve and build on each other as the system as a whole develops.

To conclude, it is important to remember that the challenge of system reform has great moral depth to it. It addresses directly the learning needs of our students and the professional growth of our teachers, and enhances the role of the school as an agent of social change. This is why I have argued that as we imagine a new educational future in line with the “policy conundrum” analysis outlined earlier, so we require a new operating system capable of realising a future where every school is a great one. That is why the discussion on coherent system reform is so important. The operating system is not just a technical device for linking inputs to outputs; it is also a metaphor for those strategies that when implemented lead towards “every school a great school” as well as the “good society.”

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School-Based Networking for Educational Change

Christopher Chapman and Mark Hadfield

Networking is not a new phenomenon in educational circles. Teachers and other education professionals have a long history of collaboration and networking. However, the concept of developing collaborative practices designed to stimulate educational change through formalised networks has only recently become central to policy-making across educational systems. Networking and collaborative school improvement programmes have emerged in diverse cultural contexts, ranging from Australasia, to North America and Asia (Harris & Crispeels, 2006; Hopkins, 2001). The use of technology through e-mail, fibre optic networks and teleconferencing is supporting people locally, regionally and globally to generate and transfer knowledge at a faster rate than has previously been experienced. Friedman (2005) develops these themes in his bestseller *The World is Flat* arguing that emerging technology and the forces of globalisation allow individuals and organisations to “collaborate and compete in real time with more people on different kinds of work from more different corners of the world on a more equal footing than at any previous time around the world” (2005, p. 8).

One example of this international phenomenon is the developmental work undertaken by iNET, an international networking organisation linked to the Specialist Schools and Academies Trust. iNET now has international offices on every continent and aims to link schools, teachers, students from across the globe to transform educational systems.

In this chapter we draw on international literature base to, first, explore the nature of school-based networks, second, to consider the evidence linking school-based networks to educational change and third, to outline three key challenges facing the development network-based approaches to educational change.

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Understanding School-Based Networks

The *Oxford English Dictionary* describes a “network” as “a group or system of interconnected people or things”. At one level the word can be used to refer to a group of connected computers, and at another a complex web of professional and social relationships between people and organisations. The sheer plasticity of the term “network” means that it has been applied to a wide range of social and technological phenomena. Within education the term “network” has been applied to professional networks of individuals that can span a local area or whole country (Lieberman & Grolnick, 1996; Little, 1993), or networks of personal relationships within a single school (Bryk, Camburn, & Seashore, 1999). Even when applied specifically to networks of schools it can appear that it is applied to groups of schools with very different foci. For example, Wohlstetter, Malloy, Chau, and Polhemus (2003) in their study of Los Angeles networks focus on the role of joint problem solving in drawing schools together into networks.

A network . . . is a group of organisations working together to solve problems or issues of mutual concern that are too large for any one organisation to handle on its own (Mandell, 1999). Applied to schools, the idea of networks suggests that schools working together in a collaborative effort would be more effective in enhancing organisational capacity and improving student learning than individual schools working on their own. (Wohlstetter & Smith, 2000; Wohlstetter et al., 2003, p. 399)

The OECD Lisbon Seminar (2003) drew on research into professional learning communities to define “Networked Learning Communities” in terms of knowledge transfer, professional learning and their position between central and local educational structures:

Networked Learning Communities are purposefully led social entities that are characterised by a commitment to quality, rigour and a focus on outcomes. . . . They promote the dissemination of good practice, enhance the professional development of teachers, support capacity building in schools, mediate between centralised and decentralised structures, and assist in the process of re-structuring and re-culturing educational organisational systems. (OECD, 2003, p. 154)

Rather than adding to the established list of definitions of networks and networking, our approach is to argue that all networks share a set of common features: structures, interactions (processes), agency and purposes. We then use these characteristics to define what we mean by a network of schools by discussing how they are both similar to and different from being part of social or informal professional networks.

Structures

Network structures are probably the most popular way of distinguishing networks from other organisational forms. Church et al. (2002) use a “fisherman’s net” metaphor to describe the structure of a network of individuals. A fisherman’s net

is based on threads which are knotted together. In a network of individuals the “threads” that link people together, and represent the “soft” part of the network structure, are the relationships, communications and trust that links people. The “knots” provide the “harder” part of the structure and are the activities that bring people in the network together, meeting and events or even video-conferencing or instant messaging sessions. The “net” attains its structural strength from the interaction of these two components. Church’s metaphor stresses the interaction of the soft, the relational structures that bring people together, along with the operational, the meetings and so on. This is important as all networks have to form some of *structure* that brings people together and organises the connections between them. What provides this structure, and the patterns of interactions that result, have been used as means of classifying different types of networks. Even social networks, or systems, require some form of structure to maintain them.

Social systems involve regularized relations of interdependence between individuals or groups, that typically can be best analysed as recurrent social practices. Social systems are systems of social interaction. . . Systems in this terminology, have structures, or, more accurately, have structural properties. Structures are necessarily (logically) properties of systems or collectives. (Giddens cited in: Callinicos, 1987, p. 20)

Within social systems these “regularized relationships” and “recurrent social patterns” can be brought about by structures as simple as supporting a football club or visiting the same coffee shop. Formalised professional networks are built around different sorts of structures. The soft structures that operate in social networks are important, such as trust and knowledge of each other, but in a school network they are supplemented by professional purposes and motivations, for example, by a joint problem or shared professional aim. Similarly the knots that hold these threads in place are a different sort of activity or event, such as planning meetings, working groups or cross-school research teams. It is the interaction of these “hard” and “soft” structures that create the potential for focussing and harnessing the energy and passion of those in the network.

School networks also require structures that interact with, and between, the internal school structures that organise what happens within individual schools. These structures, such as network conferences, cross-school meetings and inter-visitations provide the means to develop the “soft” aspects of the network structure that bring people together, the professional relationships, while at the same time creating the “hard” structures, the knots which provide the opportunity for joint working and effective collaboration.

Interactions (Processes)

Whenever people in a network come together some form of interaction takes place. In social networks such interactions may be little more than amiable conversations around a shared interest or experience. These interactions can become more complex exchanges as individuals swap expert knowledge about a hobby, exchange local

knowledge about good places to eat and barter goods and services. Social networks are often marked out by this multiplicity of interactions each arising out of sets of individual interests. In contrast professional networks are marked by more limited sets of interactions based on specifically designed *processes* aimed at achieving professional rather than social outcomes. It is the nature of these processes, and the intentions behind them, that distinguishes a school network from a social one.

The kinds of processes that occur within school networks will range from shared learning experiences, through joint professional development activities, and joint working, such as planning together, to undertaking collaborative change, such as working on curriculum innovations and practitioner enquiry. Other processes, such as leadership and management activities will interlink this joint working to co-ordinate it and ensure it impacts on the classroom. A network of schools will therefore have within it not only the kinds of interactions which one might find in a social network but also specifically designed learning and co-ordinating processes.

Networked Agency

The third difference between social and professional networks is in the balance between the degree of collective and individual agency that its members exhibit, a balance we have termed “networked agency”. In social networks there may be relatively little shared understanding of what is occurring in the different parts of a network, and only limited commitment to any form of collective activity. This is not to say that social networks do not get involved in collective action, as evidenced by the numerous social events and fund raisers organised by them, but they do not require this in order to function as a network. In contrast, for a professional network to be termed such there needs to be a shared commitment to a degree of collective action aimed at achieving explicit professional goals. If this element is not present within a network then a number of things can happen. They can become “talking shops” in which professionals come together and enact little more than what occurs within social network. Or the networks will act more like a professional “club” in which a minority of activists provide various “services” for the passive majority. Remember it is the nature of the participation of its members that gives a network its unique organisational characteristics, and “talking shops” and “clubs” although forms of networking are not networks of schools.

Purpose

The final characteristic of all networks is that people come together for a purpose, or more accurately a range of purposes. A crude differentiator between social networks and networks of schools is that the latter generally espouse an “official” collective aim, such as:

We expect, by the end of the programme, all schools to have introduced strategies and activities that will develop their institutions as being emotionally literate and this will impact significantly on pupils' attainments. The intention is to link the development of emotional intelligence to all our activities for both pupils and staff. (Janus Network of Schools, 2005)

This form of explicitly stated collective purpose is of a very different form and scale to the individual needs that are likely to be fulfilled by being part of social network, such as having fun, meeting others and so on. This makes them a crude means of differentiating between types of networks because it would involve juxtaposing the espoused "official" collective aims of a school network with the individual needs of members of a social network. A more sophisticated analysis is to consider if there are different types of individual purposes between why people participate within school and social networks, while still recognising that teachers might well be meeting social as well as professional needs by participating in such networks.

Both social and professional networks play a part in the process of identity formation. So any discussion of the purposes behind peoples' decisions to participate in a school network needs to recognise the role it can play, through their interactions within it, in the process of creating, building and giving meaning to their professional identity. Prophets tend not to be recognised in their own homeland and innovative practitioners can often become overlooked in their own schools. A network may give them a degree of recognition, even if this was not the original motivation or purpose of them getting involved. Similarly networks based on subject specialists have been shown to be particularly effective in part because of the shared professional identity as, for example, geography teachers, that already exists in such groupings and also because this identity is validated and valued within such networks.

Individual involvement in collaborative work often gives people the opportunity to engage in professional activities that they would not necessarily have access to in their own school. This might be a relatively self-centred motivation, for example, it may give them the chance to take on a leadership role that they would not normally be given in their own school and thus help them develop their careers. Similarly, though, a network might create a big enough group of practitioners interested in a specific area to make it economically viable to provide them with specially tailored professional development activities.

The individual purposes which shape peoples' participation in a school network are likely to be as diverse and complex as those that mark our involvement in other forms of networking, to an extent they are distinguishable by the fact that they will generally have a more "professional" focus. Instrumentally people get involved in networks to access support, information and to keep abreast of new developments and initiatives.

But the major difference is that individual participation within a professional network will require them explicitly, or implicitly, to articulate their own espoused agenda for taking part and be comfortable with being challenged both directly, and indirectly, by what they do collectively. In reality the individual "purposes" that drive forward participation in a network of schools are going to range from the somewhat instrumental, the chance to do things not available to them professionally

elsewhere, to the more abstract and idealistic. We now move on to consider what evidence exists to link school-based networks to educational change.

School-Based Networks and Educational Change: What's the Evidence?

Reviewing the evidence relating to networks and change is problematic, particularly in relation to issues of definition. It is hard to differentiate networks from various other forms of collaboratives, partnerships, alliances and consortia. In our search for evidence of the impact of school network we have therefore adopted, and slightly adapted, the expansive definition used by the reviewers whom to-date have carried out the only systematic review of the impact of school networks on pupils.

Groups or systems of interconnected people and/or organisations (including schools) whose aims and purposes include the improvement of learning, (or learning opportunities), and whose structure and organisation include explicit strategies designed to achieve these aims. (Bell, Bolam, & Cubillo, 2006, p. 29)

Our addition of the phrase “or learning opportunities” in the above definition is to highlight that in this analysis there are networks whose focus is on change, in terms of the provision of additional services, extended provision or new educational opportunities for learners rather than aiming for generic academic improvement or the targeting of specific curriculum innovations.

A further cautionary note relates to the issue of causality, in this case how to link any network activity to a specific impact within a classroom, school or local community. Networks have infrastructures based on webs of connections through which a wide variety of interactions take place. This means it is highly problematic to following the impact of any network activity through these multiple connections and interactions and then claim that what takes place in a specific lesson arose because of something that occurred months ago during a joint school development session. Add to this problem that there might be several network-based interactions occurring at a variety of connection points within a network at any one time, some of which will be vital to a particular innovation's success while others are tangential or make no real contribution, and one can see the difficult task that both researchers and practitioners have in assessing the effectiveness of any network. It is therefore perhaps not surprising, considering how difficult it is to identify any kind of causal chain within a network, that although anecdotal claims of their impact on schools abound in a wide variety of evaluations and practitioner accounts articulating the specific impacts of networking is more problematic.

A common theme that runs through these accounts is the discussion of how networks impact throughout a school affecting both its leader, staff, pupils and even parents and local communities. Although many schools found evaluating the academic impacts of the initiative a challenging task, the work impacted a variety of forms, such as staff becoming more aware and reflective about their practice, and learners working in more positive learning environments. In a majority of schools these kinds of developments were also reported to

be reflected in improved academic achievements. (Rudd, Lines, Schagen, Smith, & Reakes, 2004, p. 43)

At one level this discussion of multiple effects complicates any truly causal analysis but it does give general support to the idea that networks actually impact on pupils and schools. It does this because one would expect to see a range of interim or “proxy” indicators of network effects on pupils, such as changes to teachers’ attitudes, knowledge and practice. In the following review of the evidence we explore this idea of networks having multiple levels of impact within school.

School-Based Networks, Pupils and Change

Possibly the strongest evidential basis that networks impact upon pupil achievement is provided by Bell et al.’s (2006) systematic review of schools networks from 1995 to 2005. As previously mentioned, this review took a broad definition of what constituted a network but came to the following conclusion on reviewing some 119 studies before focussing in on some 19 international studies, and categorising them as having high to low levels of impact;

Eleven studies investigated and reported pupil impact. ... We found six studies where the networks’ impact on pupil attainment and/or achievement and engagement was high. Five of these were targeted at improvements for SEN, at risk or minority students. Attainment gains included significant improvements in pupil progression and employment rates, overall public test score increases, increased academic achievement in core subjects gains for project students in reading, language and mathematics. ... Two studies were found to have medium attainment impact. In one, the network narrowed the gap between minority and non-minority students and between economically disadvantaged and non-disadvantaged pupils. The other found student achievements were mixed, but included a “steady increase” in performance in maths and science; steady improvement in grade scores on nonverbal tests and an increase in students’ reflection and responsibility for their work. In terms of achievement and engagement one study found greater pupil involvement in school clubs and after-school activities; an increase in pupil self-confidence and self esteem, an improved attitude to school and increased attendance. (Bell et al., 2006, p. 53)

This systematic review highlighted that in terms of measurable outcomes on pupil achievement, the more effective networks had more specific and narrower aims and targeted their efforts on particular groups of pupils. To what extent this finding arises, because it is much easier to measure the impact on smaller groups of pupils, is beyond the scope of a systematic review. What can be deduced is that in part these outcomes came about because of the nature of the projects included. A significant proportion of these were focussed on groups of pupils with specific needs or who required a level and kind of support that it was difficult for certain schools in isolation to offer, such as the most socially excluded or underachieving students. The review highlights how in some cases it would have been difficult to see how these impacts could have been achieved without a network. What was apparent was that certain schools struggling with intractable social and educational issues benefited from working in a network. Part of the success was due to how networks of

schools were more able to mobilise a wide range of resources and expertise, often in short supply when dealing with parents and local community groups.

Is there though evidence of networks impacting more broadly than on the most excluded of pupils? Within the UK there have been a number of networking initiatives funded by central government. They have tended to be focussed at the two ends of the achievement spectrum and have ranged from providing support mechanisms to under-achieving schools to trying to harness the expertise and capacity of successful schools (Chapman, 2008). Again the most robust evidence, because of the pressure to provide funders with evidence of impact, lies within those studies that have targeted inner city pupils. A recent review of 17 different UK networks working in a mixture of inner city and complex and challenging circumstances led to the conclusion that:

The pupil impact evidence in the case studies, and the broader reviews, supports the argument that well-led and appropriately structured collaboration between schools facing complex and challenging circumstances helped their leaders to balance short term pressures to improve pupil attainment with long-term desires to improve the educational experiences of their pupils and the engagement of their communities. (Hadfield & Jopling, 2006, p. 3)

This review identified evidence of global improvements in attainment across whole networks at both primary and secondary level. Even within those networks that showed such global improvements variations in rates of improvement between collaborating schools were often apparent. These variations not only reflected the dynamic and unpredictable contexts they worked in but also shift in the internal capacities of schools that affected their ability to benefit from any collaborative activities. The conclusion also reflected that there was evidence in several networks that collaboration-supported schools take the “risk” of investing in long-term improvements, rather than focussing on short-term gains.

Unsurprisingly then, the most significant benefits were in those areas, and also in dealing with the issues, to paraphrase Mandell’s (1999), “individual schools find it difficult to do on their own.” Both these reviews seem to indicate that a network-based approach should be considered when individual schools lack the resources or expertise to overcome a particular challenge when they face an issue which is large to deal with on their own or they face a challenge which is based within the relationships between schools and local communities. The most recent wave of network-based initiatives in the UK have arisen in part because of the challenges set out by the Every Child Matters’ agenda and the need to provide better-co-ordinated education opportunities requiring schools to become part of multi-agency and cross-phase networks (Chapman et al., 2008).

School-Based Networks, Teachers and Change

Probably because of the emphasis on professional learning communities that permeates much of the North American literature it is within accounts of national initiatives such as the Annenberg Challenge (Reyes & Phillips, 2002), district-based initiatives such as the British Columbia Network of Performance-Based Schools and

professional networks such as the National Writing Project that we can find some of the richest descriptions of how networks impact on teachers knowledge, beliefs and classroom practices. Indeed as far back as 1996 Lieberman and Grolnick in their study of 16 US educational reform networks were commenting,

We found that these networks were attempting to shift the meaning of adult learning away from prescription towards challenging involvement and problem solving. They tried to achieve goals of participant learning and professional competence by modelling different modes of inquiry, supporting the formations of teams to create and write school-based plans for change, finding mechanisms to encourage cross-role groups to work together, focussing deeply on particular topics, and inviting the participants to help shape the agenda in their own terms. (Lieberman & Grolnick, 1996, p. 9)

Improvements to the professional development experiences of teachers involved in networking arise from a number of factors. This is not least in part because of the opportunities they offer to teachers to work with other teachers outside of their school. Overall teachers rate highly the opportunity to connect with others working in similar contexts with the same sorts of pupils. A recent Ipsos MORI poll (MORI, 2004) asked teachers, “To what extent, if at all would you say that collaboration between your school and others leads to an improvement in the motivation of teachers and other staff?” The response was that nearly a third, 28%, replied “A great deal” with just under half, 47%, stating “A fair amount”.

The impact of school networks on practitioners arise not just because they find it motivating to connect with others outside of their school, it also seems to improve the overall quality of the professional development on offer. The evidence that networks provide improved professional development opportunities is spread throughout numerous evaluations and research accounts. The major benefits for staff of these changes can be drawn together into three main themes.

- Improved access to local, national and international expertise
- Enhanced ability to innovate and inquire into ones own practice
- Supporting and structuring professional development opportunities so they result in changes to classroom practice.

Improved access to expertise might be as low key and specific as arranging for “opportunities for sharing good practice with subject specialists in neighbouring schools” (OfSTED, 2003) to a high-profile international expert launching a school-wide reform activity. By creating economies of scale networks make it economically viable to hire in external expertise. They can also provide the structures that bring together groups of practitioners and provide the facilitation they need to learn from each others’ insights and understandings.

Networks are fertile grounds for developing practitioner innovation and inquiry into their own practices, and just as importantly the practice of others in the network. This ability can also operate at a number of levels. In numerous instances school and teacher networks have been constructed around partnership with universities or forms of “intermediary organisations” (McLaughlin & Talbert, 2006) which have provided formal training and on-going support to practitioner research

and inquiry. For example, the Bay Area Schools Reform Collaborative in the United States has over the last 10 years been supporting “Cycles of inquiry” amongst its networks of 87 Leadership Schools (CRC, 2002). In a less formalised manner, many networks are based around learning from each other’s best practice and approaches to innovation. This may simply consist of a network organising monthly “Bring and Brag” sessions where teachers meet after school to share new curriculum ideas or they may produce sophisticated network Web portals and publications. A network’s ability to transfer new practices out from individual practitioner researchers and enquiry groups and into classrooms across the network can also exert a strong cultural influence.

The main reaction (to the research consortium) was one of enthusiasm . . . with particular regard to . . . awakening interest of colleagues and the growth of staffroom discussion about pedagogical issues – a talking culture previously absent. (MSSC Final Report, 2006, p. 8)

The final and possibly most significant impact on staff of being involved in a network is that it helps convert new professional learning into new practices. This can result in fundamental change. Networks appear to be able to do this because they simultaneously improve the quality of professional development and support the transfer of knowledge and practice. The argument here is threefold:

1. Networks can provide not only a wider professional development offer but one that has more meaning for staff and is more likely to meet their needs and this greatly improves the chance of them making changes to classroom practice.
2. Networks structures and processes can underpin those forms of collaborative professional development that have been shown to be particularly effective in terms of affecting classroom change.
3. Networks can create a critical mass of activity that sustains innovation and widespread change across numerous classrooms and schools.

The evidence that certain forms of networks can substantially improve practitioners’ engagement within their own professional development is spread across the research on networks, from the evaluation of the Network Learning Programme in the UK (Sammons, Mujtaba, Earl, & Gu, 2007) to the National Writing Project in the United States (Lieberman & Wood, 2004). Working with others in a network has also been shown to provide greater opportunities for self and collective reflection on practice (Deloitte & Touche, 2000) and tends to increase engagement with more challenging and interactive forms of professional learning (Lieberman & Grolnick, 1996). All of which is set within the broad base of evidence of networking’s ability to enhance morale and reduce professional isolation (Hargreaves, 2003; Hopkins, 2000; Sliwka, 2003; Toole & Louis, 2002). This improved engagement comes about for a range of reasons but vitally important is the voluntary nature of networking which means that staff are more likely to opt into professional development opportunities that have strong personal and professional meaning.

The claim that networks support forms of collaborative Continuing Professional Development (CPD) that have been shown to be particularly effective in changing classroom practices requires us to look at the broader literature. Some of the key

characteristics of effective collaborative CPD have been identified in a recent systematic review carried out by the UK-based Evidence for Policy and Practice Information (EPPI) centre. This review identified seven common features:

- the use of external expertise linked to school-based activity
- observation
- feedback (usually based on observation)
- an emphasis on peer support rather than leadership by supervisors
- scope for teacher participants to identify their own CPD focus
- processes to encourage, extend and structure professional dialogue
- processes for sustaining the CPD over time to enable teachers to embed the practices in their own classroom settings. (Cordingley, Bell, Rundell, & Evans, 2003, p. 5)

Our argument is that although CPD within an individual school could demonstrate all of the above characteristics, networks facilitate the development of the majority of them. As has already been discussed networks can improve an individual's access to external expertise, similarly with their multitude of connections they provide opportunities for peer support, which may include observation and feedback from a wide range of joint working activities. The greater numbers of teachers involved in a network, and the capacity created by the pooling of resources, means that better-defined groups of staff with similar interests and needs can be brought together and provided with more tailored support. Our own research within school networks has shown how staff often form semi-autonomous groups that meet over time and which encourage sustained professional dialogues and so assist its members in implementing what they have recently learned (Hadfield, 2007).

The third and final claim is that networks are not only structures that support collaborative professional development but they also create and sustain a critical mass of activity that supports individual changes impact across numerous classrooms and schools. A number of factors within networks come together to enable innovations to go to scale. First, as we discuss later, the very nature of networks is that they often come together because of a shared professional issue or interest and so built into their fabric is a desire to learn from and with each other. These mutual aspirations form the basis of their ability to create a critical mass of activity that can take an innovation to scale – an ability further enhanced by the make-up of networks that bring together schools with different areas of expertise and capacities. Second, practitioners in networks that are based in a specific locality have the opportunity to learn from peers working in similar types of schools and working with “their” sort of pupils. This is a situation which can overcome many of the cultural and psychological barriers to transferring new practices. Staff can see an innovation operating in situations akin to their own, and therefore are reassured about its feasibility. This can also raise staff and learners’ expectations about what can be achieved in their “context”. Networks by linking staff with mutually similar aspirations, but with differing levels of expertise, and helping them to develop trust in each other can also give individuals an increased sense of ownership of what they are learning. Rather than

a change in classroom practice seemingly being imposed from outside it quickly becomes something they feel that have ownership of. This sense of ownership, or as Coburn (2003) terms it “transfer” of ownership, is key for a change to embed itself within practice.

Networks as structures can also help overcome a number of threats to the sustainability of any change. They can do this by quickly building “internal” capacity within the network at various points so that the loss of a key individual does not stall a development. By acting as a “reservoir” they can help overcome the problem of a short-term influx of resources and support that can quickly dissipate once external funders turn their attention to other issues and new priorities. A network can also sustain change by providing additional leadership capacity. School networks often create new “middle” leadership roles which sit between the network and school structures and that try to ensure that network activity results in classroom change.

In summary, the evidence that networks impact positively upon staff can be found directly within the research and evaluation literature around networks but also indirectly in the broader literature concerned with collaborative professional development and the sustainability of educational reform. As with the evidence about pupil impact it re-enforces the message that networks need to be effectively led, structured and organised around meaningful interactions. In conclusion we now turn our attention to three key challenges faced by those developing a school-based network approach to educational change.

School-Based Networks: Rising to the Challenge?

In this chapter we have outlined our understanding of the nature of school-based networks and considered the evidence linking school-based networks to educational change. With this in mind, we conclude by reflecting on three challenges that permeate through these previous sections:

- *Constitution* – the mix and balance of those involved in the network;
- *Relationships* – the interactions between those involved;
- *Purpose and identity* – the aims and objectives of the network and the identity those involved create for the network.

It is our view that if we are to realise the potential of school-based networks these challenges require further attention in terms of research and policy development. Taking each in turn:

Constitution

The first of our three key challenges relates to the constitution of networks. By this we mean the mix and balance of constituent parts and members of the network and

how they come together as a formal entity. At the core of this issue is the dilemma between conscription and volunteerism. We know most successful networks usually involve volunteers who choose to initiate or join the network. The weakness of this approach is those schools with potentially the most to gain may decide networking is not for them. We have found this is often the case with schools facing challenging circumstances, especially in those who feel overwhelmed by the pace of change and need to manage multiple initiatives and interventions. This is also an issue for coasting schools who perceive themselves as high performing and therefore do not think they will benefit from involvement and consequently view networking as a low-priority activity. There are also arguments within network theory about the advantages of heterogenous versus homogenous membership profiles, particularly with respect to levels of capacity, perceived expertise and relative levels of performance.

The alternative, conscription, is problematic even when there is good reason and the benefits are clearly articulated. For example, issues of equity and inclusion are often used to justify “putting” schools into a particular network. Unfortunately, although network membership can be mandated meaningful participation cannot. When individuals and organisations are coerced into networks they tend to be hollow or empty with little change of sustaining themselves beyond any incentives or inducements.

The issue here is that networks are no more likely than others to overcome organisational inequalities. Networks are just as capable as acting as monopolies drawing down greater funding than individual schools and exerting unfair influence on local education systems than other organisational forms. How then as we progress to a more networked landscape do we ensure that networks do not re-enforce existing inequalities?

Relationships

The second key challenge we highlight relates to the importance of relationships, a core theme running through this chapter. Much attention has been paid to the nature of relationships and what underpins them (Hargreaves, 1994). Within a networking context, we argue that trust is the key driver of positive relationships. Trust is both the lubricant and the glue of relationships. On one hand trust can allow slippage and flexibility by oiling situations. For example, in trusting relationships individuals are more likely to be generous and compromises are more likely to be negotiated. On the other hand trust acts as a force binding individuals and indeed organisations together. For example, in times of crisis if people trust each other they are more likely to stand together and face the situation collectively. Where trust is limited people are more likely to revert to a pessimistic perspective and protect their own resources and territory.

One of the key paradoxes of networks is that people prefer to work with people they already know and trust while some of the greatest gains of networking require

that you reach out to others and form new collaborations which fulfil unmet needs and help support new approaches. The challenge here is how to build sufficient trust within education systems so that school networks become a force for inclusion rather than exclusion and do not encourage parochialism?

Purpose and Identity

The third key challenge we outline is concerned with purpose and identity. By this we mean the purpose of the network, in terms of its aims and objectives, and the identity of the individuals within the network, who they are and where do they locate themselves. In England, many networks have emerged from opportunities provided by central government. For example, the Leadership Incentive Grant (LIG) provided schools with resource to develop leadership capacity through collaboration. Others have developed from the desire to reject or subvert externally imposed change or to tackle a localised problem, issue or crisis. The purposes of school-based networks are incredibly varied, ranging from school improvement networks, curriculum development networks, professional development networks to multi-agency and community-based networks.

In terms of identity, the challenge rests within the nature of those involved within the network. Homogenous school-based networks of teachers are the least problematic, as they involve only teachers and therefore there will be at least some consensus in terms of understanding and perspective. However, we only have to think of a staffroom and its characters to recognise the diversity of values, approach and practice within a school. In a network setting, you have to add teachers versed in a range of school cultures, with different professional experiences from organisations at various stages of development, and it quickly becomes clear the idea of one “teacher” identity is flawed and in reality there will be a number of contrasting individual identities working at different levels. The situation becomes far more complex when networks involve working across professional boundaries.

If school-based networks are to reach their potential we need to break down barriers and think beyond schools and education. An ambitious move might be to challenge the orthodoxy of leadership identity by changing the initial training of professionals and their continuous professional development by creating learning contexts that counter-balances strong professional identities with those based on locality. The challenge here is to re-conceptualise educational leadership in terms of generating and transferring knowledge, trust and shared purposes and identities at various levels across education systems and local communities.

In sum, the evidence suggests school-based networks have the potential to make a significant contribution to educational change in a range of contexts. However, it would seem there are a number of important challenges and a set of facilitating conditions that must be nurtured if school-based networks are to foster educational change for school improvement.

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Travel of District-Wide Approaches to Instructional Improvement: How Can Districts Learn from One Another?

Mary Kay Stein, Lea Hubbard, and Judith Toure

Increasingly, districts are being recognized for the role that they can play in improving instructional practice and, in turn, improving the academic performance of students (Hightower, Knapp, Marsh, & McLaughlin, 2002; Supovitz, 2006). With the passage of No Child Left Behind (NCLB) Act, improvement in student achievement is no longer just a laudable goal, but rather has become a real goal with real consequences. As the recognition that instructional improvement is the best way to boost student achievement has gradually sunk in among policymakers, raising the quality of teaching and learning *across the board* has become essential. Arguably, no organization is in a better position to accomplish this than is a school district.

One approach that districts have taken to build instructional capacity is to focus on instructional improvement *across the system* as opposed to viewing instructional improvement as the adoption of a series of unrelated “programs.” A system-based perspective on instructional improvement recognizes the importance of coherence, goal-setting, and common instructional frameworks. The reasoning behind this approach is that broad-based instructional improvement is not likely to occur unless leaders spearhead an interrelated array of reforms that *everyone* is expected to undertake and for which leadership, ongoing support, professional development, and aligned accountability are provided. In short, the entire context of the institution becomes transformed to support the improvement of teaching and learning.

Prior to the mid-nineties, holistic reforms aimed at instructional improvement occurred primarily at the school level (Berends, Bodilly, & Kirby, 2002). An early proponent of system-wide reform at the district level was Anthony Alvarado. The former Community School District #2 in New York City, under the leadership of Alvarado (1987–1998), has been called an “existence proof” that urban districts can successfully educate a wide range of students through a system-wide focus on teacher learning and instructional improvement. As first brought to the attention of educators by Elmore (Elmore & Burney, 1999), and later elaborated by Stein (Stein & D’Amico, 2002a, 2002b) and Resnick (Fink & Resnick, 2001), the

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philosophy of systemic reform that undergirded District #2's approach consisted of a set of interrelated ideas. We see these ideas as comprising the "deep structure" of the reform.

Whole district reform from the start. The District #2 approach shunned demonstration schools, "pilots," and small-bore programmatic initiatives in favor of a strategy that begins with broad-based reform and requires participation of *all* schools and *all* classrooms *from the very beginning*. The problem of starting with a small program or only a few schools, according to Alvarado, is that unwanted aspects of the system persist and the new innovations have difficulty taking root: "When you do it piecemeal, and with a slow pace, the system has a way of blubbering, sucking in the innovation and looking a lot like it looked before" (Interview, 2001).

Teaching and learning driving the system. Rather than the organizational machinery of the district being driven by bureaucratic needs, the District #2 approach begins with an assessment of the needs of students in the classroom. In this view, the requirements for student learning (e.g., material resources, well-trained teachers, and principals) determine how schools and districts should be organized – not the convenience of the organization or the adults who inhabit it. System-wide policy-making is based on a thorough analysis of how all decisions – even bus and sports schedules – will impact teaching and learning in the classroom.

Professional development "in the line." This idea speaks to the necessity of integrating professional learning with evaluation. It has two aspects. First, principals are expected to be instructional leaders and to provide professional development as part of "doing their jobs" (Elmore, 1999–2000). Second, professional developers should be "housed" within the administrative line, that is, they should be answerable to principals and the superintendent, not to a director of a separate "professional development" branch of district operations. In this way, the expectation that teachers will attend seriously to the ideas discussed in professional development can be backed up with the "heft" of evaluative oversight.

Content-driven reform starting with Balanced Literacy. By beginning their system-wide reform with Balanced Literacy, District #2 was (a) ensuring that children would learn to read and write and thus be in a good position to learn other subjects; and (b) sending the message that reform was first and foremost about improvement in the instructional core, not window-dressing that skirts around the edges of fundamental changes in what students learn and how teachers teach (e.g., adjusting schedules, changing school sizes, cooperative learning without attention to subject matter).

Professional learning at all levels of the system. The District #2 reform was built on the notion that effective teaching and competent leadership can be learned and that it is the responsibility of the district to provide the resources and opportunities for that learning. This contrasts with the commonly held view that the capacity to teach well or lead competently is a personal attribute that one either has or does not have. Furthermore, the opportunities for professional learning should be related to district initiatives and should be embedded in the daily work of teaching and leading. (See Stein, Hubbard, & Mehan, 2004, for a fuller explanation of each of these.)

Once the successes of District #2 became widely known, school boards and district leaders across the county became interested in building or adopting approaches modeled after District #2; in many cases, they were helped to do so by individuals and organizations that had various ties to Alvarado and other District #2 leaders. This phenomenon has raised an interesting set of questions about the feasibility of and mechanisms for the travel of an *entire system-wide approach* to instructional improvement.¹

The purpose of this chapter is to examine the processes by which district-wide approaches to instructional improvement “travel” from one district to another. We use the term “travel,” as first coined by a report of the National Academy of Education (1999), to mean the movement of reform from one site to another – with the understanding that such movement is more than the faithful reproduction of the reform and includes professional learning on the part of teachers and administrators – that is facilitated by people, tools, and ideas that serve as “carriers” of the reform. Using three case studies of District #2-inspired reforms traveling to other districts, we identify how professional learning can be facilitated by ideas, people, and tools and the strengths and weaknesses of various mixtures of these.

The NAE framework defined ideas, people, and tools as follows:

- *well-articulated ideas and principles* – the theories and explanations that lie behind the solutions worked out in well-functioning sites;
- *tools and defined processes* that can help people use the ideas in new places;
- *people* who are very familiar with the principles and practices developed at a site and who are able to assist schools or districts wanting to use solutions based on the original work (p. xx).

The articulation of *ideas* is important, the panel argued, because new users need to understand the underlying principles of a reform to go beyond simply copying its surface features and to be able to design a local implementation that honors the underlying principles of the original reform. *Tools*, on the other hand, are important because they embody theories of teaching and learning while guiding individuals’ actions as well. As such they are “de facto representations of what an educational idea would look like in practice” and they “support new implementers of a reform to act in accord with the principles and theories underlying the design” (p. x). Finally, *people*, the panel argued, are a major way in which capacity for innovation spreads. The panel noted that well-articulated

¹We differentiate this type of district-to-district travel from the more commonly discussed process of “scaling up” because the scaling-up process typically refers to the transfer of school reform models (e.g., Accelerated Schools, AVID, Coalition of Essential Schools, Success for All; see Datnow, Hubbard, & Mehan, 2002). Although there has been considerable research on the challenges and methods of scaling up (Glennan, Bodilly, Galegher, & Kerr, 2004), little has been written about the travel of district-based reform. An exception is our earlier work that has helped to begin this discussion (see Stein et al., 2004; Mehan, Hubbard, & Stein, 2005), as well as the work of a few others (e.g., see Markholt, Gallucci, & Knapp, 2002; Fishman, Marx, Best, & Tal, 2003).

principles and well-designed tools alone will generally not ensure the successful travel of their solutions and that successful instances of travel almost always include people who were familiar with the original design and who work directly with educators in new implementation sites.

This chapter identifies the extent to which and how the ideas, tools, and people associated with the District #2 reform served as carriers of the reform to new settings. Our starting point will be the five *ideas* expressed above as constituting the deep structure of the District #2 reform and the *people* who spearheaded and implemented the reform in New York City who were then hired specifically to bring the reform to new settings. We also identify, for each case, the *tools* for travel that were designed and the roles that they played.

Our Approach to Researching and Writing This Chapter

To uncover the challenges and affordances of different approaches to the travel of district-wide reform, we designed a qualitative, cross-case study of three instances of travel: (a) Alvarado's transport of District #2 reforms to the San Diego Unified School District when he was appointed as Chancellor of Instruction in that district, (b) the efforts of the Center for Educational Leadership (CEL, University of Washington) to assist districts in the states of California and Washington to implement a District #2-inspired approach to instructional improvement; and (c) the efforts of the Institute for Learning (IFL, University of Pittsburgh) to assist districts to improve their capacity to support system-wide instructional improvement based on a set of design principles for district-wide reform and the Principles of Learning (Resnick & Glennan, 2002) along with selected and modified features of the District #2 approach.

Our data sources included publicly available documents, newly conducted interviews, and data from the authors' past work. (Stein studied Alvarado's efforts in District #2; Hubbard – along with Stein, Mehan, and Toure – documented his reform efforts in San Diego.) Data regarding the movement of the District #2 reform to districts through the Center for Educational Leadership (CEL) were gathered through interviews with the executive director of CEL and two individuals on his staff, as well as document reviews. Information regarding the efforts of the Institute for Learning (IFL) was gathered through interviewing the IFL's executive director and a senior fellow at the institute, as well as information gathered informally through Stein's ongoing, but informal, association with the IFL.²

Interview transcripts were coded to identify instances of travel as supported by the three dimensions: people, tools, and ideas. During the coding process, we noticed an additional distinction among our cases, a distinction that was not captured

²The Institute for Learning is located in the same building as Stein's office. She has formed both personal and professional relationships with many IFL staff and has frequently spoken at IFL events.

by people, tools, or ideas: reformers' assumptions about how individuals in the new settings could best learn the new practices, including the extent to which their learning would need to be modified to fit their context and the role that accountability might play in their learning. We called this the "pedagogy of travel," because it was associated with distinctive stances toward "teaching," that is, toward how reformers helped participants to learn the main tenets of the reform. Did they directly teach the reform? Did they help participants to interpret the reform in ways that made sense in their own settings? What role was construed for monitoring and accountability in the new settings?

Cases of each of the instances of travel were created and then compared in order to identify similarities and differences between their approaches to travel. Implications were then drawn regarding the strengths and weaknesses associated with different methods of supporting the learning required for cross-district travel.

The Cases

The following cases all exemplify efforts to transform districts that owe at least some debt to the work of Alvarado in District #2.³ These cases were selected because they all embody an important hallmark of Alvarado's work in District #2: the goal of district-wide transformation for the purpose of improving teaching and learning.

District #2 to San Diego

When Alvarado was appointed the Chancellor of Instruction for the San Diego Unified School District, he was careful to state publicly that the reforms of a city must be built in the "soil" of that city. Nevertheless, Alvarado's approach to reform was very much shaped by his successes in District #2 (Mehan et al., 2005).

Ideas. Perhaps related to the fact that the main architect of the District #2 reforms also spearheaded the work in San Diego, the undergirding "ideas" of the District #2 reform appeared to be an important carrier of the reform as it made its way from New York City to San Diego. As shown in Table 1, four of the five undergirding principles were evident in Alvarado's approach to reform in San Diego. As he had done in District #2, Alvarado began with a *district-wide* emphasis declaring that *all* principals, teachers, and coaches would be expected to implement, or to support the implementation of, the new programs in literacy and mathematics (Hubbard, Mehan, & Stein, 2006). Calling it a moral obligation, Alvarado stated that he, indeed the district, could not let a whole generation of kids suffer while they incrementally rolled out a reform plan in a manner suited more to the needs of the adults in the system.

³We acknowledge that (a) the individuals associated with each of these cases most likely would acknowledge varying amounts of intellectual debt to District #2; and (b) there was no single District #2-certified reform but rather it grew and evolved over time.

Table 1 Ideas used to carry District #2 reforms across the three cases

	San Diego	CEL	IFL
Whole district reform from the start	X		
Teaching and learning driving the system	X	X	X
Professional development in the line			
Content-driven reform (starting with BL)	X	X	X
Professional learning at all levels of the system	X	X	X

The motto of the district, displayed prominently on walls, doors, and district letterhead pointed to this emphasis on *teaching and learning driving systemic reform*: “The mission of the San Diego Unified School District is to support teaching for the improvement of student learning.” In an interview early in his tenure, Alvarado stated that every employee in the district should be able to justify their position in terms of how it supported the improvement of teaching and learning in the district.

As they had done in District #2, the reforms in San Diego were *content driven*, having as their centerpiece *Balanced Literacy*. San Diego students, like the students that Alvarado inherited when he took over District #2, were far behind in their literacy skills. In *Balanced Literacy*, students interact with texts at varying levels of challenge in a variety of settings with different levels of support from the teacher, the final goal being for students to become proficient and independent readers. Begun in New Zealand (New Zealand Ministry of Education, 1996) and later elaborated on by the Early Literacy project at Ohio State University (Fountas & Pinnel, 1995), *Balanced Literacy* is an elementary program that needed to be adapted for high school as District #2 did not have high schools and many of San Diego’s high school students were struggling readers.

Finally, Alvarado set into motion a system of *professional learning opportunities* for leaders at all levels of the system, coaches, and teachers. The idea was to bring everyone to a level of knowledge and understanding such that they could provide assistance either directly to students or to those who work with students.

As noted in Table 1, professional development “in the line” was the only key idea that did not travel to San Diego. Although San Diego principals were expected to be instructional leaders, Alvarado *did not contain all of professional development within the administrative line*, but rather housed the instructional coaching efforts within a separate organizational structure. So, rather than reporting to principals, the coaches reported to a separate branch for literacy or mathematics which was led by subject-matter specialists with no supervisory authority. As such, the San Diego coaches were not accountable to the administrative line as were professional developers in District #2.⁴ This decision rested on Alvarado’s assessment of the high level of content knowledge needed to assume leadership in the subject areas and the little time that administrators had been given to achieve that level (because the reform was so new).

⁴This bifurcation of professional development and leadership was associated with mixed messages at the teacher level and some loss of accountability.

People. As the academic leader in San Diego, Alvarado was the key individual responsible for carrying the reform from District #2 to San Diego. Equally significant, however, was the addition of Elaine Fink to the San Diego staff, his deputy during the reforms in District #2. Fink had two key leadership roles in San Diego: directing the training of new principals (through her directorship of the Leadership Development Academy) and providing professional development for the district’s instructional leaders (ILs), nine individuals who were the immediate supervisors of principals. There was arguably no one better suited to training the ILs because, in fact, the position of IL in San Diego, including their responsibilities and the number of principals that each was responsible for overseeing, was modeled directly after Fink’s previous role in District #2. In addition to Fink, three other individuals left District #2 to join the effort in San Diego: a distinguished teacher who became an IL and two other distinguished teachers who became important staff members associated with the Balanced Literacy effort. Finally, two consultants from New Zealand who were instrumental in the initial training of District #2 staff in the tenets of Balanced Literacy in the late 1980s were recruited to teach coaches and others in San Diego as well. Thus, as shown in Table 2, a heavy presence of District #2 educators was felt in the district.

Table 2 Proportion of weight carried by ideas, people, and tools across the three cases

	San Diego	CEL	IFL
Ideas	High	Medium	Medium
People	High	High	Low
Tools	Low	Low	High

San Diegans were exposed to District #2 people in yet another way: through their interactions with principals and teachers during three visits to District #2 schools. Also, several District #2 principals traveled to San Diego on a number of occasions to provide workshops

Tools. During Alvarado’s tenure in San Diego, there was not a fully developed set of tools that embodied the District #2 approach, rather they relied on what the NAE panel (1999) called, “defined processes.” For example, Fink spearheaded the transport of two key practices from District 2: the walk-through (regularly scheduled visits to schools during which classrooms are inspected and principals are supported and held accountable for their work with teachers) and the monthly principal conference (during which principals learned about instructional issues and how to lead them). Additional professional development opportunities for principals in San Diego patterned after the work in District #2 included visits to other schools, principal support groups, and the establishment of mentor–principal relationships.

The essence of these practices was communicated, by and large, by individuals who had experienced them in District #2. Sometimes they were modeled; they were not, however, codified or formalized in any way by tools.⁵ Thus, San Diego leaders

⁵We speak here primarily about tools to assist with leadership practices; there may have been tools related to Balanced Literacy and/or the mathematics program that were used by coaches and teachers.

had to implement these practices without templates, protocols, written documents, or electronic tools to guide them. The only attempt at formal codification of which we were aware was the initial flurry of activity in which District #2 leaders prepared notebooks for the very first summer’s training of principals who would, in turn, train teachers in Balanced Literacy.⁶ Most of the artifacts that were placed into the hands of San Diego staff were not crafted specifically for them, but rather were taken directly from ongoing work processes in District #2. For example, District #2 principals visited San Diego and shared examples of forms that they were using, memos that they had written to their staff, and work plans for their schools. Overall, then, as shown in Table 2, the District #2 reforms were embodied primarily in ideas and people. Tools, if they existed at all, were in a primitive state.

Pedagogy of travel. Finally, how did District #2 leaders “teach” the reform to others in San Diego? By and large, as documented by our earlier research (Hubbard et al., 2006), the reforms were “handed down” from District #2 leaders with little room for negotiation or discussion and with little or no recruitment of expertise from San Diego educators.⁷ The context of San Diegans (their culture, their past history, their resources) was rarely taken into account during the design or implementation. Thus, as shown in Table 3, we’ve characterized the stance toward pedagogy taken in this case as low in terms of adaptiveness to the new context.

Table 3 Pedagogy of travel

	San Diego	CEL	IFL
Adaptation to context	No	Yes	Yes
Accountability	Yes	No	No

Finally, accountability played a strong role in the San Diego reforms. As Chancellor of Instruction, Alvarado was in the position to hold administrators and teachers accountable for implementing the reforms that he had set into motion. The approach was framed as “two-way accountability” whereby district leadership was responsible for providing teachers and principals with the support and resources they needed to improve instruction; in exchange, teachers and principals were held accountable for implementing what they learned in professional development (Hubbard et al., 2006). Early on, district leadership showed that it was not shy about following through with its accountability plan when it released several principals who were not following through with their responsibilities under the new regime.

Because of our research (Hubbard et al., 2006), we can report on the fate of the District #2-inspired reforms in San Diego. Some instructional improvements

⁶The notebooks included handouts, overhead transparencies, and scripts for leading meetings.
⁷Adjustments that might be required for high school, since this was the first time that Balanced Literacy-inspired reforms were being used at the high school level, or adjustments to include subject matter outside of literacy were undertaken.

occurred along the lines suggested by the reform, particularly in the elementary schools, although progress was uneven. Others have reported positive outcomes, as well (Hess, 2005). However, the influence of the reforms began to dwindle in 2003 when Alvarado stepped down. As additional District #2 people began to leave the district, the lasting effects became increasingly hazy (see final chapters of Hubbard et al., 2006). Many of these people, however, traveled into our next case.

District #2 and San Diego to Multiple Districts via CEL

Our second case analysis of travel involves a third party. Unlike the District #2-to-San Diego case, Alvarado was not personally responsible for transporting his ideas to other districts in Washington and California. Instead, Steve Fink, Executive Director of the Center for Educational Leadership (CEL),⁸ served as a translator of Alvarado's ideas for improving the instructional capacity of districts.

Fink's long career as a principal and an assistant superintendent included a professional relationship with the San Diego Unified School District that began in the 1980s (when he was with the Panasonic Foundation and worked directly with San Diego superintendent Bertha Pendleton). His involvement continued in the 1990s with the Bersin/Alvarado regime. Fink explained that he became a "critical friend" to Superintendent Bersin ("loosely defined") and a keen observer of the Alvarado-inspired instructional reforms that were taking place. As CEL developed partnerships with school districts committed to improving teaching and learning, the theory of action that Fink developed to guide the Center's work was very much grounded in the work of Alvarado. Today, CEL has partnerships with a district in Wyoming, one in Southern California, and numerous districts throughout the state of Washington.

Fink openly acknowledges that CEL's work is built largely on the ideological trajectory set forth by Alvarado and his colleagues. Working closely with Anneke Markholt (from Washington who was not only familiar with the Seattle school district and smart about instruction but also familiar with reform work in New York's District #2 and #3), they set about applying the theory of action that Alvarado employed in New York and San Diego.

Ideas. Interestingly, some, but not all, of the ideas that carried the reform from New York to San Diego were used by CEL to carry the reform to other districts (see Table 1), the strongest being the idea of *professional learning at all layers of the system*. In fact, when asked specifically what had traveled, Fink described it as:

A picture of how a school system can come together to support deep professional learning of its leaders and its teachers. That's a picture that I [was able] to see and still see in the form of District 2. . . , that I got to see in San Diego, and for that I give Tony [credit] . . . I would say that traveled . . . it continues to influence our thinking.

⁸No relationship to Elaine Fink.

At the heart of his Center's work with districts is a strong focus on assistance of professional learning at the *leadership level*. Recognizing the importance of building the overall leadership capacity of districts, Fink and his colleagues developed a plan that provided for a continuum of services connecting a preparation program for principals with a preparation program for superintendents. They also designed professional development for practicing school district administrators, principals, and district coaches. CEL reported that their intention was to help "school leaders increase their knowledge of what is being taught and their capacity to identify if it is being taught well" (CEL Research Brief III, p. 2).

The second idea that appears to have carried the reforms is the idea of *content-driven reform*, that is, that reform must be about the core work of teaching and learning in the classroom. Fink claims that Alvarado shaped his thinking about how to reform instruction through district leadership. Fink explained,

You'll see so much of Tony's own theories in action here [Washington]. The first one is how we help leaders get smarter . . . we do all of leadership work either around literacy or math. (Fink, June 20, 2007)

This quote illustrates Fink's commitment to creating reforms that are centered on classroom-based teaching and learning, specifically in literacy and mathematics, reforms that CEL often supports at the outset of their partnerships with districts.

While Fink seems committed to the idea of *teaching and learning driving the system*, to be effective in achieving this requires a seat at the table of the highest levels of district leadership. Without that, decisions will be made that do not always follow this ideology. We illustrate CEL's commitment coupled with uncertain levels of follow-through from the district with a lighter shade of an "X" in Table 1.

Finally, two of District #2's undergirding ideas proved to be decidedly more difficult to incorporate into the work of CEL: *whole district reform from the start* and *professional development in the line*. Fink notes that garnering the support of the entire district is not easy. Nevertheless, he is always assured that, at a minimum, the superintendent is behind the work. Ideally, if a district is going to partner with CEL, then "everybody needs to be involved in the work, not some people." That said, however, Fink has not always waited for the buy-in of all schools and all classrooms, but rather goes with the "goers."

Similarly, arranging for professional development "in the line" requires a level of commitment that districts are usually not prepared to make. This is because it requires a rearrangement of the organizational structure of the district. Most districts have separate organizational homes for professional development; indeed many coaches prefer *not* to be housed in the evaluative administrative branch because they feel it would impede the "helping" relationship they are trying to establish with teachers. Moreover, most administrators do not feel prepared to monitor teachers' implementation of what has been covered in professional development or to supervise coaches. These kinds of organizational rearrangements would constitute a major upheaval for most districts.

People. Without a doubt, the movement of reform from District #2 and San Diego to Washington was most heavily reliant on *people*; primarily, it was the people who

had trained under Alvarado's tutelage (see Table 2). And this started at the top with Fink learning from Elaine Fink who, as noted earlier, was former deputy superintendent of District #2 and was appointed Director of the Instructional Leaders in San Diego during the Bersin/Alvarado regime. Fink had the opportunity to accompany Elaine Fink to classrooms in San Diego and described it as an "amazing experience," where she ably deconstructed the teaching and learning in each classroom and problem-solved with the principal how to improve instruction. The process made him realize how very different this kind of leadership work was from the work he had been doing with his principals as an assistant superintendent.

Fink also spent time observing the leadership practice of selected ILs in San Diego. Impressed and humbled by what Elaine Fink and her ILs were able to see in instruction, and inspired by the belief that there was an "instructional lens to bring to a leadership role," he watched more closely, read more deeply about Alvarado's work in District #2, and used these hands-on experiences to form "sort of the roots of [his] professional transformation."

Fink also recruited a cadre of experts, the vast majority of whom were selected because of their extensive work in San Diego and/or New York. Instructional leaders (ILs) from San Diego who had been responsible for transforming the district's abstract theory of action into concrete practice became the carriers of the reform. He also hired educators from District #2 and consultants from Australia and New Zealand who also had worked for Alvarado. Two of these individuals – Lynn Regett from New Zealand and Katherine Casey, a former District #2 teacher – were the same individuals who helped Alvarado in San Diego. These individuals brought both ideological and instrumental support to CEL's instructional improvement efforts. Steve Fink explained, "It's not by accident that people like Katherine Casey work for me a lot, an awful lot. Almost like a hundred days of the year . . . because then again it's all part of the theory of action."

As noted earlier, CEL also does a lot of leadership training. Here, again, he has relied on individuals close to Alvarado's work. Fink explained,

We do a lot of leadership teaching when we do leadership coaching. So it didn't [happen] by accident . . . that I have hired **every original** instructional leader in San Diego. Everyone either works for me in substantive consulting capacities or in the case of Wilma Kozai . . . is on our staff."

Moreover, Fink regularly took teams of educational leaders to visit District #2 schools because according to Fink, "we need to show people that poor kids of color can learn to read. . .".

Tools. As in the first case, the development of *tools* to support the work is in an early stage. One can see "processes" that were developed at the hands of Alvarado and his colleagues. For example, District #2's "Professional Development Laboratory" has been transformed into an integral part of CEL's coaching model – what they call their "studio residency model." The walk-throughs implemented both in District #2 and in San Diego are now taught to school principals by former San Diego ILs in order to build principal capacity. At the time of our interviews, ILs were also working closely with some assistant superintendents to organize principal

conferences, a common monthly event during the Bersin/Alvarado reform in San Diego to support principal leadership.

However, in this case “people” clearly outweigh “tools” (see Table 2). According to Fink, tools are “evolving.” To date, the delivery of professional development has been reliant on the work of the former San Diego ILs who have been accustomed to “doing it the San Diego way.” The strength is that it provides some built-in consistency across consultants in the type of professional development provided to district leaders. Fink explained that because they are on the same page and they know enough about content “we never really developed formal protocols.” Over time, however, things have begun to change. As CEL is doing more of their own work and as district leaders have learned more, the need for tools is greater. One of the consultants explained that she and her colleagues have begun to develop protocols for walk-throughs and that they continually share their experiences with each other to make sure that they give similar messages to the principals with whom they work.

Pedagogy of travel. As shown in Table 3, CEL’s approach to the teaching of the reform is distinctly more context-sensitive than was the approach in our first case. In fact, Fink feels that using tools based solely on the work done by and for San Diegans and, at a stage too early in the reform process in Washington would mean ignoring the importance of context which is vital. Fink, who praises the San Diego consultants for “coming a long way in their ability to help people construct their own meaning, rather than *telling* them,” admits that this is “difficult stuff.” Fink explained that the San Diego folks tended to be really good at the *to*:

They can tell you what *to* do and tended to be a little less good with the *with*, knowing when to shoulder up and allow the local folks to construct their own meaning even though they may be a little bit sloppier, a little bit less efficient. . . There really isn’t a formula.

While clearly context matters, there is a point by which Fink won’t negotiate. He tells districts that “we have to have a footing,” but then, from Fink’s perspective, it’s important to actually move away from

what looks and feels too San Diego’esk and more anchored to what I [would call] some really core principles of what powerful instruction looks like, what good instructional leadership looks like. Make no mistake, I say this with full deference and respect and praise to Tony and Elaine’s work. We hired these people because they’re smart and because they knew something and we still rely on what they know.

But the point Fink makes here is that for the Alvarado-inspired reform to be successful in Washington (or anywhere else), the “core principles of powerful instruction” have to be constructed and negotiated within the context in which they are being implemented, not imposed or viewed solely as the products of San Diego or New York district leaders. The specific challenge then is that his consultants must “help people construct their own meaning, rather than telling them.”

Matching the right consultant with the right district becomes a key part of moving the reform forward. Fink points out that “people are in different places in terms of their interests, their desires and their skill sets to move forward . . . that there’s going to be a natural variation.” This variation requires the thoughtful “pedagogy of a third

party,” In most cases, this translates into getting the appropriate consultant, as Fink describes, “on the right seat on the right bus” and “going with the goers.” Fink has a repertoire of consultants that he draws from to place them in districts around the country. Careful consideration is given to matching individual personality and expertise with the social-cultural context of a district.

Finally, as shown in Table 3, CEL has little ability to impose accountability within the districts that it works with. Rather than being directly inside the district and acting as a superintendent with all the authority and power that accompanies that position, CEL acts as an intermediary bringing knowledge and expertise to the districts. According to Fink, “Leadership work, when you don’t have a line of authority, position of authority [means] you’re really using your referential power and your expert power. . .”

The consultants we spoke to agreed that their outsider status came with challenges but they also felt it had its benefits. On the one hand, without insider credibility and authority, CEL consultants felt that they were required to constantly negotiate their status and work diligently to build trust to move away from some of the “baggage” that was associated with the reputation of the San Diego reform. On the other hand, they came with a reputation as highly successful leaders from New York and San Diego, who felt that they were perceived as individuals who were there to help, not evaluate. Because districts and schools chose to partner with CEL, the work appeared “nonthreatening” (Interview, Consultant, 2007).

District #2 to Multiple Districts via IFL

Our third case, the Institute for Learning (IFL), like CEL, is an intermediary organization that assists school districts in developing their capacity to support system-wide instructional improvement. At present, the IFL works with 11 urban districts around the country, helping them to reorganize their systems around the improvement of teaching and learning. It is staffed by 23 fellows, distinguished practitioners with a range of expertise including leadership practice, instructional practice in four main school subjects (English language arts, mathematics, science, and history), and professional development. The efforts of the IFL are based on a set of design principles for supporting high performance in urban school districts (Resnick & Glennan, 2002), coupled with research-based guidance on effective teaching and learning (Resnick, 1998). Our focus in this chapter is on the role played by selected features of District #2’s approach to systemic reform that can also be found in the IFL approach.

The IFL began with a set of conversations between researchers at the Learning Research and Development Center (LRDC) and a group of district leaders from around the country (including Anthony Alvarado), all of whom were using the New Standards Reference Exam (NSRE) in their district (Ikemoto & Honig, 2007, p. 20). In response to these district leaders’ requests for help in implementing the

New Standards,⁹ Resnick brought groups of researchers and practitioners together to begin to identify the “opportunities to learn” students would need in order to do well on the NSRE and the supports that teachers and others would need in order to deliver those opportunities.

In the early years of the formation of the IFL, Resnick also served as PI of a federal grant the purpose of which was to deepen the field’s understandings of high performance learning communities (the HPLC project). District #2 served as the grant’s example of a high performance learning community (HPLC Web site, 2008). Through her work on the grant, as well as her ongoing relationship with Alvarado and several of his colleagues, the ideas that undergirded the District #2 reforms became increasingly clear to her and began to infiltrate Resnick’s work with other districts around the country. While the Principals of Learning provided a crystallization of research-based ideas for leading reform, District #2 provided a concrete instantiation of what an effective district looks like in practice. As noted by the present executive director of the IFL,

...the other thing that happened is clearly when the IFL started, because (IFL fellow) and Lauren (Resnick) were both really involved in the research study on high performance learning communities, a lot of the way they thought about how districts reformed was influenced by the District #2 model. . . . that was the reform model that was the core belief system that the Institute kind of began with.

Ideas. The ideas associated with the District #2 reform served as a carrier of reform for the IFL’s work in a qualitatively different way than they did in CEL. According to the executive director, District #2 was important because it showed them that “it is possible” to organize an urban district around teaching and learning. However, the specific ideas were filtered through contemporary research on learning, a benefit associated with the fact that the IFL is located inside a major research institution that focuses on how people learn (the Learning Research and Development Center). As such, the guiding principles of their work are additionally informed by research and theory.

That said, several of the ideas that undergirded the District #2 reforms can be identified in IFL’s theory of action (see Table 1). One is the idea of *teaching and learning driving the system*. As stated by the executive director,

It clearly comes out (in our work), that base belief that District #2 had about the district being an instructional force where that is the driver of everything that goes around it . . . one of our central beliefs is ‘the coherence of the system.’ That does come from District #2 . . . the message of coherence—tight coupling of instruction, professional development, instructional leadership into one design—did come out of District #2, absolutely (Interview, 2007).

⁹The New Standards consisted of high-level standards for student learning accompanied by examinations that tested the extent to which students met those standards. In the nineties, they were adopted by many districts around the country in an attempt to raise the level of teaching and learning occurring in their classrooms.

Like CEL, however, the IFL is not able to impose their notion of an instructional driver on central office leaders as they make their day-to-day decisions regarding an array of organizational matters. Thus, the extent to which all district decisions were driven by instructional issues varies across IFL districts (shown with a shaded X in Table 1).

Another idea that plays a prominent role in the IFL's work is *content-driven reform*, although IFL leadership has developed it to a more comprehensive level than did District #2 with its heavy reliance on Balanced Literacy as the "content" in "content-driven reform." A primary feature of the IFL's approach is what they call "disciplinary literacy," the assistance of improvement in the four main content areas of mathematics, science, history, and English language arts. Rather than centering their efforts on any one instructional program in these areas, the IFL works with districts to help them improve their instruction in each area according to disciplinary design principles. As such, the ideas of the discipline and ways of thinking and reasoning in the discipline serve as the frame for improvement efforts, not an identifiable program.

The IFL also works with the core idea of *professional learning at all levels of the system*, referring to this as "nested learning communities." As noted by the executive director, "I think the other core idea that came out of District #2 is the investment in professional development is a key investment a district has to do for leaders and teachers." The leadership training strand of their work is perhaps the most mature and well-developed.

Like CEL, the IFL has district-wide systemic reform as its goal from the moment it begins to work with districts. However, they frequently use strategies other than *whole district from the start* to accomplish this. According to the executive director, demanding 100% participation from the outset is not always feasible, especially in very large districts. In addition, they sometimes use volunteer schools as a starting point, with the insistence that district leadership participate in the professional development for coaches and teachers. The strategy is to use the initial set – and the visible support of district leadership – as a motivator for other schools to join in.

Finally, like our other two cases, the IFL has not met with much success in getting districts to embed professional development in the line. Although they have an entire program on instructional leadership for principals, the idea that professional developers would add to the overall evaluative capacity of a school or district is something that most districts have not warmed to.

So, overall, the IFL appears to have used the same two ideas that were used by CEL: content-driven reform and professional learning at all levels of the system (see Table 1), although their version of content-driven reform is significantly different from Balanced Literacy. Similar to CEL, their goal of teaching and learning driving the system is sometimes compromised by being a third party. The IFL often does not begin with all teachers and all schools, but typically has a plan for getting there. Finally, like CEL (and San Diego) professional development in the line has not been adopted.

People. In its earliest stages, the IFL relied on people from District #2 to carry District #2-inspired ideas and processes for school improvement into districts.

Because of their work on the HPLC grant, both the executive director and a senior IFL fellow became acquainted with several District #2 leaders and teachers. They used these individuals as consultants with some of their earliest partner districts like Kansas City. As noted by the fellow.

They (names District #2 teachers and a principal) all went in (to the district) and they in turn sent teachers from Kansas City to New York District #2 schools to spend time there, like for a couple of days.

Soon, however, the IFL began to experience limitations of working solely with District #2 personnel. Two reasons have been cited. First, they began to realize that people often don't leave much behind: As stated by one IFL fellow, "When we first started we did it (our work) with people and it just doesn't get you as far. And there's not, as (names another fellow) says, there's no residue left when you leave." The executive director adds, "And it can't get you as far because you don't leave anything. You don't leave any footprints when you're a person" (Interview, 2007).

The second reason they stopped relying on individuals from District #2 was because they gradually broadened their approach to meet districts where they are, rather than to always begin by prescribing Balanced Literacy. As noted by the executive director,

When the Institute first started getting going we invested a lot of time in Balanced Literacy and the Read Aloud and Reader's and Writer's Workshop . . . but it was, as I think about it now, part of the reason was we were able to access and use some of the (District #2) teachers (Interview, 2007).

Once the IFL began recommending different starting points for different districts and different reading programs based on where the districts were at, they found that they could rely less on the District #2 individuals who were primarily Balanced Literacy experts. Our characterization of the IFL's current reliance on people who were original to the reform is therefore shown as "Low" on Table 2.

Tools. Once the IFL came to the conclusion that relying only on people was not sufficient, they began a concerted effort to develop tools. This has become a large part of what they do and how they see themselves. As noted by an IFL fellow "...now we focus a lot on developing tools that carry the theory (of how we believe teaching and learning occur) . . . I think that's one of the things that distinguishes us." Tools were developed to support professional development in several areas of its work, including the "Principles of Learning Tools," "Leadership Tools" (including the LearningWalk), and Multimedia and Text-based Case Studies (IFL Web site, 2008). These tools included CDs or videos that elaborated the POL and the LearningWalk and have become the predominant means of traveling reform for the IFL.

Perhaps the best known of the IFL tools is the LearningWalk, a direct descendant of the "Walk Through" that was a key piece of the reform undertaken in District #2, used by instructional leaders to conduct focus observations of classrooms. A LearningWalk is "an organized walk through a school's halls and classrooms using the Principles of Learning to focus on the instructional core" (IFL Web site, 2008). In contrast to the Walk Through from District #2, however, the LearningWalk was

designed by the IFL to be nonevaluative in order to “... understand, monitor, and support the implementation of the Principles of Learning” (Ikemoto & Honig, 2007).

Tools can be seen as an essential, perhaps *the* essential, component of how the Institute now does its work. They realize that the ideas, theories, and concepts that undergird their work can be abstract and difficult to understand. Part of their approach, then, is to embed these difficult theories and ideas in their tools so that people start to act in accordance with them, without necessarily even realizing it. As explained by the executive director,

So we try really hard to design tools that will build coherence even if the people don't understand that that's what they're doing ... even if they don't quite get that theory.

An IFL fellow completes her thought “[T]he tools we design immerse people in the experience of doing what you want them to do.” Overall, then, as shown in Table 2, the travel of District #2-inspired reforms via the IFL occurs primarily through tools that are designed to embody theory. It is important to note, however, that people do travel with the tools, but they aren't the original people who worked with the reforms in either San Diego or New York City.

Pedagogy of travel. The IFL's “pedagogy of travel” allows for adaptation to context, which surfaced as an important consideration in their work with districts that were qualitatively different from District #2 (see Table 3). In their early efforts at district reform, IFL Fellows encountered recalcitrant teachers' unions, and principals and teachers in districts throughout the country who had varying levels of interest in reform:

We've had to deal with the issues of the union and the bus schedules and the finances and the boards. The core remained the same in terms of talking about nested learning communities but what we meant by that has really changed significantly over the years to reflect the needs of districts that have many more complex problems than a K-8 district that didn't have some of the other problems and didn't have the capacities that NYC had in terms of the pool of teachers that was available, the ability to get rid of teachers in the district and things like that.

The needs of the districts in which IFL worked became paramount and inspired new directions for IFL, particularly after it undertook efforts in Providence in 1999. In previous work with districts, teams of district leaders met at the IFL offices in Pittsburgh for semiannual workshops, or IFL trainers presented on-site training of a limited duration. A fundamental change in the organization of IFL's work occurred based upon two requests by the superintendent in Providence. First, she requested that the IFL maintain a human presence in the district. And second, the superintendent of Providence asked that the Institute include a focus on leadership development. In response, the IFL sent a fellow to work closely with principals to develop their instructional knowledge, and in so doing, a new piece of their work emerged. While these shifts in practice were based upon the needs of a specific district, they are now part and parcel of IFL's repertoire.

While practitioner participation in the negotiation of goals has occasionally been uneven, initial work plans are usually developed together with the intention of adapting IFL tools and other assistance to the needs of the district (Ikemoto & Honig, 2007). IFL leaders and fellows recognize that local knowledge must be respected. As one of the leaders told us,

Where we tend to be is we have a vision of professional development, two way accountability, developing a nested learning community, but we tend to meet districts where they are and try to move them along a trajectory that fits with where they are in their capacities at the time and build a plan that reflects that.

In this way, the IFL is able to maintain a healthy tension, not unlike CEL, between their vision and from where a district is starting.

Similar to CEL, IFL bemoans its outsider status when it comes to having an influence on the internal accountability workings of a district:

So one of the things that Alvarado said explicitly, but we didn't realize how difficult it was, is this two-way accountability system . . . we find in our districts that the superintendent and their staff really want to change the system, but they don't build in any accountability to make it happen. They think if they just wave their hands and provide good training it will occur.

This has been a continual frustration for the IFL. Overall, then, the profile of the IFL with respect to the “pedagogy of travel” is exactly similar to CEL, while both CEL and IFL have the opposite profile from San Diego (see Table 3).

Comparing the Three Cases

Our analysis of the phenomenon of reform travel helps to illustrate the role that ideas, people, and tools play in moving a reform from one site to another. We begin by considering each of these in turn.

Ideas

How well did the five undergirding ideas of the District #2 reform serve as carriers of the reform? Theoretically, they should have served as important carriers of the reform because, as claimed earlier, they comprised the so-called “deep structure” of the reform, that is, the things that must be understood and acted upon in order to go beyond simply copying the surface features of the reform. However, only two of the five ideas appear to have survived the journey across all three cases (content-driven reform and professional learning).

How, if at all, did these two ideas differ from the other three? Were they simply more familiar or easier to understand and implement? After all, the research on reform implementation tells us that people gravitate toward those elements with which they are most familiar. One could argue that the two ideas represented ways of thinking about district reform that the field of education reform was most ready for and prepared to take action on. Until the advent of “content-based” reform (the first

idea), education reform generally fell into two broad categories: Structural reforms that typically failed to generate significant improvement in teaching and learning inside classrooms or subject-matter reforms that generally failed to penetrate the district beyond a few hothouse schools or classrooms. By beginning with issues at the educational core of how children learn to read and write, and then driving outwards to implications for the learning needs of professionals at every level of the system (the second idea), District #2 attempted to accomplish both structural and deep instructional reform simultaneously (Stein & D'Amico, 2002b). This idea – that educational reform should be defined at the level of significant classroom changes but, at the same time, attend to corresponding changes in the roles of principals and other leaders – resonated with the leaders of CEL and IFL, as well as the districts with whom they worked.

The idea that education reform demands new learning at all levels of the system was timely, given that, up until that time, principals received little, if any, professional development and coaches were relatively new to the education scene. Yet, given the ambitious nature of new reforms, the argument could easily be made that everyone – not just teachers and students – had to learn how to think and act in new and complex ways in order for ambitious instructional reforms to take hold. Thus, the idea that principals, coaches, and others needed training and that the training should be aligned with expectations for teachers and students made perfect sense.

The three ideas that did not travel well (whole district reform from the start, teaching and learning driving the system, and professional development in the line) represent more of a stretch for districts and, as our last two cases demonstrated, an extreme challenge for third-party organizations such as CEL or IFL. Without decision-making power, these organizations claimed to be left in the position of recommending – but not having the authority to institute – organizational changes.

What is lost by their failure to travel? We've argued that instituting these organizational supports for district-wide reform was key to Alvarado's ability to build system-wide improvement in District #2. Without them, Alvarado argued, reforms can occur, but not be woven throughout the system. As such, these reforms – however effective and valued they may be – will eventually be overtaken by the standard operating procedures of the district, that is, they will end up losing their distinctive features and looking like typical practice in the district.

Thus, an important follow-up to this study would be to assess the extent to which organization-wide learning occurred in the districts in which CEL and IFL operated. Even though IFL and CEL often began with a smaller set of volunteer schools (rather than demand district-wide participation), have the new practices that have been set into motion in these schools been able to migrate throughout the organization? If so, how?

Tools and People

A reliance on people and tools is also decidedly different across cases. As shown in Table 2, while San Diego and CEL relied heavily on many of the first- or second-generation designers of the District #2 reform, the IFL appears to have

done this to a much lesser extent and instead has spent considerable effort developing tools. This leads to questions about the advantages and disadvantages of each approach.

Both the San Diego and CEL cases illustrated travel that relied heavily on people, with little, if any, reliance on tools. We heard much testimony regarding the importance of face-to-face participation with individuals who had actually lived through the reform and who knew it intimately. This personal interaction is especially important when faced with the need to learn complex tasks, negotiate new meanings, and straighten out misconceptions. It also provides an opportunity to develop an identification with others who have successfully mastered the reform. The individuals from District #2 who carried the reform to new settings can be seen as “boundary spanners,” individuals who belonged to one community of practice but who successfully crossed into another community in order to introduce new elements of practice (Wenger, 1998).

However, if learning through people (without tools) prevails as the only avenue of travel, there will not be enough material support left behind to anchor the specifics of what needs to be done across the system once the people leave. Artifacts (or tools) accompanied by individuals who have used the tools in other settings stand the best chance of bridging practices (Wenger, 1998). Also, the “informality” associated with personal contact can cause confusions later on if diverging assumptions are uncovered (e.g., the principal understood the reform in a different way than did her teachers).

Finally, a reliance on people with little documentation begs the question of how an organization accumulates its knowledge, including ways in which it learns and improves. In this regard, the reification of one’s experiences can be an ally. As the IFL director noted, “. . . the building of our tools pushes us to learn because when you actually start to memorialize what you do into tools. . .” you are forced to ask “What did you mean when you did this?” In this way, tool building can force reformers to be more explicit about their actions and the justifications for those actions. It can also help to uncover different assumptions that otherwise may have remained in the shadows.

The case of the IFL, as we have noted, is opposite of the San Diego and CEL cases: heavy on tools and light on people (at least the original people involved in the District #2 reforms). However, the IFL does not rely on tools alone; they send IFL fellows to districts to introduce the tools and to guide district personnel in their initial use. These fellows have gained knowledge by working across a number of districts themselves and by participating in sessions at the IFL in which they hear about the IFL efforts in yet more districts. In this way, the IFL as an organization – as well as the individual fellows – are placed in the position of extracting generalized learning by comparing and contrasting across districts what works, where, and why. Combined with the learning that accompanies tool development (see above), the IFL uses these meetings to solidify gains in reform knowledge and to create platforms from which to continue to develop knowledge. The importance of shared learning is revealed in this quote from an IFL fellow:

People can only make reform travel if they're reflective about what's different and the same. . . . We (the IFL) does a lot of traveling. Literally and figuratively, a lot of our work is the tools, but it is also our people who take it, but our people are trained to think about what it is that they're actually bringing with them and it's not just a model of what worked for me (in one district). It's what *we* know, through experience, works generally . . . can be more generalized.

So the IFL is adding to the principles of the reform based on their cumulative knowledge that reflects the differing contexts in which they've worked.

Although not characteristic of the IFL, it is important to note the dangers of reform strategies that are overly dependent on tools and that do not build in enough occasions for human interaction. Heavy reliance on tools can lead to superficial understandings and brittle forms of compliance (Stein & Coburn, 2008). Interactions with those who have designed the tools is essential for clearing up misaligned understandings and for strengthening the possibility of deep learning.

Of particular interest to our comparative analysis has been our fourth dimension of reform travel, which emerged from the data: the "pedagogy of travel." In attempting to understand how the reform was taught to various constituents, we found that the cases varied according to the attention they paid to contextual factors and the role that accountability played in their efforts. In San Diego, for example, the reform was primarily a handoff that ignored context and as a result was undermined by the social and political context (Hubbard et al., 2006). The third-party pedagogy of CEL and IFL assumed a very different stance regarding context. Both constructed their work around the belief that context does matter and that it was incumbent upon them to work to meet district needs. That said, Fink was clear that contextually driven work must still be grounded in some commonly understood policies and practices – specifically those inspired by Alvarado's work.

We also found that accountability played out differently in the CEL and IFL cases than it did in the San Diego case. These organizations do not have the *authority* to demand behavior change, as did Alvarado when he was at the district helm in San Diego. As pointed out earlier, the challenge to third-party organizations in this regard may be related to the nontravel of the three organizationally embedded ideas.

Both CEL and the IFL had recently instituted possible ways of dealing with their lack of authority. CEL has begun to partner with funders who demand evidence of reform implementation and who are interested in helping to build districts' capacities to monitor their own improvement efforts. IFL notes that accountability is under the purview of leaders who have authority but may not have enough knowledge about the instructional reform to easily hold individuals accountable for improvement. Thus, the IFL is attempting to assist leaders by clearly telling them what they can expect to see in classrooms as a result of the work that IFL fellows have done with principals and teachers:

The IFL is actually trying something new in this regard (with respect to accountability), at the urging of a district leader. (Name of superintendent) is really adamant about making what we're doing very clear or transparent to her because, as with all good superintendents, she wants our work to build capacity for them inside the district and so they really want to

know now, after we've worked with a group of people, what can we reasonably expect to see them do . . . now we can't *make* them do it, but if the district leadership at least sees what our expectations are, then one would hope they'll start to ask people if they're doing some of those things (IFL director, interview).

Thus, despite their outsider status, organizations such as CEL or IFL, could identify one of their training missions as helping leaders learn how to both assist others and hold them accountable.

Interestingly, as shown in Table 3, the patterns of adaptation and accountability were directly opposite between the first case (in which the authority for the reform came from within) and the other two cases (in which a third party could not impose accountability). In the first case, the reform was not as sensitive to the resources or needs of the local context. Was this perhaps because they *could* hold the teachers and principals accountable for doing things “the prescribed way?” In the second two cases, the CEL and IFL leaders had to work more diligently to understand the local contexts because being sensitive to teachers' and principals' needs constituted the avenue by which they motivated them to change, instead of mandating change and holding them accountable, something they could not do.

Conclusions and Implications

The proportion of weight carried by people, tools, and ideas, as well as the differences with respect to the pedagogy of travel associated with each of these cases, poses some interesting questions for our understanding of travel, specifically the travel of district-wide reforms. Because of their demand for organizational – as well as classroom-level – change, district-wide reforms can be considered to be a special case of reform, one that should incorporate theorizing about what it takes to bring reforms to scale. To help us think about how well our three cases cover the territory of issues that are important to reform-at-scale, we turn to the dimensions of scale as outlined by Coburn (2003): depth, sustainability, spread, shift in reform ownership.

Coburn argues that conceptions of scale must go beyond the typical quantitative measures of numbers of schools reached by a given reform effort to also include attention to the *depth of reform* reached inside classrooms. Not only was this the centerpiece of the District #2 reform, but it also took center stage in all three of our cases of travel. The idea of content-driven reform – an idea that traveled in all of the cases – represents the belief that reform is impotent unless it reaches and impacts teaching and learning inside the classroom.

Once depth is achieved, it may be difficult to *sustain* “in the face of competing priorities, changing demands, and teacher and administrative turnover” (Coburn, 2003, p. 6). It can be argued that classroom-based reforms are more likely to be sustained if there are mechanisms in place at multiple levels of the system to support ongoing teacher learning. The success of travel of the second District #2 idea – professional learning at all levels of the system – suggests that all of our cases of

travel incorporated some attention to sustainability. Indeed, in San Diego, we found that the elementary reforms were sustained after Alvarado's departure, perhaps due to the strong program of principal training that happened at the elementary level (Hubbard et al., 2006). Moreover, IFL's tool-development efforts should help to sustain new practices upon the departure of IFL personnel.

No conception of scale is complete without the notion of *spread*. For Coburn, however, spread is not defined solely in terms of greater numbers of schools or classrooms, but rather the spread of reform-related norms and principles within the unit of change, in our case, the district. For our cases, the following question might be asked: To what extent has the work of travel attended to district policies, procedures, and ways of operating such that they will be transformed in ways that make them more supportive of the reform? One might answer this question by noting that only the first case evidenced clear changes in district policies and procedures and not necessarily because it was planned but rather because Alvarado himself was in the position to carry out district-level changes in policies and procedures. Both CEL and IFL cases were not, by and large, able to institute new district policies such as placing professional development in the line or having all district decisions driven by what is best for classroom-based teaching and learning.

However, there was evidence that they attended to the problem of influencing district policy and procedures, but in different ways. For example, although the IFL found it difficult to demand *whole district reform from the start* with some of its districts (especially the larger ones), they were able to demand that district leaders commit to going through professional development with an initial set of carefully chosen schools and that the leaders also publicize a roll-out plan that includes *all* schools in a specified time period. In this way, they were able to establish the norm that (a) this reform is important to the district; and (b) everyone will be expected to do it in the near future.

Finally, scale can be conceptualized as including a *shift in reform ownership* that goes beyond "buy-in" (Coburn, 2003) to include knowledge of and authority for the reform. This dimension of scale is of concern in both cases that included a third-party organization because they will require (at some point in the future) a change in ongoing responsibility for the reform from an external to an internal party. Although it could be argued that CEL's and IFL's efforts to train leadership comprise efforts to shift reform ownership, the leadership training was primarily about how to support the instructional reforms brought to them by the reform organization (we have argued that this is related to *sustainability*—see above). Coburn notes that shift of ownership needs to include a range of other types of capacities and knowledge such as how to take responsibility for the continued spread of the reform, how to provide continued funding for the reform, and how to use reform-related ideas or structures in district decision making. Although not the center of our data collection, we found little evidence that either CEL or IFL worked with districts in a systematic way to develop these kinds of capacities. For example, we uncovered no tools for doing this, and—although a shift in reform ownership was espoused as a goal—we heard few specific ideas for how they were undertaking the work to make this happen.

By intersecting our conception of travel with an elaborated theory of scale, we have complicated the requirements for change. We have shown the importance of both people and tools, arguing that either alone is inadequate for travel. In addition, the requirements of change-at-scale suggest that the tools/people need to be designed to not only work at all levels of the system but also to work on different issues at the different levels. Classroom-knowledgeable professional developers or leadership training consultants will not be enough on their own. Reform knowledge takes many forms, some of which are specific to leadership functions, others to coach or teacher functions. All must be accounted for and coordinated in successful district-wide reform.

We have also uncovered a requirement for successful change-at-scale that requires much more than knowledgeable people and elegant tools: the ability to step back from the work of change and reflect on what is required for successful change-at-scale. This was not evidenced in the first case in which Alvarado served as a conduit for the travel of reforms that he himself established in another district. CEL and IFL, on the other hand, were in the business of guiding reform, so they had spent considerable time reflecting on, and then building and refining their organizational knowledge base about what constitutes successful strategies for change, as well as building their own capacity to continue to provide professional development as new clients come on board. However, neither organization appeared to be taking on seriously the development of knowledge regarding how to shift reform ownership from themselves to their client districts as a central element of their work: a shift that will be ultimately required for lasting, successful district-wide improvement.

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Part IV
Teaching, Learning and Change

Involving Children and Young People in Educational Change: Possibilities and Challenges

Pat Thomson

There is growing international interest in the practice of involving children and young people in educational change. This chapter examines the purposes for children's and youth involvement in educational change, surveys some of the ways it has been interpreted and enacted, considers the challenges that it inevitably raises and draws attention to some knotty and enduring problems.

There are distinctive traditions of youth educational involvement in various countries – for example, in Britain as “pupil voice”, student governance and school improvement; in Australia via student participation and active citizenship and in the United States where student perspectives have been integral to some national school reform programmes. These traditions share some common philosophical foundations, and they cover a similar span of activities – from modest incremental shifts in school practice to radical proposals for school restructure and community transformation. This chapter ranges across these traditions, focusing more on the commonalities of approach than the specificities. In so doing, it draws on a corpus of published and unpublished work, but it does not attempt a thorough survey. It also draws on my own experiences working with children and young people in Australia and England.

Why Involve Young People in Educational Change?

The move to involve children and young people in educational change is underpinned by the view that they are capable of forming and giving opinions (James, Jenks, & Prout, 1998; Qvortrup, Bardy, Sigritta, & Wintersberger, 1994). Youth is not seen as a barrier to the capacity to analyse social problems and articulate solutions. To the contrary, children and young people are, by virtue of their age and social position, seen to have experiences and viewpoints which are not only particular and distinctive but also sufficiently different from that of adults to warrant their

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active participation in consultation, debate and decision making (Franklin, 1986, 2002; John, 2003). Children and young people are “expert witnesses” to their lives and can provide unique perspectives on and reasons for, and modes of, educational change.

Most people who involve children and young people in educational change have a mix of reasons for doing so. Three of the most common reasons are as follows:

(1) *It's their right*

The legal rationale for involving young people in decisions that affect them can be found in the United Nations Convention on the Rights of the Child [United Nations (UN), 1989] which, in Article 12, calls on nation-states to

assure to the child who is capable of forming his or her own views the right to express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child.

While the convention is not legally binding, and indeed is not formally ratified in the United States, it is an important international statement of moral purpose. It is a fulcrum for children's rights advocates and has supported significant changes in policy and practice in health, education and welfare organizations.

(2) *It teaches them important personal, social and civic knowledge, skills and dispositions*

Being consulted and participating in decision making go further than simply recognizing the rights of young people. When the school works to support civic learning and behaviour, students develop the social dispositions and civic knowledges necessary for adult life (Gordon, Holland, & Lahelma, 2000; Kennedy, 1997; Osler, 2000). Schools committed to education for citizenship create settings and occasions where children and young people can not only learn about the practices of living together – how to manage differences, how to work collaboratively, how to make compromises and what processes are conducive to good decision-making – but also learn how to change them (Kaplan, 2000; Pearl & Knight, 1999). Furthermore, in operating as a democracy, the school contributes to the (re)production of our democratic way of life (Apple & Beane, 1995). Such involvement also supports personal development (leadership, self confidence and communication), changes relationships between teachers and students (Mitra, 2003) and fosters the reflective behaviours that are important to learning in general (Fielding & Bragg, 2003).

(3) *It's integral to making good decisions and sustainable change*

It is impossible to know what to do without information. Making good decisions about educational change depends on having all of the necessary information

available. This includes the students' experiences and perspectives. Thus, consulting students provides important information about what needs to change, why and how (Flutter & Rudduck, 2004; Rudduck, Chaplain, & Wallace, 1996). In addition, making change "stick" depends on having agreement, from those who are affected by it and who have to carry it out, that decisions are well made and the change is desirable, appropriate and feasible. If students participate in change then it is more likely to be successful. Not only they, but also their families, are more likely to "own" the decisions and directions for change and take some responsibility for its success (Rudduck & Flutter, 2004; Steinberg & Kincheloe, 1998).

Having a Say in Educational Change

When children and young people are involved in educational change, it is often referred to as "voice". The term "voice" comes from the political tradition where oppressed or marginalised groups of people struggled to find ways to tell their stories and have their experiences recognised. A focus on "student voice" links to this tradition, drawing attention to the ways in which young people have historically been disenfranchised in and through their education: adults typically have made decisions about and for students without consulting them.

Voice is generally taken to mean "having a say", but this commonsense interpretation glosses over some important caveats. Britzman (1989, p. 146) notes that the word carries three sets of meanings:

The concept of voice spans literal, metaphorical and political terrains: in its literal sense, voice represents the speech and perspective of the speaker; metaphorically, voice spans inflection, tone, accent, style and the qualities and feelings conveyed by the speaker's words; and politically, a construct of voice attests to the right of speaking and being represented.

So, voice thus not only means having a say, but also refers to the language, emotional components and non-verbal means used to express opinions. The notion of voice also encapsulates the idea of a particular point of view, not necessarily one that is universal. Children and young people do not speak as one – just like adults, they have different experiences, opinions and modes of expression. And some voices may be harder for adults to hear than others.

Some children and young people make their views heard in ways that are confrontational, rude and offensive. This is no less "voice" than that which is politely expressed in correct English in response to a question. Many school staff think that only well behaved students have earned the right to have a say, and may also think that being less compliant or less academically successful means that those students will have nothing sensible to say (Hamill & Boyd, 2002). But it is these young people who have very important things to tell us about how schools have failed them, and/or how their education needs to be different (Thomson, McQuade, & Rochford, 2005). It may be hard to hear confrontative stories and terms, but listening does not equate with condoning (see the last chapter in Fine & Weis, 1998, for a discussion about violent voices). Adults maybe challenged by the words that come from

the mouths of children and young people, but a commitment to hearing *all* voices requires not censoring particular views and modes of expression.

However, diversity is not the only complication in voice. According to Hadfield and Haw (2001) there are not just differences between people, but each individual also uses more than one voice. They nominate three:

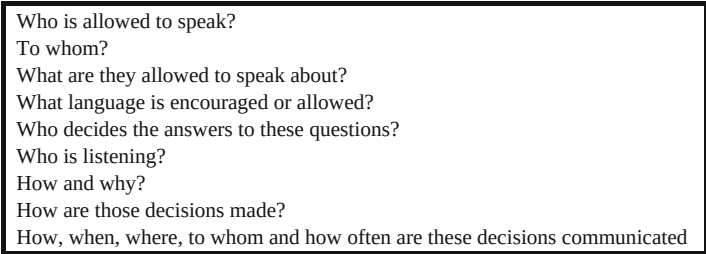
- *authoritative*. This is a representative voice intended to speak on behalf of a group – children say, adolescents believe. . . . It is exercised politically in consultations, and through elected bodies such as councils and working parties. It can be also elicited through surveys and polls, where majority opinions are taken to be representative of a larger group.
- *critical*. This voice is intended to challenge the status quo. It may be directed towards policies and practices, or towards stereotypical portrayals. It may also mean putting into the public arena perspectives that are rarely, if ever, heard.
- *therapeutic*. This voice occurs in safe spaces where people are able to discuss painful and/or difficult experiences and are then supported to find ways of dealing with them. Speaking with the therapeutic voice is not simply a matter of personally coping, but also of seeing the social production of seemingly individual problems (see Cruddas & Haddock, 2003). In the case of children and young people, working with the therapeutic voice often requires specialist training and support.
- Bragg (2007) adds a fourth type of voice:
- *consumer*. This voice expresses preferences about lifestyle and culture or leisure-related activities and experiences. The consumer voice is also embedded in (delimited) choices about identity/ies and affiliations. The consumer voice of children and young people is much sought after by commercial interests through various forms of market research.
- Arnot and Reay (2007) focus on a fifth kind of voice:
- *pedagogic*. Children and young people speak with a voice that is literally schooled, that is, it is created by the experiences of being educated within particular kinds of pedagogic, curriculum and assessment regimes. Arnot and Reay suggest that talk can be focused on classrooms, subjects, identities and/or codes (the tacit and explicit rules which govern ways of being in school). They argue that it is important to carefully differentiate between the kinds of talk that occur in classrooms and to look past the surface of what children and young people say to the tacit categories and rules which govern expression. They caution against seeing pedagogic voice as authentic and pure.
- There is also a sixth voice:
- *aesthetic*. Just like adults, children and young people express their ideas, experiences and opinions through artistic media and creative genre (Grainger, Gooch, & Lambirth, 2005; Lensmire, 1998; Thomson, Jones, & Hall, 2008). They not only find “voice” through the music, multimedia and digital image generation of popular and youth cultures, but also through traditional artistic forms such as writing poetry and plays, sculpture, painting, dance, choirs and orchestras. The arts are often marginalised within formal schooling, pushed to the extra-curricular or

positioned in opposition to the “basics” (Fowler, 1996), yet they provide important avenues for the development of knowledge and skills as well as the means of self-expression and communication (Hoffman Davis, 2008; Taylor & Glennis, 1993).

The first three kinds of voice imply some kind of political change. Through speaking, a young person may feel differently, or make new alliances. Those in power are confronted. The person who speaks has exercised some agency and control of circumstances which previously felt beyond reach. However, this is not the case in the fourth kind of voice. In market research children and young people rarely have the opportunity to have any involvement in how their voice is used or exploited (see Kenway & Bullen, 2001), whereas with other kinds of voice this is the very point of speaking up and speaking out. Pedagogic voice on the other hand can be complicit, resistant or mediating, and it is up to those wanting to engage with pedagogic voices to sort out which kind of talk they are interested in, and how they might work with it.

To complicate matters even further having a say, no matter with which voice, is very dependent on the social context. Voice is produced in particular times and places for particular purposes. Being able to say what you think, in the ways that you want, is highly dependent on what you are asked, by whom, about what and what is expected of you. What is said in one setting to one person may not be the same as what is said on a different day to a different person. Power relations of class, gender, race, ethnicity, dis-ability, sexuality and age all constrain social relations and may profoundly limit what can be said (Kramer-Dahl, 1996; Orner, 1992) – as well as how it is heard (Ellsworth, 1989). Speaking therapeutically or critically, for example, always entails a judgment about the possible responses of the listeners. It all depends on who is listening, what they choose to do as a result and in whose interests they act (see Fielding’s questions in Fig. 1).

And voice is not “authentic” (Hargreaves, 1996). Having a say does not mean having your point of view treated differently from that of others. Just like adults, the views of children and young people can be challenged and debated respectfully. Failing to do so is not simply romanticising their point of view, but also failing



Who is allowed to speak?
To whom?
What are they allowed to speak about?
What language is encouraged or allowed?
Who decides the answers to these questions?
Who is listening?
How and why?
How are those decisions made?
How, when, where, to whom and how often are these decisions communicated

Fig. 1 Fielding’s (2001) questions to ask about student voice

to accord them the right to engage in dialogue and to learn from an exchange of views.

Putting “Having a Say” into Practice

The voice(s) of children and young people in educational change are generally exercised through three types of activities—consultation, participation and governance. Commentators interpret these differently, and it is clear that they overlap. The following sections show one way of understanding them:

- (1) *Consultation*: Consultation is a conversational practice. It involves a discussion between students and those with official power in the school. It is thus about the ways in which the voice(s) of children and young people are actively sought out, heard and acted on (Cook-Sather, 2002; Fielding, 2001). Students value the opportunity to have a say in their classrooms and their school, and it is salutary to note that research suggests that many feel they do not (Smyth & Hattam, 2004). Student opinions can be sought through highly structured means such as surveys and focus groups, but they can also be solicited through casual conversation and through more formally constructed conversations.
- (2) *Participation*: Participation always involves consultation, but also generally has students carrying out an investigation, a project and/or a process of decision making. Students value the opportunity to have an idea and be able to act on it and take it to fruition. Participatory classrooms are those which function democratically (Beyer, 1996; Thomson, 2007). Participatory activities are often associated with active citizenship agendas and can involve students in working outside of school in community-based activities and events. They may also involve students working through various media and genres to represent themselves, their peers and their ideas to school and community authorities and the general public.
- (3) *Governance*: Governance refers to the formal processes of school’s decision making where students can be involved in representative processes through which they can raise issues, make recommendations and decisions. Governance activities include class meetings, open forums, student councils and membership of school and community committees, working parties, project steering groups and official governing bodies. Students value the opportunity to gain a wider perspective on their education. They appreciate having their views included in formal decision making, but often require adult support at the outset in order to ensure that they are able to put their views in the ways that are effective.

The six different kinds of voice discussed earlier appear in different ways in the three types of student involvement (see Table 1). This is discussed further in the next section.

Table 1 Indicative voiced activities

	<i>Consultation – engage in conversation</i>	<i>Participation – run projects or events</i>	<i>Governance – involvement in formal school organization</i>
<i>Authoritative – speak on behalf of students</i>	Staff survey a representative group of students about their views on the playground	Some students write a report for the local newspaper about the school	The student council reports to the governing body
<i>Critical – offer critique of aspects of education</i>	Students offer suggestions for school improvement	Students research peers’ views of school	Students work on the committee writing the school development plan
<i>Therapeutic – speak about personal issues</i>	Students discuss the stress of exams	Students organize a peer mediation programme	Students work on the school interagency policy with staff
<i>Consumer – offer views on choices of predetermined products</i>	Students are surveyed about their views on school uniform	Students run a healthy food restaurant 1 day a week	Students are on a working party to review school meals
<i>Pedagogic – conversation about teaching/learning</i>	Students are asked to choose texts, activities and/or to nominate their preferred modes of learning	Students negotiate the classroom curriculum, pedagogy and assessment	Students sit on school curriculum and time-tabling committee
<i>Aesthetic – use creative means to engage with change agenda</i>	Students are asked to make posters about an aspect of the school they would like to change	Student researchers use photo-elicitation as part of a project on truancy	Student council uses a website with blog and bulletin board to communicate ideas and actions

All consultation, participation and governance activities are not the same. They are on a continuum – from one-off activities to ongoing and seriously engaged forms (Fig. 2). It is important to note that these continua are not “good” to “bad” progressions. There are many instances where a single activity is appropriate, sufficient and/or is where the school is currently placed in relation to its change practices. Schools committed to involving students in change will typically have a mix of single and ongoing activities across all three categories – consultation, participation and governance. However, while students appreciate single opportunities for involvement, they are also alert to ways in which they can be marginalised, their presence used symbolically to suggest greater forms of involvement than are reality and the ways in which their involvement can be tied to agendas not of their making. There is a significant difference in the ethos of schools where student involvement is integral to the ways in which things are routinely done, and those where there are some opportunities for some students some of the time.

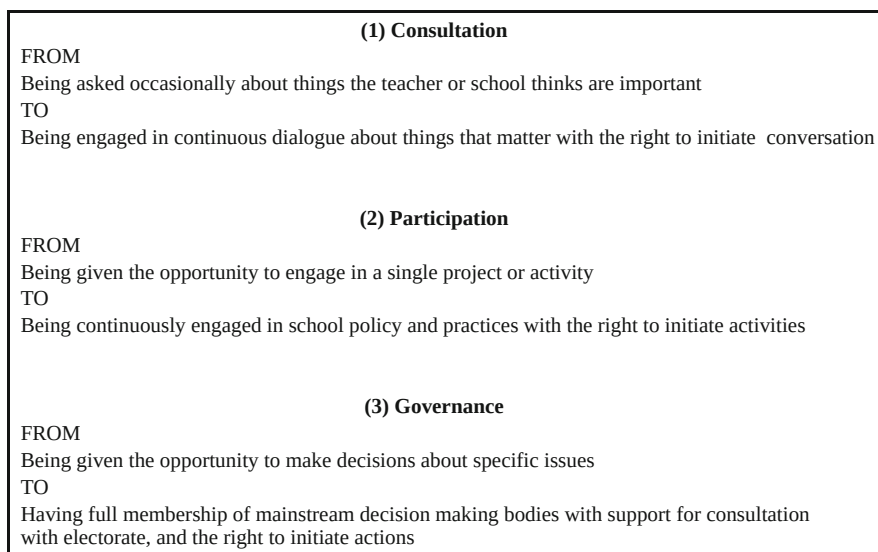


Fig. 2 Continua of student involvement

In the next part of the chapter, I outline some relatively common approaches to educational change through which diverse voices are constructed through different types of change activities.

Promising Educational Change Practices that Involve Children and Young People

Schools very often establish student councils and are then dismayed when the first thing that students want to work on is the toilets, food or the yard. Staff can see these things as not as important as learning. However, they are very important to students whose everyday life at school can be made miserable through deficiencies in basic services.

It is hardly surprising that these are the first things that students focus on since these are, as Maslow (1971) reminds us, basic human needs. It is important for school staff to recognize that the experience of school is not simply about lessons, but is a way of life that lasts for at least 11 years. Students have the same expectations of school as their teachers – clean facilities, pleasant spaces, some privacy, interesting activities and affordable and comparatively good food.

In order to effect changes in these areas, students must learn how to work together and with staff to collect evidence, consider alternatives, present a persuasive case and produce a plan of action. Furthermore, working on problems such as the state of the toilets or food brings students face to face with the educational realpolitik of

budgetary processes and constraints, the systemic management procedures for making improvements to school plant and the difficulties of managing the behaviours of a minority of their peers. There is thus in work on everyday life the opportunity for learning about the processes of school change and the practical knowledge, skills and dispositions necessary for organisational change.

Many schools involve children and young people in the processes of redesigning school spaces, outside and in. Designers are often surprised at the ways in which their assumptions are challenged by the ideas and evidence produced by the people who use the facilities. There are now numerous instances of students working with architects to design new buildings (see <http://www.theviewofthechild.org.uk>). It is not uncommon for student research teams to investigate the creation of large play areas: They consult the entire school and then make recommendations through formal presentations to the student council, headteacher and staff. In such instances, staff are impressed not only by the students' commitment to making the school a better place, but also with the obvious skills that the students have learned (e.g. Brice Heath, Paul-Boehnck, & Wolf, 2005).

But schools do involve students in the very heart of educational change (see Table 1). One such instance is through the evaluation of lessons: Some teachers regularly ask students about what makes for a good lesson, good teaching and acceptable grouping practices (e.g. Yellop, 2006). They may involve students in the processes of lesson observation, or in the learning programmes of student teachers (Cook-Sather & Youens, 2007). Fielding and Bragg (2003) describe a number of cases where student researchers use a mix of questionnaires, interviews and lesson observations to arrive at a series of insights and practical recommendations about the curriculum and pedagogy. They suggest that such experiences often persuade the headteacher and staff to expand student involvement in curriculum planning. Some schools also work with forms of the following:

- ongoing student evaluation of curriculum and teaching/learning via dedicated classroom time for pedagogic dialogue
- negotiated curriculum (Boomer, Lester, Onore, & Cook, 1992), where students are engaged in dialogue with their teacher about ways in which they might meet mandated standards
- student-led assessment, where students are responsible for keeping records of their learning and for running the regular reporting meetings between teacher and parents
- portfolio-based assessment where students either singly or in groups undertake significant tasks which can also then be assessed through formal "exhibitions" (Brennan, White, & Owen, 2001).

Those involved in these kinds of approaches point to higher levels of student engagement (Thiessen & Cook-Sather, 2007) as well as more success in required measures (tests, exams and so on) (Meier, 1995; Newmann & Associates, 1996; Wasley, 1994).

Many schools also involve students in the ongoing and cyclical processes of school and classroom self-evaluation. There are now texts which outline the kinds of “tools” that schools can use in order to engage children and young people in thinking about how their school and their education might need to change (e.g. MacBeath, 1999; MacBeath, Demetriou, Rudduck, & Myers, 2003; MacBeath, Jakobsen, Meuret, & Schratz, 2000; MacBeath & Sugimine, 2002). These go further than simply asking how well the school is doing in keeping children, young people and their families satisfied, but examine the shared understandings of the purposes of schooling, hold the prevailing practices up to scrutiny against the ideals, and also generate concrete strategies for change (Watts & Youens, 2007). There is also a move to add to the use of written and spoken surveys – interviews and dialogues and the use of creative, often visual, media and forms. These allow young people the opportunity to use their “aesthetic voice” and, importantly, open avenues of communication for more young people, many of whom are not adept at writing and speaking (Thomson, 2008). In England, there are now local authorities which are committed to supporting the development of “listening schools” where there are regular time-tabled “listening” activities, induction and ongoing support for all members of staff in “listening”, and involvement of students in the appointment of staff.¹

There is also increasing interest in involving in educational change children and young people who do not enjoy the full benefits of their education. For example, Marquez-Zenkov and colleagues (Marquez-Zenkov, Hamron, Van Lier, & Marquez-Zenkov, 2007), teachers in Cleveland’s inner urban schools, used photographic methods to involve young people who were likely to drop out of school in an action research project about “quality teaching”. The students’ research suggested that “quality teachers were those who recognized the reality of their lives, engaged in caring networks and utilized the students’ social networks. More such teachers, they suggested, would allow them to be more successful, and stay on, at school. University researchers in Australia (Atweh, 2003; Bland & Atweh, 2007) worked with a group of young people who traditionally did not go onto higher education, including a number of Indigenous youth. The project resulted in materials to inform young people about higher education, the establishment of homework support centres for senior students, the development of Indigenous support centres and services and projects to enhance the school environment. Also in Australia, there is a growing use of Student Action Teams to nominate, investigate and take action on problems which range from boredom in classes to the proliferation of graffiti on school buildings to questions of community safety (Holdsworth, 2006; Holdsworth, Stafford, Stokes, & Tyler, 2001; Thomson & Holdsworth, 2003). This is mirrored in the UK by the move to develop students as researchers.

There are often surprising connections between what happens out of school and what happens in classrooms. Helen Gunter and I worked over three school years with a student research team in what we have called Kingswood High

¹See for example the innovative work by The University of Sussex and Portsmouth local authority.

school (Hollins, Gunter, & Thomson, 2006; Thomson & Gunter, 2006, 2007, 2008). Following a survey of the whole student body, the students identified bullying and safety as an issue that they wanted to work on. Staff were initially reluctant to engage with the project as they felt that this was ground that they been over and over. However, the student researchers produced evidence of what they called “low level bullying” in which there was no single perpetrator or victim, but rather an ongoing culture of name-calling, physical jostling and social isolation. While much of this was produced through the various musical and clothing attachments of sub-cultural groups, there were also strong correlations with the socioeconomic geography of the town, and the academic groups established by the school. The group that was most feared by the majority of its peers was that of “the scallies”, a largish group of working-class boys who had very short hair, listed to rap music, lived in the local council estate, were concentrated in the “bottom sets” in academic subjects and left school before graduation. The bullying project thus provided a lens through which to see the ways in which the cultures and structures of schooling and community worked to (re)produce particular kinds of outcomes.

Not surprisingly, staff chose to focus on revising the bullying policy rather than pursue further the larger question the student research had opened up: This was translated into a “learning styles” problem. Atweh (2003) also noted that some of the schools in his project also “watered down” what students had proposed. These are not the only instances of semi-realized youth involvement in educational change.

Challenges and Knotty Problems

While there is increasing involvement of children and young people in all aspects of educational change and many promising beginnings, there are also concerns. In conclusion I canvass some of the most common and difficult to resolve.

Students can easily be silenced in very well-intentioned conversations (see Fig. 3). But there is also a tendency for schools to involve an elite group of young people in change activities with the expectation that they know and can/will represent their peers. The “hijacking” syndrome – selecting students who say what we want to hear, about topics we have decided, in ways we want to hear and responding

Fig. 3 Portsmouth children in “Listening schools” pamphlet

It’s harder to get our ideas across:

- if people are too busy and don’t have time to listen to us
- when people get distracted or interrupt us
- when people do not respect what children say or laugh at us
- if there’s too much noise and people are shouting
- if we feel scared, shy or embarrassed to say what we think
- when we worry that we will say the wrong answer
- when we do not know the right words to say what we mean
- if others cannot use or understand sign language

in ways that are congruent with what we already want to do – produces predictable side effects:

- student councils dominated by “good girls”
- school councils which only engage in fund-raising and social activities
- cynicism among students about participation, consultation and governance and about the school’s articulation of citizenship (Alderson, 1999; Chamberlin, 2003; Matthews & Limb, 2003)
- reforms which are not as interesting, innovative and/or deep and sustainable as they might be.

The answer is, as Holdsworth (2000) puts it, “taking young people seriously . . . (this) means giving them serious things to do”.

Allowing children and young people the right to determine what issues they will speak about and act on requires some courage from school leaders and classroom teachers. What schools can do is constrained by school agendas and by neoliberal government policy initiatives. This tight framing can very simply be re-enacted with students (Fielding, 2006) – they are asked about the details of school uniform, not whether they ought to have one; they are asked how they can be taught more effectively to pass exams rather than what they want to learn, and they are involved in school inspection-related improvements rather than on those things that they nominate as most important. Alternatively (or perhaps as well), schools simply fail to act on the expressed views and recommendations of students.

While not all things that students suggest are realistic and possible, and government mandates always place real restrictions around what can be done, some things that students think are important are simply more challenging to the school than others. Things which might be seen to bring bad publicity or damage market-based enrolments, for example, are very often simply ignored rather than there being a conversation about the difficulties. Or, as in the case of Kingswood, students’ recommendations are diluted and half implemented. Importantly, these kinds of school responses not only teach students to be wary of promises of involvement but also that citizenship may be more about compliance than agency. Fielding’s questions (Fig. 1) are a useful reminder that student involvement in educational change is an ethical undertaking.

Finally, because of the ways schools are separated from communities and other youth activities, school staff rarely encounter the often radical and dramatic actions that young people take and make in community settings and in social movements (Fine et al., 2004; Ginwright, Noguera, & Cammarota, 2006).² They do not see the tremendous potential that exists for reciprocal partnerships with children and young people.

Perhaps the greatest challenge for educators interested in involving children and young people in educational change is inscribed in the very language of

²See also the open access online journal *Children Youth and Environments*.

teacher/learner. This is a linguistic pair in which there is a predetermined power relationship – the teacher who knows, and the learner who does not. Fielding (2008) sees this as an ongoing challenge.

... within the context of formal education, there is always likely to be a tension between those who regard the standpoints and perspectives of the young as, by virtue of their youth and inexperience, of limited value or legitimacy and those who take a view that sees the characteristic and very different virtues and capacities of young people as a source of creativity.

The assumptions that learners do not deep down really have the expertise to do significant things can permeate attempts to involve them in educational change, ensuring that students remain lesser and less “expert” partners. This is indeed a pity, since in places where such attitudes do not prevail, there is growing evidence that working with children and young people on educational change – rather than on them, or for them – can make a significant, and often surprising, difference.

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Adaptive People and Adaptive Systems: Issues of Learning and Design

John Bransford, Susan Mosborg, Michael A. Copland, Meredith A. Honig, Harold G. Nelson, Drue Gawel, Rachel S. Phillips, and Nancy Vye

A Nation at Risk, the watershed US report that urged action to better prepare students for the global economy, was published in 1983 – approximately 25 years ago. Since then, notes Darling-Hammond (2008, p.1),

... mountains of reports have been written about the need for more powerful learning focused on the demands of life and work in the 21st Century. Whereas 95% of jobs in 1900 and 50% in 1950 were low-skilled jobs requiring only the ability to follow basic procedures designed by others, today such jobs comprise only about 10% of the U.S. economy. At least 70% of jobs require specialized knowledge and skills, including the capacity to design and manage one's own work, communicate effectively and collaborate with others, research ideas, collect, synthesize, and analyze information, develop new products, and apply many bodies of knowledge to novel problems that arise (Drucker, 1994).

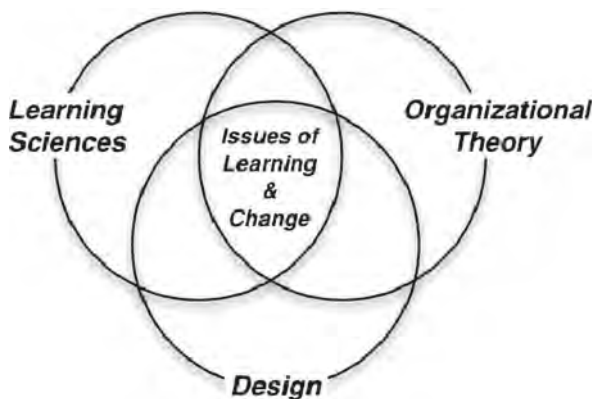
The United States is not the only nation facing these issues. As Darling-Hammond explains, "Nations around the world are reforming their school systems to meet these new demands;" they are "revising curriculum, instruction, and assessment to support the more complex knowledge and skills needed in the twenty-first century – skills needed for framing problems, seeking and organizing information and resources, and working strategically with others to manage and address dilemmas and create new products."

Microsoft's *innovative schools* program (<http://innovativeschoolsonline.com>) provides excellent examples of worldwide efforts to create new kinds of learning systems. Many of these learning systems focus on creating close connections among schools and communities, aided by new technologies.

While distinct skills, technologies, and knowledge are needed to adapt to change, the particular adaptations needed are not necessarily foreseeable in advance. This means that adapting to change requires lifelong learning – not only by individuals but also by groups, organizations, communities, and nations. Each of these levels of learning requires special efforts to support people and systems as they adapt to evolving opportunities, needs and trends.

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Fig. 1 Three academic traditions



With the preceding considerations in mind, we formed a team of authors who represented three different academic traditions – the learning sciences, organizational theory and design (each with a variety of subtraditions). All three traditions focus on issues of learning and change (see Fig. 1), but each has approached this task from different perspectives. We knew that our grounding disciplines had already converged to some extent on some basic conceptions, and we believed that the task of writing together would help us identify some unique strengths of our different academic traditions that, when combined, could provide a rich set of ideas for helping individuals, organizations, and communities increase their abilities to learn, adapt, and innovate.

While each of the three traditions shown in Fig. 1 is much broader than we can explore in depth in the present chapter, our aim is to provide glimpses of how these traditions can complement one another. To begin, brief sketches of the three traditions are provided below.

The Learning Sciences

Some of our authors come from the learning sciences tradition. Although this tradition encompasses many different theories (e.g., Bransford, Barron et al., 2006; Bransford, Vye et al., 2006), most have a shared interest in questions about the need to manage and adapt to rapid change both now and in the future. These questions suggest new ways to think about topics including expertise, professional and student identity, assessment, and lifelong learning. For example, it is predicted that in the future people will change jobs with accelerated frequency (e.g., Partnership for 21st Century Skills, 2003). Even if people stay in the same job – for example, as an engineer, doctor, technologist, or manufacturing expert – the nature of the jobs themselves will almost certainly change, often quite dramatically. As a result, the need for lifelong learning may well become even more important in the future than it is currently. As we shall see, the present authors all agree to a

key assumption; namely that processes of becoming *lifelong learners* involve much more than periodically *topping off* existing repertoires of skills, knowledge and attitudes. Furthermore, typical assessments often fail to capture peoples' potentials for effective lifelong learning. We say more about these points later on.

Organizational Theory

Another set of our authors comes from the field of organizational theory and leadership. Like the learning sciences, this field encompasses a broad area of research that includes a variety of perspectives. For the present chapter, we focus specifically on organizational *learning*. In today's world, *individuals* need to learn, but so do *organizations*. It is important to understand the similarities and differences between these two views of what *learning* means.

Design

A third set of contributors to this chapter comes from the *design* tradition, a tradition that includes in its focus the intentional design of buildings, artifacts, technologies, and organizational structures that are responsive to, and useful for, particular groups of people and their purposes and settings (e.g., Nelson & Stolterman, 2003; Simon, 1969/1981). Our learning scientists and organizational theorists deal with issues of design on a daily basis (e.g., the design of meaningful experiments, of powerful instruction, of organizationwide feedback systems to monitor and guide learning). However, we have all come to agree that the design tradition takes a deeper look at these issues than is typically characteristic of the other two groups.

Our Common Focus

As noted earlier, each of the three traditions we discuss explores issues of change and learning (see Fig. 1), and the invitation to write this chapter provided a common ground that allowed each of us to apply and reflect on our own specialized expertise and join in the search for insights that extend beyond the boundaries of our previous learning.

In the first three sections of this chapter, we discuss some key assumptions and findings from each of the three traditions – especially regarding adaptivity to rapidly changing environments. The fourth section is based on extended discussions after we finished the first three sections. Here, we ask how our three traditions might complement one another and possibly arrive at a set of agreed-upon conjectures that can set the stage for additional, and richer, explorations of learning and change.

The Learning Sciences Tradition

John Bransford, Susan Mosborg, Drue Gawel, Rachel S. Phillips, and Nancy Vye

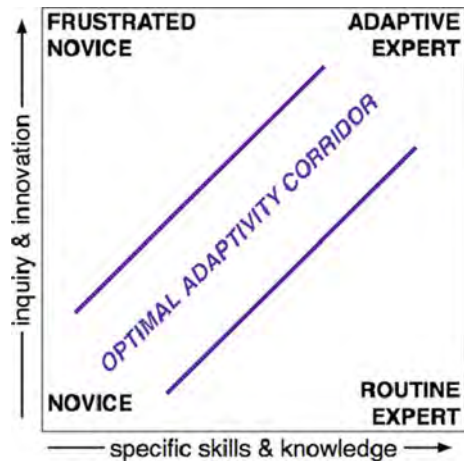
Many learning scientists argue that the accelerated transitions people face in their environments (see the introduction to this chapter) – augmented by surges in information and communication technologies – require rethinking the kinds of professional identities, learning strategies and assessments of successful learning needed for productive and fulfilling lives. For example, it is often stated that people need to become *self-directed, lifelong learners* in order to stay afloat in what Peter Vaill calls today’s “whitewater world” (Vaill, 1996).

We argue that dealing with rapid change often requires a professional identity quite different from viewing oneself as a *master of one’s trade* who has *finally arrived* and can continue the same basic set of practices year in and year out. It also requires a vision of educational success that is quite different from defining the goal of schooling as producing a *finely polished, finished product that will last for many years*. Instead, rapid change means that all of us must become *self-polishing* – and the kinds of polishing needed is likely to change over time (O’Mahony et al., under review).

Seminal work by Hatano and Inagaki (1986) differentiated *adaptive expertise* from *routine expertise*. They argued that stable environments provide many pockets of routine expertise where people can be highly efficient without a need to deeply understand what they are doing and why it is relevant. In contrast, environmental change and variability often require routine experts to develop more of a learning stance (i.e., adaptive expertise). Lin, Schwartz, and Bransford (2007, pp. 65–66) note that Hatano and his colleagues first introduced the concept of adaptive expertise in relation to abacus masters. Hatano and Ignaki (1986) proposed that the abacus masters they studied, while highly skilled, should be termed *routine experts* because they had developed a very high, but rather narrow, procedural proficiency with a particular set of cultural tools. They contrasted routine experts with adaptive experts, and they asked the educationally relevant question of how novices become adaptive experts, performing procedural skills efficiently, but also understanding the meaning and nature of their object. Hatano and Inagaki (1986) described several qualities of adaptive expertise that distinguish it from routine expertise. These include the ability to verbalize the principles underlying one’s skills, judge conventional and unconventional versions of skills as appropriate, and modify or invent skills according to local constraints.

Several authors (e.g., Schwartz, Bransford, & Sears, 2005; Wineburg, 1998) have suggested that adaptive experts are more prepared to learn in new situations, in part by avoiding the natural tendency to overapply previously efficient schemas (Hatano & Oura, 2003). Other researchers have referred to the overassimilation problem as one of *functional fixedness* (e.g., Luchins & Luchins, 1959) or *the tyranny of success* (e.g., Robinson & Stern, 1997). Studies of these phenomena using Second

Fig. 2 Dimensions of adaptive expertise



Life have recently shown how easy it is to become trapped into an *efficiency* rather than exploration and innovation set (e.g., Weusijana, Svihla, Gawel, & Bransford, 2009).

Figure 2 provides a characterization of adaptive expertise that is relevant for thinking about issues of learning and teaching (Schwartz et al., 2005).

The horizontal dimension in Fig. 2 emphasizes efficiency of particular skills and knowledge; the vertical dimension emphasizes innovation. Adaptive experts are presumably high on both dimensions (e.g., Gentner & Markman, 1997; Hatano & Inagaki, 1986; Wineburg, 1998).

People who appear on the horizontal dimension in Fig. 2 are highly efficient and can rapidly retrieve and accurately apply appropriate knowledge and skills to solve a problem or understand an explanation. Examples include experts who have a great deal of experience with particular types of problems – for example, doctors who have seen many instances of particular diseases in many different people or who have frequently performed a particular type of surgery. They can diagnose and treat a new patient quickly and effectively – as long as the case fits their current, efficient routines.

Many instructional strategies are designed to develop the kinds of efficiency that enable people to act with fluency. They do this by helping people acquire schemas that turn *non-routine* or novel (for the person) problems into problems that are routine (e.g., see Bransford & Stein, 1984). If you are having surgery, you want someone who has highly efficient and stable routines (e.g., Ericsson, 2004). As noted by Schwartz et al. (2005):

Researchers who study both people and organizations have learned a great deal about promoting efficiency. At a general level, probably the best way to be efficient is to practice at tasks and gain experiences with important classes and components of problems so that they become “routine” and easy to solve later. The best way to ensure transfer is to “teach for

it” so that the problems people encounter on a test or in an everyday environment can be solved with high frequency because they are quite close to what has been learned previously. Transfer problems essentially disappear if we teach in contexts where people need to perform, and if we arrange experiences and environments so that the correct behaviors are driven by the environment. (p. 29)

Efficiency training works well when environments for which we are preparing people are stable. As noted earlier, Hatano and Inagaki (1986) discuss “routine experts” who become very good at solving particular sets of problems but who do not continue to learn throughout their lifetimes (except in the sense of becoming even more efficient at their old routines). In contrast, Ericsson and his colleagues show how world-class experts resist premature automatization and keep seeking new challenges to increase their abilities to excel (Ericsson, 2009).

Dr. Steven Phillips (personal communication, January 4, 2008), a heart transplant surgeon who developed artificial hearts, valves, and other vital devices, explained to us how his training emphasized the importance of being innovative and well organized. When he entered the medical artificial heart and transplant field, the need to innovate was ubiquitous. During the early years of cardiac surgery, there were many problems to be solved. Examples include the need for highly effective blood oxygenators, improved blood pumps, and ways to reduce rejection of foreign objects by the body.

Dr. Phillips learned to balance efficiency and innovation. When he performed surgery, he was primarily in an efficiency mode – he needed to be fast and accurate. In his laboratory, he continually worked to invent new procedures and devices that would save lives. He did not invent on the fly while doing surgery, unless he faced a life or death issue and had to try something new *on the spot*. Given a new innovation, Dr. Phillips spent a great deal of time perfecting his new devices and surgical techniques so that he would be highly effective while actually doing the surgery. But if he had failed to innovate, his old efficient routines would often have failed.

The adaptive expertise diagram (Fig. 2) emphasizes both efficiency and innovation. For educators, this model becomes especially useful when we ask how we can move people along both of its dimensions, because movement along one dimension alone is unlikely to support the development of adaptive expertise. Training dedicated to high efficiency can overly constrain transfer and restrict it primarily to highly similar situations (e.g., National Research Council 2000). By the same token, opportunities to develop general, content-free skills of critical thinking or problem solving appear to provide a set of flexible but *weak methods* that are too inefficient for the large problem spaces found in many real-world tasks (e.g., Newell & Simon, 1972).

These arguments suggest that people will benefit most from learning opportunities that balance the two dimensions in Fig. 2 and remain within the *optimal adaptability corridor* (OAC). For example, children who receive nothing but efficiency-oriented computation training in mathematics may well become efficient, but this kind of experience can lead to limited conceptual understanding, which hampers flexibility when they face new problems (e.g., Martin & Schwartz,

2005; NRC 2000). Balanced instruction in mathematics, for example, includes opportunities for people to learn with understanding – in part by posing and testing their own mathematical conjectures. They can then be exposed to solutions developed over the centuries, plus be provided with multiple efficiency-building experiences. Instruction that *balances* efficiency and innovation seems optimal and should include opportunities to experiment with ideas and, in the process, experience the need to change them and develop the proficiency to make them work (e.g., Schwartz & Bransford, 1998; Schwartz & Martin, 2004).

An emphasis on balanced instruction can help move our field beyond *either/or* discussions such as “Who was right, Thorndike versus Dewey?” (e.g., Lagemann, 1997). Yes, there is an important role for innovation and inquiry in instruction (e.g., Dewey, 1916; Piaget, 1953) – but also for efficiency and direct instruction (e.g., Skinner, 1954; Thorndike, 1913).

Interestingly, data suggest that *innovation first* instruction *followed* by direct instruction (e.g., asking learners to first grapple with instructionally rich problems using their prior knowledge, then introducing them to the problem-solving heuristics and solutions used by experts) can create *times for telling* resulting in more effective learning than when instruction takes place in the opposite order (e.g., Bransford & Schwartz, 1999; Martin & Schwartz, 2005; Schwartz & Bransford, 1998; Schwartz et al., 2005). Often, however, the opposite order is the norm – we typically begin by providing directions and formulas for how to solve a set of problems and then ask people to apply this knowledge to new problems we present.

Adaptivity and Sociocultural Contexts

The kinds of behaviors typically associated with adaptive expertise (e.g., being open enough to ask naïve questions, admit misunderstanding and mistakes, learn from others) can be strongly affected by the sociocultural contexts in which people are embedded. Consider the following comments from Eric Meyer (personal communication, 2005), who explained how the criteria for success implicit in two different classroom environments affected his and his classmates’ attitudes about attempting to be innovative and take academic risks.

[A] recent graduate seminar experience at a major research university was one in which I was encouraged to take risks. A socially derived peer evaluation system played a major role in this seminar. Grades were significantly less important, at least to most of us, but the esteem of our peers was cherished. We were all highly motivated learners, but this was because we attached meaning to the activities in which we participated. Risk taking, in this context, became the symbol of success—once we understood what we brought to the table in a skill sense, those who were most lauded were those who went outside their areas of expertise to attempt something new. This was not a standard that was imposed on us artificially, but one which we created socially in the context of our cohort seminar. In this sense, we created our own assessment of each other, something that we do unconsciously in many contexts, but with the opposite result—risk taking is minimized.

Meyer went on to contrast the preceding example with another learning experience in which risk taking was not rewarded:

Our readings were predominantly in favor of a specific reform effort. It was no surprise that nearly all the midterms written for the professor chose to speak positively of that effort, a point he chose to reveal to us when he returned our papers. While there was a clear opportunity for someone to lambaste this particular reform in light of its many failures and uncertain future, we all took the position that coincided with the readings we were provided. This was coercive in two ways: 1) we were not given contrary evidence upon which to base our papers should we choose the contrary position—in essence, we were not armed for both sides of the debate; and 2) by not providing an alternative point of view, that evidence was not perceived as valuable to the debate and thus not sought by the members of the class in constructing their own meanings. While the professor acknowledged this oversight in class, it was too late to change the way we approached our assignments.

After contrasting these two situations Meyer concluded:

I think there are lessons to be learned from these contrasting examples. Support for risk has to be valued both in terms of social and authoritative meaning. A climate in which assessment is a construct of mutually shared values promotes risk taking, provided everyone is mature enough to recognize risk as a reward in itself. Additionally, students need to be given the tools to take risks. Providing students with limited options, materially or intellectually, will limit the products they produce.

If we think of business managers as *giving grades* (in the form of reprimands, bonuses, etc.), it is intriguing to consider how the mindsets and emotions that Meyer experienced in his two different classrooms compares to assumptions that many business employees make about what they can and cannot do in the context of their companies. A recent article by Pfeffer (2007) includes an excellent example:

Executives come from all over the world to attend programs at Stanford Business School (where I teach) and learn amazing things about how to manage people more effectively to build competitive advantage and how to build high-commitment, high-performance organizational cultures. And their response never ceases to amaze me: “Loved what you told us about treating employees better to capture their discretionary effort. Promoting learning by building a culture that tolerates mistakes? Great idea! Fixing root causes of problems makes a lot of sense. Trouble is, we can’t do it. The boss should have been here. Too much day to day stuff takes precedence. It takes too long to make these changes. Wish we had the time, money, and the other resources to change the way we do things, but you know how it goes. (p. 31)

Of course, particular institutional constraints may be perceptions rather than realities, but they still have powerful effects on how individuals think and behave. Organizational cultures can vary in ways analogous to the classroom cultures discussed earlier by Meyer. If employees perceive their company culture as rewarding narrow – even arbitrary – metrics for success, their behavior can exhibit grudging compliance rather than genuine innovation, collaboration, and motivation for increased productivity.

Overall, what counts as *being successful* in a particular setting influences attitudes and behaviors associated with innovation. When innovation-stifling measures are formalized into measures of accountability, their effects can be especially large.

Effects of Formal Assessments on Learning and Innovation

A focus on adaptive expertise raises fundamental questions about the metrics of success traditionally embedded in school assessments (e.g., Schwartz et al., 2005). Most are efficiency assessments; they place people in *sequestered problem solving* (SPS) environments to find out how well each can directly *apply* previously acquired knowledge to answer questions on the tests.

We noted earlier that efficiency is important (see Fig. 2). However, in a fast-changing world, it is important to know how to *learn* to solve new problems. Examples include the questions people think to ask about particular topics and situations, the kinds of tools they use to answer questions (e.g., technology-based search and simulation tools, social networks, empirical inquiry), and the kinds of context-sensitive mindsets that enable them to know when to take *breakthrough* risks and seek the advice of non-like-minded people and when to be in an efficiency mode.

Differences between SPS (sequestered problem solving) and PFL (preparation for future learning) assessments are discussed more fully in studies by Bransford and Schwartz (1999) and Schwartz et al. (2005) and a CD, *Assessing Twenty-First Century Learning*, developed for the Microsoft Partners in Learning program by members of the LIFE Center (2006). It is also noteworthy that, in schools, assessments focus primarily on individuals. Many question whether this helps us understand how to help people prepare to work effectively in teams (e.g., see Barron, 2003), especially teams where there are wide ranges of distributed expertise in terms of knowledge, experiences and skills (e.g., Partners In Learning, 2006). An emphasis on teams provides a transition that brings us to issues of organizational learning and knowledge building (Bereiter & Scardamalia, 1993): How do organizations, as collective entities of individuals, learn to adapt to and manage productive change?

Perspectives on Organizational Learning

Michael A. Copland and Meredith I. Honig

Organizational theory is an extremely varied field. Business management specialists, economists, psychologists, political scientists, sociologists, and others contribute to it, and the literature base spans a broad array of empirical, theoretical, and prescriptive works on the lifespan of organizations – from their birth through their development, change, and death (Scott & Davis, 2007). Selection of any one strand of organizational theory promises to amplify certain dimensions of organizational change yet to obscure others. Here we focus specifically on *organizational learning* theory.

Theories of organizational learning are rooted in assumptions quite consistent with the conception of adaptive expertise from the learning sciences described above, and many organizational learning theorists draw on ideas from the learning

sciences in their own work. Theorizing in this line emerged largely out of concerns among prominent organizational theorists (e.g., Levitt & March, 1988) that earlier ideas about *organizational adaptation* did not accurately capture the nature of dynamic processes important for an organization's continuous learning and adaptivity.

In recent years, analyses of learning have helped the field understand dynamic change processes across various organizational and institutional contexts, offering useful corollaries to adaptive expertise. Within the field of organizational behavior and management, there are multiple, sometimes competing, theories of organizational learning that highlight the importance of peoples' participation across various organizational and institutional contexts – each of which would extend ideas about adaptive expertise in different ways (e.g., Fiol & Lyles, 1985). Considering this range of perspectives, we find agreement in understanding that organizational learning theories help us move beyond a narrow focus on individuals when thinking about adaptive expertise.¹

We begin our discussion with a conception of organizational learning advanced by Argyris and Schön (1978). Centered on the social-psychological level of organizations, their work elaborates how individuals participate in organizational transformation, consistent with adaptive expertise. They argue that all organizations learn, as all change over time. However, some forms of organizational learning are more generative than others. Leaders of what Argyris and Schön call *Model II* organizations operate in a way conducive to adaptive expertise (though they do not use the term). *Model I* organizations, by contrast, emphasize narrowly procedural decision making marked by linear and technical rationality: Leaders define performance goals and act to maximize chances of meeting them while minimizing negative or contrary feelings toward the goals and actions. Argyris and Schön argue that leaders in Model I organization often attempt to maintain total control at the expense of learning from experience (Argyris, 1999).

Model II organizations are inhabited by leaders who, in learning sciences terms, are adaptive experts. These individuals work to intentionally open their leadership practices to critical feedback from other organizational actors; they operate with collaborative, facilitative, and learning-oriented norms of trust and open-confrontation on difficult issues. Model II leaders are concerned with surfacing and resolving conflict rather than suppressing it. Model II organizations thereby have the capacity to engage in *double loop* learning – what Argyris and Schön refer to as “learning to change the field of constancy itself” (Argyris & Schön, 1996, p. 19) – and what others sometimes call institutional or cultural change, or change in the organization's underlying theory of action. Crucially, this helps organizations avoid the trap of overapplying previously efficient schemas.

¹Limitations of space preclude a discussion of the organizational and institutional conditions that shape organizational learning. For a fuller discussion of these influences, please see Honig (2008).

Critical Inquiry Cycles

Educational leadership scholars have used the ideas of Argyris and Schön described above to elaborate the critical inquiry processes characteristic of Model II-style organizations and their leaders (Copland, 2003; Sirotnik, 1989). According to this subset of the literature, people and their organizations that are engaged in cycles of critical inquiry recursively return to six practices that we discuss below.

As an example of these cycles, imagine a school engaged in efforts to overcome inequitable patterns of student achievement. Year after year, the school's achievement data revealed that, with regard to particular assessments, second-language learners were underperforming the rest of the school's population. A school community that took seriously the process of critical inquiry would recognize that defining the problem was an all-important first step; they would understand that the data did not constitute the *problem* but rather were reflective of something underneath the numbers that needed to be explored in greater depth. In particular, they would avoid assigning blame to students, families, teachers, or prevailing community norms, and turn instead to ask openly: What are the causes of this persistent inequity? What might the problem be?

Ideally, the school would make use of six practices in their cycles of critical inquiry (Copland, 2003; Sirotnik, 1989):

- (1) *Take the framing and reframing of problems as a foundational and necessary organizational activity* (see Getzels, 1979). Similar to Hatano and Inagaki's (1986) point about openness to new perspectives, leaders of Model II organizations carefully attend to identifying and understanding problems of practice to ground the work of the collective. They hold on to the present framing of problems to anchor their present work but remain prepared to let go of current frames as conditions (people, tools, or time horizons) change. They actively seek out organizational resources for this work.
- (2) *Understand that the reframing of problems and change strategies is enhanced by the intentional invitation of alternative perspectives, including perspectives contrary to, or in direct conflict with, the current overriding decision.* As Argyris and Schön emphasize, leaders of Model II organizations open their doors to alternative ways of framing problems, and take the time to create the formal and informal structures to do so. For example, organizational members may intentionally partner with external entities to round out their organization's own expertise, and these external partners may be encouraged to push on static perspectives, as well as make explicit assumptions or beliefs that may be present among organizational members tacitly and frame constructive challenges to the status quo.
- (3) *Seek out various sources of evidence when deliberating decisions, and seek to maximize free and informed choices of action* (Argyris & Schön, 1978). In critical inquiry, organizational participants argue from evidence, take seriously the importance of rooting arguments in evidence, and scrutinize the nature of the evidence in use. Argyris and Schön emphasize that the disruption of existing

(and often tacit) schemas depends significantly on the extent to which organizational actors search for and are open to various forms of evidence and the extent to which individuals have the freedom to search and deliberate.

- (4) *Develop theories of action to guide choice of organizational change strategies or solutions.* Theories of action essentially function as an argument about why a particular kind of change happens or is expected. Well-articulated theories of action rest on well-developed rationales (empirical, experiential, comparative or intuitive) available for continuous scrutiny. What is more, organizations engaged in critical inquiry pay careful attention to evidence about how espoused theories of action play out in use. Implicit here (and in their treatment of evidence) is a recognition that search-and-application – the search for an *accurate* diagnosis of the presenting problems and the application of proper knowledge to fix them – may not be a realistic frame for change in educational and other social systems. Such systems are notorious for their means–ends ambiguity; direct causal connections between inputs and outputs can seldom be drawn, and more information does not always clarify the connections and sometimes actually muddies them (March, 1994).
- (5) *Use theories of action to guide action, developing organizational policies and practices reflective of them.* Argyris and Schön argue in part that adaptive experts *manage ambiguity* (Honig, 2001) by recognizing that no actions are objectively better than others; rather some actions rest on a stronger rationale and body of evidence than others. Whether or not rationales and evidence can withstand the scrutiny of critics is a test of their strength. For example, medical doctors are helped to make solid decisions because they have opportunities to engage in medical rounds and the like (Barrows, 1994), where they must articulate their framing a problem (e.g., the illness a patient is encountering), present supporting evidence, and debate with colleagues the pros and cons of their frames and evidence. Similarly, when theories of action are translated into organizational policies and practices and at the same time kept in view, the fruits of the critical inquiry process become a resource for other members of the organization.
- (6) *Evaluate the organizational change strategies implemented as a fundamental means for informing both the original problem frame (Were we working on the right problem?), and the next iteration of change strategies employed (Were we working on the problem in a way that effected change of the kind we were looking for?).* Formal assessments may be important, but informal opportunities for dialog and feedback are no less so. As a case in point, some medical professionals have cautioned against traditional medical models that define medical evaluation as diagnosis plus treatment, arguing instead that diagnosis and treatment begin a learning cycle, where the treatment, essentially a hypothesis not a conclusion, is tested in practice for feedback.

For organizational learning theorists, these critical inquiry processes are far from an individual enterprise (e.g., see Spillane & Diamond, 2007). They are fundamentally social activities, unfolding in organizational settings. It is through engagement with others that individuals make sense of how to frame problems of practice and

learn which evidence may be relevant to those problems, what the evidence means, and what actions might address them.

As an example of these cycles of inquiry in practice, consider once again the school engaged in efforts to overcome inequitable patterns of student achievement, as described at the opening of this section. Year after year, the school's achievement data revealed that, with regard to particular assessments, second-language learners were underperforming the rest of the school's population.

The school operating in the mode of critical inquiry to overcome inequitable student achievement would avoid adopting quick solutions based on limited or superficial understanding represented by the disparities in the school's achievement data. Rather, they would devote time and energy to deep consideration of the underlying problem dimensions (Practice 1), attempting to discern the root causes of the disparities, and why the trends persisted over time. They would consider a variety of alternative sources of information (Practice 2); they might, for example, examine what second-language learners were saying about their experience at the school or how families of second-language learners perceive their connection with the school. Teachers might engage in dialogue about learning among themselves, working to make assumptions held by members of the school community about students, teaching, and families they served more explicitly.

In these efforts they might unearth conflicts and reframe more fundamental problems to be resolved, for example, school members' beliefs about who can achieve academically, gaps in their collective instructional practice, or varying perspectives about whose interests the school really serves. Importantly, they would take critical account of what efforts (programs, practices, etc.) the school had already instituted to resolve the situation, and try to learn from those earlier efforts. Throughout, they would argue from evidence and take critical account of the evidence (Practice 3).

Efforts at problem framing and reframing like these run counter to prevailing norms that encourage schools to *jump on the bandwagon* of new reforms, without first understanding the problem for which new reforms may be solutions.

Armed with a deeper, clearer understanding of the problem(s) to be addressed, the school community could become much more intentional and specific about the choice of particular strategies or solutions (Practice 5). If, for example, it became clear that the fundamental challenge had something to do with some teachers' lower achievement expectations for second-language learners, a new curriculum, or new set of pedagogical strategies, would be unlikely to help close the disparities in achievement. Rather the school would necessarily need to tackle the deeper work on changing teachers' beliefs and attitudes and devise strategies that would work on helping teachers to hold all students to high expectations.

Importantly, a theory of action hailing from this kind of critical inquiry would provide a rationale for why the particular choice of strategies and solutions would be likely to address the underlying problem(s) that was uncovered (Practice 4).

Finally, the school would engage in continual efforts to assess progress on at least two dimensions (Practice 6). First, they would pay attention to whether or not the problem they started to work on was the *right* problem or if efforts at change helped to develop an even deeper understanding and a new problem frame. A new

problem frame would call for a reconsideration of their theory of action and possibly different strategies specific to the new understanding of the problem. Second, they would pay attention to whether the solutions they put in place, supported by the theory of action, actually worked the way they had anticipated. If progress of the kind they anticipated was not evident, they would seek to understand why and make concerted efforts to learn from the efforts they had made initially, which could guide new rounds of decision making.

A school working this way would recognize that problems underneath inequitable achievement for second-language learners are complex and unlikely to respond without ongoing and persistent learning and reinvention. A school engaged in critical inquiry is always attending to new challenges on the horizon and looking honestly at the progress in their practice, learning from efforts to make productive change.

Overall, these specific activities are consistent with notions of adaptive expertise from the learning sciences tradition, including the adaptive expertise required of individuals who seek to transform schools and school systems. But the question remains of how such behavior comes to impact policies and practices beyond the individuals engaged in specific inquiry cycles. Theorists such as Argyris and Schön (1996) include policy and practice changes in their models of inquiry, but their work does not illuminate – as much as many would like – how individual learning contributes to, and is affected by, organizational learning. We discuss this issue below.

Understanding Individual and Organizational Learning

To many, the term *organizational learning* suggests two different meanings. One is that, in order to be adaptive, individuals needed to learn about the ins and outs of the organizations within which they do their work. The second meaning is the one referred to in the organizational learning literature, namely, the degree to which organizations themselves are able to learn.

The value of thinking about learning at the organizational level became clear to one of this paper's authors (John Bransford) when he was waiting to board an airplane and the agent said: "We are boarding Group 1 first. If you can't find your group number, look under your thumb holding your ticket." John looked under his thumb and sure enough, there was the group number. While handing the ticket to the agent, he smiled and asked, "How did you know where my thumb was?" The answer was revealing. "You can't believe how much time I used to waste because people couldn't find their group number. Things would quickly get chaotic," the agent said. "So I started telling people about their thumbs and it has helped a great deal." "Have you had a chance to communicate this idea to others in your company?" asked John. The agent had not; as an individual, she had come up with an innovative strategy for addressing a recurring problem – by reframing the problem (helping people find

their thumbs rather than their boarding group number), trying out her innovation with different groups over time, and assessing the outcomes.

Her company had expressed general concerns about flight delays. But they did not have a systematic way to capture information about innovations that field staff had created, or to act on that information (e.g., by training all agents to use the *thumb* method, or redesigning tickets). This kind of problem is ubiquitous in organizations (e.g., Robinson & Stern, 1997), including schools. How many innovative ways of teaching and assessing are invisible to the larger system (school, district, state, nation or world) because leaders have not created systems to make individuals' ideas and experiences a resource for the rest of the system?

Foundational work in this area was conducted by March and colleagues who discuss how individual inquiry processes come to impact the policies and practice of others in an organization, hence becoming distinctly *organizational* learning processes (e.g., Levitt & March, 1988). Information from the ticket agent noted earlier could have impacted learning by her organization in a number of ways; for example, by prompting the development of new companywide policies for having all gate agents mention to customers about the *thumb problem*; or perhaps by changing the design of boarding passes so that the thumb problem essentially disappeared.

Organizational theorists are well aware that just because evidence is encoded into policies and practices, this does not mean that organizational members actually use those policies and practices to guide what they do day to day. Ticket agents who are asked to point out the *thumb* problem to customers may not feel that they have the time to do so, or may feel that it seems unprofessional for some reason. In this case, the strategy of redesigning boarding passes may be the preferred solution, although its costs might be high and there may be other negative consequences as well (e.g., other information on the boarding pass becomes harder to see).

Especially noteworthy is that fact that evidence encoded into policies and practices shine an unambiguous light on how to proceed in new situations. In cycles of inquiry, organizational members grapple with questions such as: What type of situation is this? What policies and practices in our organizational repertoire may be relevant to this situation? How are they relevant? What do my interpretations mean for my work day to day? The actual use of encoded information in new situations over time is often referred to by organizational learning theorists as *retrieval* of a known practice. Through ongoing retrieval, organizational members deepen their own ability to use evidence and to transfer their developing knowledge and competencies to new settings.

In many ways, organizational learning is more complex than individual learning because learning processes are distributed across all or part of the entire organization and hence can easily become jumbled or misinterpreted. On the other hand, having multiple perspectives on a problem can be very useful. Many new uses of technology are being designed to facilitate organizational learning – including technologies that can provide sensitive feedback from a variety of stakeholders so that organizations

can adapt to their changing environments. This topic brings us to issues of design, which are discussed next.

The Design Tradition

Harold G. Nelson, Susan Mosborg, and Drue Gawel

Members of the design tradition emphasize that design is a fundamental human activity ranging from the design of artifacts to the design of complex technologies, social practices (e.g., science, politics, religion), and the ways people choose to live their everyday lives (Nelson & Stolterman, 2003; Simon, 1969/1981). As noted in the introduction to this chapter, learning scientists and educational leadership experts deal with design issues on a daily basis, for example, when they attempt to design meaningful experiments, tools for instruction, management and accountability structures, or metrics for success. The design tradition takes a deeper look at the nature of designing as an instrumental approach to resolving issues. The design tradition is strongly action oriented, focusing on intentions and what is desired for the immediate future, rather than chiefly describing or explaining what is already in existence. The other two traditions in this chapter are also action oriented, which is why design plays such an important supporting role and is such a seminal competency for those involved in facilitating change in educational settings.

In the past several decades, design thinking has expanded beyond such traditional fields of material design as architecture, industrial design, and product design. These developments have been substantial. Design scholars have brought the traditional design professions into closer alliance with the scientific disciplines (e.g., Broadbent, 1973). This in turn has created theories of design that have greatly influenced emerging technologic design fields including software engineering (e.g., Alexander, Ishikawa, & Silverstein, 1997). Scholars with backgrounds in the philosophy of science have expanded the boundaries of design inquiry, making the case that it can even be used to design how scholars engage in inquiry (e.g., Churchman, 1971). At the same time, advances in systems science have facilitated design thinking's advance and growing influence (e.g., Banathy, 1996; Bar-Yam, 1997; Forrester, 1969; Jantsch, 1975; Midgley, 2000).

Design thinking has now expanded into the fields of management and leadership (Bolland & Collopy, 2004; Martin 2004; Rall, 2006), education (Banathy, 1991, 1994; Reigeluth, Banathy, & Olson, 1993), information systems and human computer interaction (Coyne, 1995; Lowgren & Stolterman, 2004), communication (Krippendorff, 2006), and government (Schneider & Ingram, 1997; Sunstein, 2001). Studies of design in practice have helped us to understand how designers think, work, and are educated (e.g., Buchanan & Margolin, 1995; Gedenryd, 1998; Lawson, 1980; Margolin & Buchanan, 1995; Schön, 1983, 1987). In the process, the roots of design in the history of philosophy have been rediscovered (Dunne, 1993). For example, the philosophy of technology, an emerging field, is closely tied to design thinking (Borgman, 1984; Gedenryd, 1998).

Change and Adaptive Designing

Design researchers have noted that leaders and organizations take a variety of approaches to the roiling changes about them. Typical approaches often prove inadequate for the challenges of managing – or intervening in – the manyfold changes and choices underway.

Throughout this chapter, a key question has been: What are the necessary competencies that make adaptive and interactive responses to change by people and organizations possible? From an adaptive design perspective, these competencies include the ability to consider things holistically, think creatively yet pragmatically, act intentionally and work collaboratively on behalf of others' needs and desires.

An especially important point is that adaptivity from a design perspective requires thinking systemically about change itself, because people's very assumptions about change affect their behavior. For example, change is often thought to be triggered by either (1) chance or (2) necessity. The challenge of living with changes wrought by chance is captured in the recent writings of Nassim Taleb, where he calls improbably rare yet extremely high impact events *Black Swans* (Taleb, 2007). Taleb characterizes Black Swans as events understood only retrospectively, not predictably.

In contrast to Taleb's unpredictable *chance* events, others view change as a function of *necessity*: changes unfold according to necessary chains of cause, effect, and feedback. Applied to human endeavors, prescriptions based on necessity assume we have enough stable knowledge to predict and control outcomes of our actions if prescribed steps are carefully followed. But change is seldom a consequence of chance or necessity alone, as seen in common heuristics such as searching for a pattern, considering outliers, or working backward, which draw on both.

As an alternative to assuming chance or necessity as the primary driver of change, the design perspective emphasizes a third trigger of change – human intention (Nelson, 1987). While chance is defined by statistics or probabilities, and necessity by immutable laws and principles, intention is the expression of human volition and the ability to be deliberate when creating a desired change. Intentional change modulates the ongoing dynamics of change at play in the environment, irrespective of whether the original dynamics were triggered by chance or necessity. Scholars in this tradition argue that key issues of scalability and innovation become more manageable when approached through the design lens of intentionality.

Intentions and Systems: The Aim and Logic of Adaptive Designing

From a designer's perspective, two key strategies are essential to adaptive individuals and organizations' capacities to survive and thrive. The first involves the ability of the people and organizations to change themselves – to learn what the current reality is and what consequently needs to be done in response. The second involves the ability of the individual or organization to intervene purposefully in the situation

at hand, to bring about a desired state or reach a desired goal. Simon (1969/1981) described this competence for intentional intervention as the science of the artificial: “[T]he designer, is concerned with how things *ought* to be – how they ought to be in order to *attain* goals, and to *function*” (p. 7).

True designers work with, and on behalf of, *value experts*, those to be served by an intentionally provoked change. Value experts are the clients, surrogate clients, stakeholders, and others whose interests drive any change intervention. These are the people who, ideally in design activity, express a desired outcome, and who look forward to adapting to the positive consequences of a purposeful intervention, triggered by intention.

The interrelationships among value experts and adaptive design experts can be defined as a contractual agreement – implicit or explicit. These agreements form the basis of successful design leadership and assure sustainability of any intentional design intervention, because the interrelationships are maintained even though individuals may come and go from the design team. These interrelationships serve the interests of everyone involved or affected by an intentional change, including societal and environmental interests. Serving one another’s interests is different from top-down intervention. Further, from a design perspective, service is very different from the kind of empathic relationship employed in helping or fixing, as (Remen, 1996) notes:

Serving is different from helping. Helping is based on inequality; it is not a relationship between equals. . . . Service is a relationship between equals. . . . Helping incurs debt. When you help someone they owe you one. But serving, like healing is mutual. There is no debt. (pp. 24–25)

The success of a multi-individual adaptive undertaking requires attention to the interrelationships among the various roles of the different agents in the activity – interrelationships that are often complex. Systems science and systems thinking provide the logic of design behavior; they enable this complexity to be seen and managed through methods that make it realistically accessible (Nelson, 2007).

The systems science tradition has significantly grown from its seminal foundations (e.g., Ashby, 1956, 1962; Boulding, 1956; Churchman, 1968; Forrester, 1961) and continues to deepen scientific understanding and public awareness of complex phenomena. In the words of Lemke and Sabelli (2008) describing its growing influence:

New conceptual approaches to the study of complex systems have been developed in the last two decades by mathematicians, physicists, chemists, biologists, and computer scientists (cf. Bar-Yam, 1997). They are being applied and extended by economists, psychologists, organizational scientists, and researchers in many disciplines whose insights are being scaffolded not only by new quantitative techniques, but by new qualitative conceptions of phenomena common to many different complex systems. Concepts such as multi-scale hierarchical organization, emergent patterning, agent-based modeling, dynamical attractors and repellers, information flows and constraints, system-environment interaction, developmental trajectories, selectional ratchets, fitness landscapes, interaction across timescales, and varieties of self-organization are becoming key tools for *qualitative reasoning* about complex socio-natural systems as well as for quantitative modeling and simulation. (p. 119)

One important outgrowth from the field of complex systems is the notion of a complex adaptive system (CAS). The distinguishing feature of a complex adaptive system is its ability to self-organize, sometimes referred to as autopoiesis (self-making). One can easily imagine a system of multiple, interacting agents that never coalesces into a larger whole, for example, when a crowd of people panick by some perceived threat. In complex adaptive systems, in contrast, important new high-level structure and behavior emerge when the constituent agents interact – for instance, when a group of individuals become a true community based on shared values and collaborative behavior (e.g., Knapp, 2008).

Building on what is known about complex adaptive systems is the concept of *complex adaptive design systems* (CADS). A complex adaptive design system is a system in which the agents – people and their organizations – are intentionally proactive in their choices and actions, with an eye toward complex behavior and phenomena. In other words, CADS leverages insights from CAS theory to address the behavior of complex social systems based on human agency.

Learning and Modeling in Adaptive Designing

Learning plays a central role throughout adaptive designing. For example, a designer's approach requires learning about the reality at hand in order to intervene in that reality – the learning is for action rather than for study alone. For that reason, the adaptive design expert needs to learn not only different kinds of information but also the status of that information. As an example, the adaptive designer needs to learn what information can be considered stable, long-term knowledge. Certain scientific principles and states of affairs will qualify – not because they are immune to change but because they are considered stable enough to base reliable judgments about actions and their effects on them. The designer also needs to learn what information might be considered a paradigm shift. This can be hard to grasp, especially if understandings or emergent structures (e.g., the web in the 1990s) are still in flux. Third, the designer needs to learn what information is currently unique to a particular situation but perhaps has little or no value in future situations.

A study led by one of us (Mosborg, 2007) showed that relatively expert designers mentally model various social interactions to help generate and verify knowledge and its status. Because intentional design typically focuses on situations where information is in flux and *problems where the answer is not known* (Fischer, 2007), the learning involved is very different from the kinds of learning most often expected in school (e.g., learning to remember or paraphrase the views of Professor X). We also noted earlier that systems analysis often requires the ability to use modeling tools to accurately prototype and understand the effects of various design decisions (e.g., Bar-Yam, 1997; Lemke & Sabelli, 2008). Mental simulations of social interaction – which serve as a means of learning information, the status of that information and innovating conceptions – often needs to work in concert with formal modeling tools for designers to systematically explore and envision the consequences of

design choices under consideration. As Gerhard Fischer and colleagues (Giaccardi & Fischer, 2008) point out, innovative solutions often require *co-adaptivity*:

In our research, we have carefully analyzed why simulation environments such as SimCity, for example, are not used for real planning and working environments. SimCity supports some superficial kinds of modifications (such as changing the appearance of buildings in the city), but most functional aspects of the simulation environment have already been determined at the original design time. For example, the only way to reduce crime in a simulated city is to add more police stations. It is impossible to explore other solutions, such as increasing social services. Because the functionality of the system was fixed when the system was created, exploring concepts that were not conceived by the system designers is difficult.

Overall, adaptive designing requires knowing how to learn when one is not being formally schooled, and it involves different types of learning than one often finds in school. For example, in addition to being able to proactively learn new information and its status, the designer needs to learn how to see systemic wholes and envision system behavior. Further, the designer must learn how to create patterns of relationships among functional assemblies of components to form desired emergent properties. Often, this requires *letting go* of preconceived priorities for the optimal workings of each elemental component, to realize the goals of a design that works best for the clients served.

Priorities in Adaptive Designing

As we noted earlier, designers work on behalf of others who can be considered the value experts in the design situation – those clients, surrogate clients, stakeholders, and others whose interests and desires drive the change intervention and who ideally express a desired outcome, looking forward to the positive consequences of the intervention. Because many have a stake, meeting the needs and desires of disparate actors (individuals and groups), and balancing these needs, is a key aspect of effective designing.

An informative example comes from Pfeffer (2007) who discusses a case of redesign involving a medical center: the University of California at San Francisco's Carol Franc Buck Breast Care Center. Pfeffer describes the case as follows:

In 1997, Laura Esserman, an M.D. and MBA graduate from Stanford, became director of the center. She had a vision: a center where a woman could arrive in the morning and, in one location and in 1 day, receive an examination, a mammogram (if needed), and a biopsy (should that be indicated), and leave at the end of the day with a diagnosis and a treatment plan—bypassing the typical delays as people went from one of them to the other. Although this new arrangement might make sense for the patient and even for the quality of medical care (after all, coordination among medical specialists would be easier if they were co-located), the obstacles were enormous. Each medical specialty—radiology, surgery, pharmacology, and so forth—had its own department and its own budget, and the organization was a large, state-governed bureaucracy burdened with budget and employment rules that seemed to preclude any change. Nonetheless, Esserman did not accept excuses as to why something that made so much sense could not be done. With persistence and political

skill, she created a successful center that has drawn national attention and has seen patient visits increase from 175 a month in 1997 to 1,300 6 years later. (p. 32)

Many stakeholders were involved in this design activity, each with their own initial priorities, creating forces for inertia. Dr. Esserman worked with everyone to obtain agreement that the primary client or stakeholder would be the patient; this was the key *anchoring value* that guided the design.

In educational settings, serving the students and their futures is an anchoring priority that educators typically agree should be primary. But realizing this or any other priority is a result of many forces, stemming from chance and necessity, and modulated by intentional change. Assuring that students and their futures remain the anchoring priority and the consistent measure of performance for the designed system, requires ongoing design activity, enabled by adaptive designing competencies.

In sum, designing is a process used to help realize the full potential of those who are defined as value experts and primary stakeholders. It is not merely the creation of systems, technologies, and services measured on their intrinsic merits, though certainly that is part of it. Design is an approach to sociotechnical action. It speaks to what former big-city schools superintendent Rudy Crew has called *climbing the hill*: One of the powerful metaphors Crew frequently uses in his many talks and speeches is that urban education is America's hill to climb. And while it might be interesting – and people have built quite successful careers – describing the hill, measuring the hill, walking around the hill, taking pictures of the hill, and so forth, sooner or later, someone needs to actually climb the hill (Pfeffer, p. 33).

Adaptive design competencies include the ability of individuals or organizations to change themselves and the ability of the individual or organization to intervene purposefully in the situation at hand in order to bring about a desired state or reach a desired goal. Adaptive design experts need to have the ability to establish close working relationships with value experts, specialists, and others involved in change projects. Effective design involves learning through diverse means such as creative imagination and analytic analysis. Most importantly, it involves learning how to compose a pattern of relationships and interrelationships among designed elements to be appropriately innovated in a particular situation. Based on our experiences, successful design is enhanced through grounding in the learning sciences and organizational theory. Adaptive design is particularly well suited to the design of learning environments and processes and policies that enable people to do their best work.

Six Points of Agreement

After writing and discussing, it is clear to each of us that we have much more exploring ahead of us, but the act of writing this chapter has started a process of collaborative inquiry that will undoubtedly continue. Our three perspectives on change and learning provide different glimpses of the same complex whole; from these

compositional looks at change and learning, a richer, more coherent image can be developed in future collaborations, integrated by a focus on adaptive expertise. In this last section, we discuss six conjectures about learning and change that we have come to believe are particularly important and can help guide future work.

Adopting a Learning Stance

First, we agree that it is extremely important to help people (including ourselves) adopt a learning stance when encountering and enacting new ideas and challenges. This point can easily seem trivial. Everyone learns (at least implicitly) throughout their lifetimes, so what's new? We suggest that *what's new* is the growing realization that learning is not simply a process of pleasantly *topping off*² one's current knowledge, skills and attitudes. Instead, learning often involves emotionally charged activities such as *letting go* of current ideas and ways of doing things and admitting to having been wrong or having simply fallen behind the times. Attempts to change current routines often require getting worse in order to get better.³ People and groups must learn to become novices once again, to ask questions rather than only give quick answers, and to tolerate the uncertainty – and the implementation dips (Fullan, 2001) – that often accompanies individual and organizational change. Adopting a learning stance affects people's personal approaches to learning and, ideally, should help them learn from others as well. Organizations can embody a learning stance, beyond that of any individual, by attending to the processes they use to frame problems, aims, and issues and by exploiting the social aspects of those processes.

Defining Our Identities as Professionals

Related to the previous point is the idea that all of us make explicit or implicit assumptions about what it means to be *experts*, or *professionals*, and these assumptions can affect the degree to which we are prepared to accept some of the emotional and behavioral bumps associated with learning. Often, the models of expertise we see on television and in other settings are models of the *expert who knows all the answers*. If one holds this view, either implicitly or explicitly, it can get in the way of new learning (e.g., Cognition and Technology Group at Vanderbilt [CTGV], 1997; Schwartz et al., 2005; Swinnerton, 2006; O'Mahony et al., under review).

The adaptive expertise concept acknowledges the importance of well-honed sets of skills and knowledge, but it also celebrates the ability and willingness of experts (including policy makers) to leave their existing comfort zones and engage in the

²Thanks to Tony Back for introducing us to this term.

³For example, Tiger Woods hired a coach to help him rebuild his swing (e.g., http://sportscenteraustin.blogs.com/the_view/2005/05/tiger_woods_why.html)

kinds of learning that often require risk taking and conceptual and behavioral change (see also Schwartz et al., 2005; Bransford & Vye, 2008; Bickman, Reimer, Breda, & Kelley, 2006; Sapyta, Riemer, & Bickman, 2004; Swinnerton, 2006).

For leaders who aim to foster ongoing organizational improvement, risk taking is manifest not only in both the design and implementation of innovative practices but also in ongoing efforts to invite critical (and contrarian) review of those efforts. As defined by Argyris and Schön (1996), leaders of Model II organizations routinely invite alternative ways of framing problems and possible courses of action, and they take the time and create the formal and informal structures to do so.

Learner-Sensitive Policy Making

We have all come to understand more deeply (especially the learning sciences group) that the introduction of new policies represents a powerful way to change individual, organizational, and community behavior. However, new policies need to be introduced from a learner-sensitive perspective that is mindful of their effects on the *lived experiences* of people (e.g., Cohen & Sproull, 1996; Knapp, 2008). To illustrate, it can be extremely helpful for an organization to develop a policy for organizationwide recycling because it can have much more impact than simply relying on the goodwill of a few individual volunteers. Nevertheless, each of our traditions emphasizes the importance of helping people affected by new policies *understand* the value that they add, and opening up to inspection the underlying theory of action driving them, rather than simply telling people to follow new sets of procedures (e.g., see Hatano & Inagaki, 1986).

A learner-centered approach to policy making also suggests that people should be consulted about ways to make the new tasks as easy to accomplish as possible rather than allowing them to disrupt everyday work. The design tradition discussed in this chapter employs *iterative design* processes to accomplish this, in which envisioning desired outcomes, and envisioning the *lived experience* of all those whose interests are to be served by an intentionally provoked change, go hand in hand to achieve policies that are sustainable without undue burden and intrusion.

Members of our organizational learning group are especially sensitive to the fact that new policies often carry the implicit message that “you cannot be trusted and must be monitored.” In hindsight, for example, *A Nation at Risk* appeared to have been based on a relatively naive assumption that sustainable change could be achieved without learner-sensitive policy making – an assumption that implicitly undercuts the sense of professionalism, expertise and the sense of autonomy of the recipients of the policy and ultimate delivery on the report’s aims.

Systems-Centered Policy Making

In addition to being learner centered, policy makers, whether federal or state officials or heads of organizations, need to pay more attention to the total range of dynamics

in the systems that they want to help improve. Although we did not have the chance to explicitly discuss them, each of our traditions includes many examples where decisions or policies created *unforeseen consequences* because of a narrow view of their potential effects. A simple but compelling example involves a beautiful new building built in Italy that, once constructed, was discovered to block views of the ocean and of revered churches from many different points in the city. With a broader perspective on their work, the architects could have avoided this.

As we noted in earlier discussions, our traditions are becoming increasingly influenced by systems thinking and systems modeling (on systems dynamics, e.g., see Forrester, 1994). This is not a new idea of course, but the style of thinking and the modeling is reaching a point where they can be used in a variety of useful ways. A key component of systems thinking involves issues of feedback. We discuss this issue below.

Roles and Avenues for Feedback

Central to individual and organizational (systems) learning are issues of feedback. It plays a major role in guiding individual learning, organizational learning, and effective design. Especially important are the metrics that are used for feedback, the frequency of the feedback, the target for the feedback (students, teachers, organizations, etc.), and the overall sense of community that affects how the feedback is interpreted (e.g., as high/stakes *grades* of success or failure, versus opportunities for productive, collaborative inquiry). Systems theorists identify two types of feedback: positive feedback that keeps us going in the same direction and negative feedback that provides opportunities to change and adapt.

The high-stakes tests of accountability now common in education are often perceived from a negative feedback perspective and provide much too long a feedback cycle to be useful for fast-responder teaching adaptations since most are given annually at best. Some schools use *practice tests* to shorten this feedback cycle. But the nature of these tests is of concern as well. Although the tests can tell us whether people have acquired the specific knowledge and skills targeted by the tests, they don't tell us how much opportunity people have had to acquire this specific information. In addition, they do not tell us how prepared people are for everyday learning.

In the earlier learning sciences discussion, we noted a growing concern that typical measures of assessing student progress (e.g., standardized tests) may often provide misleading information about the degree to which we are helping people prepare for lifelong learning. Similar issues are relevant to organizational learning: We don't assess an organization's progress by giving all the employees a written test at the end of each year to see what they have learned and then tally their scores to see what the organization has learned. A better understanding of what the organization has learned and is capable of doing can be found in the learning interactions *among* the employees – and the technologies that help them do their work and in the performance of the organization as a whole. The key here is making the interrelationships

and guiding information sufficiently active and transparent to realize the benefits of an open system that learns from everyday feedback and practice.

The design tradition also has powerful implications for rethinking the processes of arriving at shared goals of accountability and metrics for assessing them. In the design tradition, two challenges are seen for assessing learning. First is improving the assessment of *expected* outcomes. Second is developing the means to assess the *unexpected* outcomes that we can expect to see in the case of an adaptive learner as a result of creativity and innovation competencies.

Overall, many people who study learning – the current authors included – worry that current tests may be giving us too many false negatives (people may do poorly on the tests yet have strong everyday learning skills and attitudes) and false positives (people do well on the tests but poorly in workplace environments where collaboration, initiative, innovation, and other forms of behavior are increasingly required (e.g., Partners In Learning, 2006; Schwartz et al., 2005). All of us agree that a search to find appropriate metrics is a key factor for guiding the kinds of decision making that can lead individuals, organizations, and designers toward successful learning.

The Need for Anchored Collaborations

We end this section on cross-tradition agreements (as viewed by the present authors at least) about the need to put ideas into action and study them from multiple perspectives. We are fortunate in this regard to have the opportunity to work with the Bellevue School System in Bellevue, Washington. It is an excellent example of a possible model for school systems that resonates with the three traditions discussed in this chapter and provides the basis for multiway collaborations between practice and academic traditions.

The current system in Bellevue was strongly influenced by the strong leadership of Superintendent Mike Riley, who worked with a wide range of stakeholders to reach shared agreements about the school and its technology. The service model of design was used (see the earlier discussions in the Design Section) – not a top-down implementation model of someone else's grand plan.

It took years of work and negotiation, but it was eventually agreed that the curriculum would be unified across the district and made available through the district web site so that everyone could see what was being taught, and when. This helped teachers know *where they were* with respect to curricular experiences of the students – and it was student learning that was the key outcome for all in the school. As the web site has been opened to parents, it has also helped them and others see what students are learning and discover ways to help students learn. Recently, assessment data were also added to the web site, although (of course) no student names are attached to the data. Coaches use the assessments to help teachers understand why the students are making particular kinds of mistakes in key subject areas (they collectively look for students' tacit theories), and these analyses are used to help refine the curriculum.

As part of Bellevue's new approach, people also devised a denser web of community connections. For example, teachers used smartboards to make *smart* movies that could be sent home to remind students of key parts of a lesson, clips the students could share with their parents, too. There is a wide range of income distribution in the Bellevue district, but Bellevue's design included a clear commitment to help every child become college ready. This commitment included making sure that every child had some kind of technology access – in a nearby library, for example, or in a community center or in their homes. To help the system achieve its goals, members of the local community created a foundation and advisory board. All work was done in close collaboration with the board of education and with a number of local businesses.

An explicit and exciting goal of the Bellevue system is to facilitate innovation so that the system keeps getting better. The specificity of the materials available on the system's curriculum web is critical for achieving this goal. Parents, businesses, academicians, and others can *dial in*, see specific lesson plans, smart movies, etc., and use this information as a jumping off place for suggested improvements. Of course, this could be chaos without the right kind of communications management, but Bellevue has planned for this and is developing a system of social and technical practices to turn cacophony into symphony.

A number of the authors of this chapter currently have the pleasure of working with the Bellevue system – both as their mentors with respect to the latest research findings and mainly as mentees who learn from them. Due to the specificity of the lessons, we have been able to work with curriculum coaches, teachers, and others to try redesigns based on current theories of learning and, in the process, learn from one another. This is very different from simply offering professional development sessions that explain general principles of learning and design to educators but don't connect directly with what the teachers and schools are teaching and how they are working. The latter kind of professional development sessions also do not facilitate the two-way learning that occurs (between Bellevue and us at UW) when we all interact around common *anchoring lessons* (CTGV, 1997) that are specific enough to allow us to share insights and ideas.

A useful frame of reference that has resonated with the Bellevue School System, and that fits the emphasis of the present authors on dynamic systems, is shown in Fig. 3.

Developed by the LIFE Center (Learning in Informal and Formal Environments) it serves as a reminder of the broad set of spaces for lifewide and lifelong learning. The figure is only an approximation of the amount of time spent in formal versus informal learning environments, and of course informal learning occurs in formal environments and vice versa (see Bransford, Vye et al., 2006; Knapp, 2008). Still, the figure provides a strong reminder that learning is broader than education and that a systemic approach to learning that ties together our three traditions needs to be conceptualized from a broader perspective than simply what happens in schools (e.g., Banks et al., 2007; Gordon, Bridglall, & Meroe, 2005).

The Bellevue web site is being developed with a broad *learning ecosystem* in mind. For example, as lesson redesigns and assessments are developed, they go onto

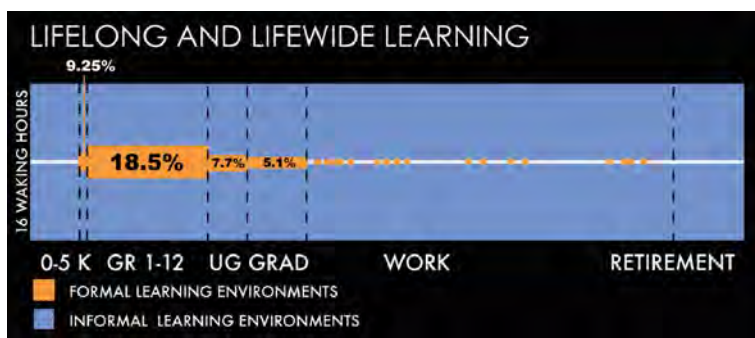


Fig. 3 Lifelong and lifewide learning

the web and provide a way for the organization and the community to keep track of progress and keep learning from one another. Ideally, preservice teachers (at UW for example) may eventually play a role by helping create and test new lessons for the district and get system feedback. This would give student teachers meaningful projects to pursue and provide them with authentic experiences that help them learn more deeply about individual and organizational learning, innovation and design.

It is our opinion that the Bellevue web site would be much less useful – and quite possibly a disaster – if it were not for the sense of community and trust in the school system (e.g., Bryke & Schneider, 2002; Fullan, 2001). It's risky to teach in this school system. What a teacher does is open to others, and they have to trust that they will not be punished for showing their work. They have to learn to balance their own preferences and teaching innovations with the curriculum structure needed for *the common good*. The concepts of adaptive expertise and adaptive systems have resonated with them. These concepts help clarify how the work they are doing fits a bigger picture that includes the courage to create (May, 1975) and a true commitment to excellence.

A sizeable risk is associated with opening many parts of the Bellevue web site (even without student names and grades, of course) to the broader community. Nobody likes everything, and the superintendent, curriculum coaches, principals, and teachers have to be prepared to deal with the negatives as well as the positives. As an illustration, a very professionally produced video was recently placed on public web (not the school's web site) in order to attack the Bellevue math program (see <http://www.wheresthemath.com/blog/local-groups/bellevue-school-district/>). The school system was taken back at first but is learning how to prepare for these kinds of events – both to learn from them in ways that improve their program and to counter the criticisms that are off base.

Schools are inherently social/political organizations, and many argue that technology is becoming a major force that will drive change and innovation in both the educational and political systems (e.g., Gore, 2007; KnowledgeWorks Foundation – <http://www.kwfdn.org>). If ever there was a time when we needed to unite the three traditions of inquiry discussed in this chapter, this is it.

We note with great sadness that after over 10 years in the Bellevue School System, Mike Riley (the superintendent) passed away very unexpectedly. He had just moved to the East Coast to become senior vice president for the College Board and focus on designing high schools that make all students college ready. The Bellevue School System, the College Board, and the entire University of Washington-College of Education mourn his untimely death.

We strongly believe that Mike Riley's vision, while undergoing changes to fit new conditions, will remain intact. He had worked closely with all the key stakeholders in his district and community. He treated his school system as an open system and specifically interacted with a variety of stakeholders to create a community of commitment and understanding. From what we can tell, the system now in place in Bellevue has become a vital part of the community.

The opportunity to get to know Mike Riley was beyond words, and he taught the authors of this chapter a great deal. He also put in place a system of outstanding leaders and teachers who remain extremely valued colleagues and are continuing to be our collaborators and teachers. We dedicate this chapter to Mike Riley, the Bellevue School System, and its broader community. The present authors are still learning from the opportunity to work with Mike Riley's outstanding leadership and teaching team, and we encourage others to look at their journey toward excellence – a journey that has always placed the future of students as its top priority.

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Changing Classroom Learning

Daniel Muijs

Why Change the Classroom?

While a lot of research has focussed on schools in terms of their overall performance and the factors that influence this at the school level (such as leadership), and many school improvement and school reform initiatives have focussed on changing school-level factors, all the evidence suggests that if we want to make a real difference to students we need to concentrate on those factors that are closest to them (Muijs & Reynolds, 2001).

Proximity theory suggests that it is those factors that are closest to the outcome that will have the strongest impact upon it. When we are talking about student outcomes, it is clear that it is student characteristics that will be most significant. Indeed, there is consistent and cumulative evidence that the factors that most strongly affect student outcomes are their social class background and cognitive and personality factors, with poorer outcomes associated with more disadvantaged backgrounds and different personality factors and abilities affecting different outcomes (i.e., mathematical ability affecting mathematics learning outcomes, and personality affecting attitudes to school) (Muijs & Reynolds, 2000; Teddlie & Reynolds, 2000). Other student-level factors are also significant, including gender, parental attitudes and parenting style, and peer relations. Recent moves towards extended schooling and greater school–community links can be seen as an attempt to directly address these factors (Muijs, 2006).

However, the second most proximal factors related to educational factors are situated at the classroom level. School effectiveness research, though in origin strongly focussed on school-level issues, has shown that approximately twice as much variance in student learning outcomes can be explained at the classroom than at the school level (Campbell, Kyriakides, Muijs, & Robinson, 2004). Even within highly effective schools there is evidence of significant “within-school” variation at the

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teacher and the subject level, and in less effective schools this variation between teachers tends to be even greater. It is clear that teachers' effectiveness can vary quite considerably even within the same department, subject area and group of children (Muijs & Reynolds, 2002). Therefore, interventions in teaching and learning have the potential to improve the educational outcomes of students more strongly than do other interventions in school.

However, when looking at classroom-level factors, the question remains as to which factors are the ones that actually matter. Recently, there has been a fair amount of interest in the classroom environment, especially in terms of ways of how we organise the classroom and what ICT resources we can use. Great investments have been made in certain technologies, such as electronic whiteboards, and recently programmes such as "the classroom of the future" have attempted to look at new ways of designing the classroom environment. Studies looking at the impact of such initiatives on student outcomes have shown very differential impacts, however, with the evaluation of the electronic whiteboard programme, for example, showing no effect on achievement (Smith, Hardman, & Higgins, 2006), though different classroom configurations and the availability of different technological solutions may facilitate particular pedagogies. However, as we will discuss later on, there is also a powerful tendency to incorporate any new technology into old ways of working.

The key element at the classroom level appears to be what the teacher does. How does the teacher manage his or her classroom? How does the teacher manage his or her students? What classroom climate does he or she create? These behavioural factors have been widely identified as being important determinants of teachers' subsequent effectiveness (Mortimore, Sammons, Stoll, Lewis, & Ecob, 1988; Muijs & Reynolds, 2000, 2002). From the point of view of proximity theory, it is what teachers do in the classroom that most directly affects student learning outcomes; therefore it is not surprising that teachers' behaviours are such important influences on subsequent learning. Clear evidence exists on what behaviours are effective, at least in achieving traditional cognitive learning outcomes as measured by standardised tests (a key limitation of the knowledge base, as we will discuss further later). Fair and proactive classroom management, clear and focussed direct instruction, interactive and active teaching that involves the students, using varied teaching methods and creating an academically focussed but supportive classroom climate have all been linked to better performance, in one study by Muijs and Reynolds (2005) accounting for over 75% of the variance at the classroom level. However, this does not mean that any intervention has a similar impact, and especially it doesn't mean that every intervention has a similar impact on students from more advantaged and disadvantaged backgrounds. Research suggests that teacher behaviours have a far greater impact on students from disadvantaged and lower social class backgrounds than on their more advantaged peers. Direct instruction methods appear to be particularly advantageous for this group of students, in part due to the fact that the high levels of structure offered by these teacher-led methods lead to less reliance on social capital than is common in pedagogical strategies that rely more strongly on self-discovery by the student (Van de Grift & Houtveen, 2006; Muijs & Reynolds, 2003).

Research has shown that teacher beliefs about their subject and how best to teach it are also powerful influences on student learning and achievement (Muijs & Reynolds, 2002). Shulman's (1987) notion of "pedagogical content knowledge" draws attention to the importance of teachers' knowledge about their subject area and in particular the instructional strategies and pedagogical practices that will optimise student learning in the subject area. These implicit beliefs about teaching the subject heavily influence teachers' classroom practice and teaching behaviours. Studies that have focussed upon connectionist beliefs (the belief that teaching is based upon dialogue between teacher and students, which helps teachers to better understand their students and allows students to gain access to teachers' knowledge) found that this shaped their classroom behaviour and guided their classroom practice (Muijs & Reynolds, 2002).

Similarly, teachers' belief in their self-efficacy, i.e. the extent to which they feel they are effective teachers, has been shown to influence subsequent teaching practices and pedagogical approaches. In one recent study of teachers' effectiveness (Muijs & Reynolds, 2002), it has been shown that teachers with higher self-efficacy tend to engage more frequently in behaviours correlated with high pupil achievement than do teachers who possess low self-efficacy. In this sense, teachers' inherent beliefs about themselves, their subject and their students are powerful influences upon their classroom behaviour, but they are also very difficult to change. Similarly, personal factors such as teachers' own need for achievement and affiliation have been found to affect their classroom behaviour and by association to indirectly affect student outcomes (Cooper & Bemis, 1967).

In view of these findings, one could argue that if any change is needed in classroom practice it is merely an intensification of existing strategies. Indeed, it can be argued that within an English context the National Literacy and Numeracy strategies have attempted to do just that, and there is evidence that these strategies have been successful in raising standards, up to a point (Earl et al., 2003). However, while there is evidence of improved standards of teaching and learning in English schools, and likewise of improved performance, the limitations of this approach have also become very apparent. First, improvement in achievement has clearly plateaued, with results not improving further since the initial gains. Second, while research suggests that the direct instruction approaches that form the basis of the National strategies should help disadvantaged students in particular, achievement gaps between students from different social backgrounds remain large.

Furthermore, there is a growing recognition that the traditional cognitive outcomes as measured by standardised tests are no longer a sufficient grounding for the future in a rapidly changing world, where competencies, attitudes and skills that prepare for lifelong learning are increasingly important, and where we have to prepare youngsters for life in an environment where acquired knowledge is quickly outdated and flexibility the key to long-term life chances.

Another key issue is the growing gap between the science of learning and classroom practice. Cognitive science is making strong advances in terms of developing

our understanding of how learning occurs in the brain. While translating this type of research into classroom practice is not straightforward, it is clear that we are losing a significant opportunity to improve our practice if we as educators don't engage seriously with this field.

The Classroom of the Future?

It is clear, therefore, that traditional practices need to be reviewed in the light of both different required outcomes and the emerging evidence from cognitive neuroscience.

Some key lessons are starting to emerge from cognitive science that may have direct relevance to classroom practice. The types of findings emerging from this research field are diverse. An example is the developing evidence base on the cycles of adolescents, which shows that, in contrast to adults, adolescents' key period of activity is the afternoon, a finding that may contradict common practices of delivering the most challenging curriculum subjects in the morning. Similarly, research on the importance of light levels to attention and learning may usefully inform the design of schools and classrooms in future (Kihara, Tsurumaki, & Ribeiro-do-Valle, 2005). It is also becoming increasingly possible to study the neural networks underlying learning in different school subjects, which appear to be partly genetically determined but also susceptible to educational treatments (Posner & Rothbart, 2005).

The most significant findings tend to concern memory and its role in learning, however.

Key findings in that area are that the sensory systems and memory can be altered through training and teaching, and that different areas of the brain are related to activity in different anatomical areas (Posner & Rothbart, 2005).

The long-term memory has a nodal structure, and consists of neural network representations, whose nodes represent chunks in memory and whose links represent connections between those chunks. As such, nodes can be equated with concepts, and links with meaningful associations between concepts. Together these form schemata, or clusters of information. Activating one item of the cluster is likely to activate all of them (Best, 1998). This means that memorisation and making connections are two crucial components of learning, according to cognitive information processing theory. Making connections is particularly important. The brain has literally millions of neurons that can be linked in neural nets in an almost unlimited number of ways.

Brain research is also telling us that the brain is a pattern maker. The brain takes great pleasure in taking random and chaotic information and ordering it. The implications for learning and instruction are that presenting a learner with random and unordered information provides the maximum opportunity for the brain to order this information and form meaningful patterns that will be remembered. Setting up a learning environment in this way mirrors real life, which is often random and

chaotic (Lackney, 1999). The brain, when allowed to express its pattern-making behaviour, creates coherency and meaning. Learning is best accomplished when the learning activity is connected directly to physical experience. We remember best when facts and skills are embedded in natural, real-life activity. We learn by doing. The implications of applying the findings of neuroscience related to coherency and meaning suggest that learning is facilitated in an environment of total immersion in a multitude of complex, interactive experiences which could include traditional instructional methods as part of this larger experience (Kotulak, 1999; Lackney, 1999).

Brain research also suggests that the brain is continually growing and changing throughout our life, but that this process is more pronounced at certain developmental stages. During childhood, this process of selectively strengthening and pruning connections in the brain is at its most intense, and it is therefore fair to say that this is a crucial period in development. Although this process continues throughout our lives, it seems to be most pronounced between the ages of 2–11, as different development areas emerge and taper off. During these periods, the brain demands specific and extensive (stimulating) inputs to create or consolidate neural networks, especially for acquiring language, emotional control and learning to play music. However, this does not necessarily imply that it is during these periods that most learning can occur, as synaptical development does not equate neatly to more learning or more brain power. Furthermore, it appears to be the case that those sensitive periods relate mainly to those elements of learning that are naturally evolved adaptations to the environment, rather than being culturally determined knowledge and skills, which are what schooling is meant to develop. The sensitive period of early childhood is also mainly related to sensory-motor skills. Views that posit the need for an overstimulating early years environment are therefore not supported by brain science (Hall, 2005; Sousa, 1998). The process of synaptic development does not stop after childhood or adolescence, but is continuous throughout the lifespan as the brain reacts to different environmental stimuli. It is therefore, quite literally, never too late to learn.

Another important finding relates to the strong evidence of individual differences between the brain functioning of different learners. While the basic brain architecture is essentially the same, brain scans have shown that, for example, “while most people, when they recognize an object visually, show increased activity in the back part of their brains, the exact magnitude, location, and distribution of that increased activity varies quite a bit” (Rose & Meyer, 2002). Similarly, learners differ in the strategies they employ to make connections in the brain (Dall’Alba, 2006). This is important for teachers, as it means that teaching should be varied to address the different needs and strategies of learners. However, the evidence does suggest that basic brain functions are similar, meaning that the oft-repeated trope that every student is likely to leave the class with a different reality, or different constructions of the learning, is likely to be incorrect. Our commonality as humans appears to be greater than our individual differences. Furthermore, the fact that differences do exist does not provide support for the view that there are different “learning styles”, or that these can easily be categorised. An example of this categorisation is the use

of the VAK schema, very popular in England following its support by the DfES (2004). VAK stands for Visual, Auditory and Kinaesthetic, the three main learning styles that are supposed to differentiate learners. It is claimed that learners predominantly use one of these three “sensory receivers” to process information, and that teachers should therefore make sure that their teaching addresses all three types (Dunn, 1990). While using a variety of teaching methods is always sensible, there is actually very little evidence for the existence of the VAK styles, or indeed of many other learning styles that have been developed, and basing teaching methods on these is therefore not recommended (Coffield et al., 2004).

A promising approach linked to findings on differential brain functioning is the increasing ability to study the individual susceptibility (thought to be in part genetic) to different treatments, such as attention training, which should allow truly individualised interventions of problems such as Attention Deficit Hyperactivity Disorder (ADHD) and dyslexia to emerge in future (Posner & Rothbart, 2005).

The importance of emotion in learning is also evident from brain research. Emotions can both help and hinder learning. On the positive side, emotions help us to recall information from the long-term memory, through allowing any information received through the sensory buffer to be perceived as positive or a threat. Research suggests that the brain learns best when confronted with a balance between high challenge and low threat. The brain needs some challenge to activate emotions and learning. This is because if there is no stress the brain becomes too relaxed and cannot actively engage in learning. Too much stress is also negative, however, as it will lead to anxiety and a “fight” response which are inimical to learning. A physically safe environment is particularly important in reducing overly strong levels of stress (Sousa, 1998).

Brain research is a constantly developing research field, and it is highly likely that further developments will in future strongly inform our views on learning and our teaching strategies.

There has, however, been significant criticism of the idea that it is possible for us to learn from neuroscience and apply its findings in education. Bruer (1997) claimed that educators fail to distinguish between neuroscience and cognitive science, and that the gap between neuroscience and education was too large to be bridged. It is certainly true that there is a big gap between the practical application we are concerned about in education and the detailed findings on brain functioning that are coming out of neuroscience, not least as research methods in neuroscience do limit the type of research questions that can be asked, focussing as they do on tractable causal questions. Furthermore, while brain imaging is helping us to pinpoint centres of activity in, for example, the learning of reading, and allowing us to identify differences between dyslexic students and others in this respect, they do not present us with pedagogical methods. Therefore, we need to take into account the fact that this research has been conducted for very different purposes and will always need to be matched to educational research findings on effective classroom teaching before it can be translated into effective classroom strategies.

However, the potential for further advances is clearly there, and greater use of these methods in the evaluation of pedagogical approaches could allow us to make significant progress (Goswami, 2006).

The Need for Evidence-Based Change

We would therefore strongly encourage classroom practice to evolve and adapt to the rapidly emerging knowledge base on learning, and to the need to develop lifelong learners rather than focussing on discrete “knowledge bases”. However, innovation in education has in many cases not been very scientific or research-based, leading to a justified scepticism of innovation among many educators. While some programmes, such as Cognitive Acceleration through Science Education (CASE), have been stringently researched and evaluated (e.g. Adey & Shayer, 1994), in many cases educational innovation is the domain of enthusiasts, marketeers and charlatans. Worrying in this respect are findings that show that most teachers are familiar mainly with the Visual–Audio–Kinaesthetic learning styles classification, known as VAK, a construct that has next to no scientific basis, while other fashionable claims, such as the utility of listening to music while learning, or “Brain Gym”, a commercial package that makes great claims for a set of dubious exercises, also rest on very limited support (Burton, 2007; Riding & Rayner, 1998). As mentioned above, it is not a simple matter to translate findings from brain science to education.

This has two main consequences for classroom change: the first is the necessity to develop communication between scientists and practitioners in such a way that actual knowledge is transmitted rather than false recipes. Goswami (2006) suggests employing retired scientists trained in effective communication to help carry out this task, but it is clear that a range of communication mechanisms will be needed to counteract some of the spurious myths currently circulating, including websites, professional development activities and professional publication.

The other main consequence is a rethinking of the way innovation is introduced in schools. Innovation is too rarely tested out and evaluated using field trials and (quasi) experimental designs, as would be the case in the sciences. The argument that is often made is that this type of research is not possible in educational settings due to the complexity thereof, which makes it hard to disentangle cause and effect. While this is true, the complexity of schools when compared to other environments is somewhat exaggerated, and useful approaches have been developed for use in education. One example of how this might work is being developed in one school we have worked with. In this school, a data system has been developed that allows each pedagogic innovation to be tested using a pre-test post-test design employing both cognitive outcome measures and self-report and attitudinal tests. Control and experimental groups are formed and the outcomes compared. Small-scale experimental work like this will allow innovations to be introduced and tested within a school context, before trying them out in other schools. In contrast to the model of

national roll outs, this model allows each school to test innovations within its own context and with its own staff, putting educational innovations simultaneously on a sounder and more contextual footing. Designs whereby factors such as social background are controlled for can easily be built into these models, ensuring that equity is taken into account and impact on equity actually measured rather than going for the usual impressionistic statements that constitute so much of current evaluation. In that way we can genuinely assess at the outset the equity impact of educational innovations rather than waiting until national roll outs or relying on often politicised opinions to inform this process, and include effectiveness as a key element of innovation. Taking a more experimental approach towards innovation could also help alleviate the problem of waste which is endemic in education, as money is spent on large-scale programmes that have no serious scientific basis and no evidence of impact on students. This way of working can extend the effectiveness approach to getting involved at the start of innovative practice, surely something of essential importance if the field is to progress, and make the process of innovation more systematic than it has been heretofore.

Models of Changing Practice

The practice of many educational reforms has involved top-down methods of changing classroom practice, which have led to significant criticism. This has been the case, for example, for the National strategies in England, which to a large extent imposed a pedagogical approach to teaching, certainly in maths and English. Use of inspection was a main method of gaining compliance, though a significant amount of professional development accompanied this approach. While there is, and will remain, discussion as to the effectiveness of the strategy, as mentioned earlier a change in classroom practice does appear to have resulted from the strategies (Earl et al., 2003). However, what is questionable are both the quality of implementation of the pedagogical methods proposed and the extent to which imposing pedagogy may stifle innovation.

The first issue is related to that of buy-in, in that staff may feel forced to employ a methodology they do not believe in, leading to poor implementation. This is obviously always a problem with imposed change and points to the need for teacher involvement in the innovation process. This is not the same as saying that all classroom change needs to originate with teacher ideas, as the risk of constant “reinvention of the wheel” then comes to the fore. Rather, what it does suggest is that if classroom practitioners are to be encouraged to take on new ideas they must be convinced of the merits thereof. This is not merely a matter of convincing them, from a standpoint that beliefs influence behaviours. Rather, behaviours perceived to be effective can themselves change beliefs. The practice of school-based experiments that we suggested above could be one way of achieving this, through achieving co-construction of reforms with their advocates, be they governments, Higher Education Organisations or other developers and stakeholders.

This approach can also help to alleviate some of the weaknesses of a top-down approach, such as the fact that they are themselves often not truly informed by evidence. It is not at all clear that governments or their agencies are necessarily the possessors of the pedagogical knowledge and evidence that a reliance on top-down strategies would suggest. The relationship between research and policy is never a straightforward one, political and ideological considerations as well as a lack of pedagogical knowledge often intervening in the process. Therefore, a more bottom-up approach, involving practitioners and researchers working together to develop and test innovations based on sound scientific research, would appear to offer a more productive way forward. This of course does mean that researchers need to engage fully with practitioners and work in and with schools. Education, in that respect, therefore must be an applied field, where application to practice is a key concern, with a lot of the fundamental research happening in related fields such as cognitive psychology. It does, however, also require practitioners and researchers to develop constructive approach to policy, recognising that parents, taxpayers and their elected representatives have a legitimate stake in the schooling process, and that in particular an approach which denies the right of these stakeholders to determine the goals of education in society is not only unrealistic, but fundamentally undemocratic.

Co-construction and buy-in of teachers is particularly important in the light of consistent findings stressing the importance of fidelity of implementation of any school improvement project, to the extent that some studies suggest that the actual content of the innovation is less important than that it is adhered to faithfully (Stringfield, 2000; Stringfield et al., 1997). The importance of co-construction is therefore obvious. However, what is also obvious is the need for classroom interventions to be clear and sufficiently detailed. There is also a need for them to be accessible to averagely as well as highly effective teachers, which means that overly complex interventions may not be the most successful across the system. The quasi-experimental approach highlighted above can again be helpful here, in that it allows innovations to be tested rigorously in actual classroom settings.

However, there is also clear evidence of the need for a whole-school approach alongside a focus on the classroom. One factor that has been found to affect pupil outcomes, especially for those from more disadvantaged backgrounds, is consistency of approach between teachers (Kyriakides, 2005). Indeed, one of the main differences between effective and ineffective schools is not that there isn't evidence of good practice in ineffective schools (often some highly effective teaching can be observed), but that the variance in teacher effectiveness within the school is large in ineffective schools and small in more effective schools. Therefore, if we wish to improve classroom practice it is important that a whole-school approach is taken that ensures consistency of approach between teachers. This obviously does entail a reduction in teacher autonomy to an extent, and it is therefore important that teachers buy in to the approach as mentioned above. Again, collaboration of all teachers (or all teachers teaching a particular subject) may facilitate this.

Conclusion

Classroom practice is the key arena for educational improvement, being the place where we can make the greatest difference to pupils' life chances within the education system (as opposed to broader social interventions). While in the past classroom innovation has often been somewhat haphazard and in some cases based on dubious science, we now have the opportunity to develop learning and teaching strategies based on the rapidly evolving field of brain research. However, findings from research in this area don't necessarily map easily onto classroom practice. The role of education research in this is therefore to help develop brain-based strategies in the classroom.

This needs to be done as a co-constructive activity with teachers and schools, rather than as a top-down government strategy or through the simple dissemination of research. We suggest that partnerships between schools and research institutions should lie at the heart of this effort, with schools becoming research centres in their own right, where small-scale experiments can feed into the wider development of effective classroom practice, ensuring teacher buy-in within the school (as evidence of successful behaviour is generally one of the main predictors of teacher support for innovation), and ensuring that the innovation is tested in context. In this way we believe a new partnership between research and practice can develop that genuinely leads to classroom innovation and change, based on evidence rather than fads.

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Making Sure that Every Child Matters: Enhancing Equity Within Education Systems

Mel Ainscow and Sue Goldrick

Developing more equitable education systems, in which the link between disadvantage, education and life chances can be effectively challenged, is central to establishing a more just society. This presents policymakers, educators and researchers with a moral imperative to act to move education systems in more equitable directions. However, there has been relatively little explicit discussion about what a more equitable education system would actually look like, nor of how the values of equity can be made integral to research, policy, and practice, and used to drive reform.

In recent years, more and more countries have pursued top-down, de-contextualised policies, narrowly equating equity with improved examination attainments. Research in our own country has shown this to have had as many perverse as positive consequences, with the most disadvantaged schools and groups of learners being further penalised for “failing” to achieve (Ainscow et al., 2007). This has led the British government to formulate a new policy, “Every Child Matters”, that is intended to widen the narrow focus on raising standards of attainment that has previously dominated national reform efforts.

Faced with such policy moves and the increasing presence of students whose cultural experience or even language may be different from their own, and many others who may experience barriers to their learning within conventional arrangements, teachers have to think about how they should respond. So, what kinds of practices might help teachers to ensure that *every child matters*? And, how can such practices be developed within education systems?

In addressing this agenda, this chapter focuses specifically on the development of inclusive practices; that is, practices that can reach groups of learners vulnerable to underachievement, marginalisation or exclusion. In so doing, it examines ways in which inclusive practices develop, and how factors at different levels of the system bear on such developments. This leads us to argue that teachers are the key to the development of more inclusive forms of education. Their beliefs, attitudes and

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actions are what create the contexts in which children and young people are required to learn. This being the case, the task must be to develop education systems within which teachers feel supported, as well as challenged, in relation to their responsibility to keep exploring more effective ways of facilitating the learning of all students. All of this has major implications for school organisation and leadership, and overall educational policy.

Inclusive Teaching

Traditionally, education systems have responded to vulnerable groups of learners through the establishment of various forms of special provision. However, it has been argued that the approaches developed as part of what is now often referred to as special needs education have, despite good intentions, continued to create barriers to progress as schools have been encouraged to adopt them (Ainscow, 1998; Slee, 1996). Meanwhile, researchers who have reviewed the empirical basis of specialised methods for particular categories of students conclude that there is little support for a separate special needs pedagogy (Davis et al., 2004; Lewis & Norwich, 2005). It has also been argued that the preoccupation with individualised responses that have been the feature of special education deflects attention away from the creation of forms of teaching that can reach out to all learners within a class and the establishment of school conditions that will encourage such developments (Ainscow, 1997, 1999).

This may help to explain why efforts to respond to learner diversity that are dependent on the importing of practices from special education tend to foster the development of yet new, more subtle forms of segregation, albeit within mainstream settings. So, for example, in England, recent years have seen the introduction of teaching assistants who work alongside class teachers in order to facilitate the presence of those students categorised as having special needs. Often when such support is withdrawn, teachers feel that they can no longer cope. Meanwhile, the requirement for individualised education plans has encouraged some school leaders to feel that many more children will require such responses, thus creating budget problems within English local authorities (Ainscow, Farrell, & Tweddle, 2000). At the same time, the category “special educational needs” has become a repository for various groups who suffer discrimination in society, such as those from minority backgrounds. In this way special education can be a way of hiding discrimination against some groups of students behind an apparently benign label, thus, justifying their low attainments and, therefore, their need for separate educational arrangements.

The recognition that inclusive schools will not be achieved by transplanting special education thinking and practice into mainstream contexts points to other possibilities. Many of these relate to the need to move from the individualised planning frame, referred to above, to a perspective that seeks to *personalise* learning through an engagement with the whole class (Ainscow, 1999). In this sense, many ideas about effective teaching are relevant. However, what is particular to an inclusive pedagogy is the way in which teachers conceptualise notions of difference.

As Bartolome (1994) explains, teaching methods are neither devised nor implemented in a vacuum. Design, selection and use of particular teaching approaches and strategies arise from perceptions about learning and learners. In this respect, she argues, even the most pedagogically advanced methods are likely to be ineffective in the hands of those who implicitly or explicitly subscribe to a belief system that regards some students, at best, as disadvantaged and in need of fixing, or, worse, as deficient and, therefore, beyond fixing.

In thinking about what inclusive practice involves we also have to be sensitive to the complex nature of teaching. Reflecting on their observations of classroom practices internationally, Stigler and Hiebert (1999) suggest that teaching should not be seen as a loose mixture of individual features, “thrown together” by individual practitioners. Rather, they suggest, the practice of a teacher “works like a machine”, with the different elements being interconnected. This means that individual features of practice only make sense in relation to the whole. Commenting on this formulation, Hargreaves (2003) suggests that teaching practices take the form of “scripts” that are deeply embedded within teachers, reflecting their life experiences and taken-for-granted assumptions. Consequently, changing one or two features of practice is unlikely to lead to significant improvements in teaching quality, since such superficial changes will leave most elements of the original script undisturbed.

Studying Practice

In the United Kingdom two potentially important recent studies have looked closely at how practices that respond effectively to learner diversity develop. Significantly, both projects involved researchers in working collaboratively with practitioners.

The first study, *Learning without Limits*, examined ways of teaching that are free from determinist beliefs about ability (Hart, 2003; Hart, Dixon, Drummond, & McIntyre, 2004). The researchers worked closely with a group of teachers who had rejected ideas of fixed ability in order to study their practice. They started from the belief that constraints are placed on children’s learning by ability-focused practices that lead young children to define themselves in comparison to their peers.

The researchers argue that the notion of ability as inborn intelligence has come to be seen as “a natural way of talking about children” that summarises their perceived differences. They go on to suggest that national policies reflect this assumption, making it essential for teachers to compare, categorise and group their pupils by ability in order to provide appropriate and challenging teaching for all. So, for example, inspectors are expected to check that teaching is differentiated for “more able”, “average” and “less able” students. In this context, what is meant by ability is not made explicit, leaving scope for teachers to interpret what is being recommended in ways that suit their own beliefs and views. However, it is noted that the emphasis on target setting and value added measures of progress leave little scope for teachers who reject the fixed view of measurable ability to hold on to their principles.

Through examining closely the practices and thinking of their teacher partners, the researchers set themselves the task of identifying “more just and empowering”

ways of making sense of learner diversity. In summary, this would, they argue, involve teachers treating patterns of achievement and response in a “spirit of transformability”, seeking to discover what is possible to enhance the capacity of each child in his or her class to learn and to create the conditions in which his or her learning can more fully and effectively flourish.

The researchers explain that the teachers in the study based their practices on a strong conviction that things can change and be changed for the better, recognising that whatever a child’s present attainments and characteristics, given the right conditions, everybody’s capacity for learning can be enhanced. Approaching their work with this mind-set, the teachers involved in the study were seen to analyse gaps between their aspirations for children and what was actually happening.

The second study, *Understanding and Developing Inclusive Practices in Schools*, also pointed to the importance of inquiry as a stimulus for changing practices. Carried out by a research network that was part of the Economic and Social Research Council’s Teaching and Learning Research Programme (Ainscow, Booth, & Dyson, 2004; Ainscow, Howes, Farrell, & Frankham, 2003; Ainscow, Booth, & Dyson, 2006), the study involved 25 schools in exploring ways of developing inclusion in their own contexts, in collaboration with university researchers.

In broad terms, what was noted in the participating schools was neither the crushing of inclusion by the government’s policies for raising standards, nor the rejection of the standards agenda in favour of a radical, inclusive alternative. Certainly, many teachers were concerned about the impact on their work on the standards agenda and some were committed to views of inclusion which they saw as standing in contradiction to it. However, in most of the schools, the two agendas remained intertwined. Indeed, the focus on attainment appeared to prompt some teachers to examine issues in relation to the achievements and participation of hitherto marginalised groups that they had previously overlooked. Likewise, the concern with inclusion tended to shape the way the school responded to the imperative to raise standards.

In trying to make sense of the relationship between external imperatives and the processes of change in schools, the study drew on the ideas of Wenger (1998) to reveal how external agendas were mediated by the norms and values of the communities of practice within schools and how they become part of a dialogue whose outcomes can be more rather than less inclusive. In this way, the role of national policy emerges from the study in something of a new light. This suggests that schools may be able to engage with what might appear to be unfavourable policy imperatives to produce outcomes that are by no means inevitably non-inclusive.

Moving Practice Forward

Together the findings of these two studies lead to reasons for optimism. They indicate that more inclusive approaches can emerge from a study of the existing practice of teachers, set within the internal social dynamics of schools. They also suggest that it is possible to intervene in these dynamics in order to open up new possibilities for moving policy and practice forward.

Research suggests that developments of practice are unlikely to occur without some exposure to what teaching actually looks like when it is being done differently, and exposure to someone who can help teachers understand the difference between what they are doing and what they aspire to do (Elmore, Peterson, & McCarthy, 1996). It also suggests that this has to be addressed at the individual level before it can be solved at the organisational level. Indeed, there is evidence that increasing collaboration without some more specific attention to change at the individual level can simply result in teachers coming together to reinforce existing practices rather than confronting the difficulties they face in different ways (Lipman, 1997).

At the heart of the processes in schools where changes in practice do occur is the development of a common language with which colleagues can talk to one another and, indeed, to themselves about detailed aspects of their practice (Huberman, 1993). Without such a language teachers find it very difficult to experiment with new possibilities. Much of what teachers do during the intensive encounters that occur is carried out at an automatic, intuitive level. Furthermore there is little time to stop and think. This is why having the opportunity to see colleagues at work is so crucial to the success of attempts to develop practice. It is through shared experiences that colleagues can help one another to articulate what they currently do and define what they might like to do (Hiebert, Gallimore, & Stigler, 2002). It is also the means whereby space is created within which taken-for-granted assumptions about particular groups of learners can be subjected to mutual critique.

This raises questions about how best to introduce such ways of working. In this context, a promising approach is that of “lesson study”, a systematic procedure for the development of teaching that is well established in Japan and some other Asian countries (Hiebert, Gallimore, & Stigler, 2002; Lo, Yan, & Pakey, 2005; Stigler & Hiebert, 1999). The goal of lesson study is to improve the effectiveness of the experiences that the teachers provide for all of their students. The core activity is collaboration on a shared area of focus that is generated through discussion. The content of this focus is the planned lesson, which is then used as the basis of gathering data on the quality of experience that students receive. These lessons are called “study lessons” and are used to examine the teachers’ practices and the responsiveness of the students to the planned activities. Members of the group work together to design the lesson plan, which is then implemented by each teacher. Observations and post-lesson conferences are arranged to facilitate the improvement of the research lesson between each trial.

Lesson study can be conducted in many ways. It may, for example, involve a small sub-group of volunteer staff, or be carried out through departmental or special interest groupings. It can also happen “across schools”, and is then part of a wider, managed network of teachers working together. The collection of evidence is a key factor in the lesson study approach. This usually involves the use of video recording. Emphasis is also placed on listening to the views of students in a way that tends to introduce a critical edge to the discussions that take place.

Our own research has also shown how the use of evidence to study teaching can help to foster the development of more inclusive teaching (Ainscow et al., 2003). Specifically, it can help to create space for reappraisal and rethinking by interrupting

existing discourses, and by focusing attention on overlooked possibilities for moving practice forward. Particularly powerful techniques in this respect involve the use of mutual observation, sometimes through video recordings (Ainscow, 1999, 2003), and evidence collected from students about teaching and learning arrangements within a school (Ainscow & Kaplan, 2006; Messiou, 2006; Miles & Kaplan, 2005). Under certain conditions such approaches provide *interruptions* that help to make the familiar unfamiliar in ways that stimulate self-questioning, creativity and action. In so doing they can sometimes lead to a reframing of perceived problems that, in turn, draws the teacher's attention to overlooked possibilities for addressing barriers to participation and learning.

Here our argument is informed by the work of Robinson (1998) who suggests that practices are activities that solve problems in particular situations. This means that to explain a practice is to reveal the problem for which it serves as a solution. So, in working closely with practitioners, we have found that we can make inferences about how school staff have formulated a problem and the assumptions that are involved in the decisions made. We have also observed how initial formulations are sometimes rethought as a result of an engagement with various forms of evidence.

However, this is not in itself a straightforward mechanism for the development of more inclusive practices. A space that is created may be filled according to conflicting agendas. Our studies have documented examples of how deeply held beliefs within schools may prevent the experimentation that is necessary in order to foster the development of more inclusive ways of working (Ainscow & Kaplan, 2005; Howes & Ainscow, 2006). This reminds us that that it is easy for educational difficulties to be pathologised as difficulties inherent within students. This is true not only of students with disabilities and those defined as "having special educational needs", but also of those whose socio-economic status, race, language and gender render them problematic to particular teachers in particular schools. Consequently, it is necessary to explore ways of developing the capacity of those within schools to reveal and challenge deeply entrenched deficit views of "difference", which define certain types of students as "lacking something" (Trent, Artiles, & Englert, 1998). This involves being vigilant in scrutinising how deficit assumptions may be influencing perceptions of certain students.

This, in turn, points to the importance of cultural factors. Schein (1985) suggests that cultures are about the deeper levels of basic assumptions and beliefs that are shared by members of an organisation, operating unconsciously to define how they view themselves and their working contexts. The extent to which these values include the acceptance and celebration of difference, and a commitment to offering educational opportunities to all students, coupled with the extent to which they are shared across a school staff, relate to the extent to which students are enabled to participate (Carrington, 1999; Kugelmass, 2001).

Hargreaves (1995) argues that cultures can be seen as having a reality-defining function, enabling those within an institution to make sense of themselves, their actions and their environment. A current reality-defining function of culture, he suggests, is often a problem-solving function inherited from the past. In this

way, today's cultural form created to solve an emergent problem often becomes tomorrow's taken-for-granted recipe for dealing with matters shorn of their novelty.

Changing the norms that exist within a school is difficult to achieve, particularly within a context that is faced with so many competing pressures and where practitioners tend to work alone in addressing the problems they face (Fullan, 1991). On the other hand, the presence of children who are not suited to the existing "menu" of the school can provide some encouragement to explore a more collaborative culture within which teachers support one another in experimenting with new teaching responses. In this way, problem-solving activities gradually become the reality-defining, taken-for-granted functions that are the culture of a school that is more geared to fostering inclusive ways of working.

The implication of all of this is that becoming more inclusive is a matter of thinking and talking, reviewing and refining practice, and making attempts to develop a more inclusive culture. Such a conceptualisation means that we cannot divorce inclusion from the contexts within which it is developing, nor the social relations that might sustain or limit that development (Dyson, 2006). It is in the complex interplay between individuals, and between groups and individuals, that shared beliefs and values exist, and change, and that it is impossible to separate those beliefs from the relationships in which they are embodied.

Inclusive Cultures

There is a body of critical literature highlighting the problems and complexities which emerge when schools attempt to develop towards greater inclusion. These literatures point to the internal complexities of schools as organisations, and the constraints and contradictions that are generated by the policy environments in which they exist. As such, they usefully problematise the assumptions underlying the more mechanistic approaches to improvement, but stop short of saying how inclusion might actually be developed.

A more promising family of approaches to development starts from the assumption that increasing inclusion is less a set of fixed practices or policies, than a continuous process of deconstructing and reconstructing (Skrtic, 1991; Thomas & Loxley, 2001); what Corbett and Slee (2000) have called the "cultural vigilantism" of exposing exclusion in all its changing forms and seeking instead to "foster an inclusive educational culture".

Where writers have addressed these questions, they tend to give particular emphasis to characteristics of schools as organisations that stimulate and support this process of interrogation. The American scholar Tom Skrtic argues that schools with what he calls "adhocratic" configurations are most likely to respond to student diversity in positive and creative ways (Skrtic, 1991). Such schools emphasise the pooling of different professional expertise in collaborative processes. Children who cannot easily be educated within the school's established routines are not seen as "having" problems, but as challenging teachers to re-examine their practices in

order to make them more responsive and flexible. Similarly, Ainscow (1999) outlined “organisational conditions” – such as distributed leadership, high levels of staff and student involvement, joint planning and a commitment to inquiry – that promote collaboration and problem solving amongst staff, and which, therefore, produce more inclusive responses to diversity.

These themes are further supported by a review of recent international literature that examines the effectiveness of school actions in promoting inclusion (Dyson, Howes, & Roberts, 2002; Dyson et al., 2002). The review concludes that there is a limited, but by no means negligible, body of empirical evidence about the relationship between school action and the participation of all pupils in the cultures, curricula and communities of their schools. In summary, it suggests the following:

- Some schools are characterised by an “inclusive culture”. Within such schools, there is some degree of consensus amongst adults around values of respect for difference and a commitment to offering all pupils access to learning opportunities. This consensus may not be total and may not necessarily remove all tensions or contradictions in practice. On the other hand, there is likely to be a high level of staff collaboration and joint problem solving, and similar values and commitments may extend into the pupil body, and into parent and other community stakeholders in the school.
- The extent to which such “inclusive cultures” lead directly and unproblematically to enhanced pupil participation is not clear. Some aspects of these cultures, however, can be seen as participatory by definition. For instance, respect for diversity from teachers may itself be understood as a form of participation by children within a school community. Moreover, schools characterised by such cultures are also likely to be characterised by forms of organisation (such as specialist provision being made in the ordinary classroom, rather than by withdrawal) and practice (such as constructivist approaches to teaching and learning) which could be regarded as participatory by definition.
- Schools with “inclusive cultures” are also likely to be characterised by the presence of leaders who are committed to inclusive values and to a leadership style which encourages a range of individuals to participate in leadership functions. Such schools are also likely to have good links with parents and with their communities.
- The local and national policy environment can act to support or undermine the realisation of schools’ inclusive values.

On the basis of this evidence, the Dyson review team make a number of recommendations for policy and practice. They suggest that attempts to develop inclusive schools should pay attention to the development of “inclusive” cultures and, particularly, to the building of some degree of consensus around inclusive values within school communities. This leads them to argue that principals and other school leaders should be selected and trained in the light of their commitment to inclusive values and their capacity to lead in a participatory manner. Finally, they

conclude that the external policy environment should be compatible with inclusive developments if it is to support, rather than to undermine, schools' efforts.

According to the review, there are general principles of school organisation and classroom practice which should be followed: notably, the removal of structural barriers between different groups of students and staff; the dismantling of separate programmes, services and specialisms; and the development of pedagogical approaches (such as constructivist approaches) which enable students to learn together rather than separately. It is also argued that schools should build close relations with parents and communities based on developing a shared commitment to inclusive values.

The implications for practice of such an orientation are illustrated in the *Index for Inclusion* (Booth & Ainscow, 2002), a set of review materials that enables schools to draw on the knowledge and views of staff, students, parents/carers and governors about barriers to learning and participation that exist within the existing "cultures, policies and practices" of schools in order to identify priorities for change. In connecting inclusion with the detail of policy and practice, the Index encourages those who use it to build up their own view of inclusion related to their experience and values, as they work out what policies and practices they wish to promote or discourage. The Index can support staff in schools in refining their planning processes, so that these involve wider collaboration and participation and introduce coherence to development (see Rustemier & Booth, 2005).

Such approaches are congruent with the view that inclusion is essentially about attempts to embody particular values in particular contexts (Ainscow, Booth, & Dyson, 2006). Unlike mechanistic views of school improvement, they acknowledge that decisions about how to improve schools always involve moral and political reasoning as well as technical considerations. Moreover, they offer specific processes through which inclusive developments might be promoted. Discussions of inclusion and exclusion can help, therefore, to make explicit the values which underlie what, how and why changes should be made in schools. Inclusive cultures, underpinned by particular organisational conditions, may make those discussions more likely to occur and more productive when they do occur.

Leadership

It seems, then, that inclusive practices are likely to require challenges to the thinking of those within a particular organisation and, inevitably, this raises questions regarding leadership. A recent literature review concludes that learner diversity and inclusion are increasingly seen as key challenges for educational leaders (West, Ainscow, & Notman, 2003). For example, Leithwood, Jantzi, and Steinbach (1999) suggest that with continuing diversity, schools will need to thrive on uncertainty, have a greater capacity for collective problem solving, and be able to respond to a wider range of learners. Sergiovanni (1992) also points to the challenge of student diversity and argues that current approaches to school leadership may well be getting in the way of improvement efforts.

Lambert and her colleagues (1995) argue for what they see as a constructivist view of leadership. This is defined as the reciprocal processes that enable participants in an educational community to construct common meanings that lead towards a common purpose about schooling. They use this perspective to argue that leadership involves an interactive process entered into by both learners and teachers. Consequently, there is a need for shared leadership, with the principal seen as a leader of leaders. Hierarchical structures have to be replaced by shared responsibility in a community that becomes characterised by agreed values and hopes, such that many of the control functions associated with school leadership become less important or even counter-productive.

The most helpful theoretical and empirical context, however, is provided by Riehl (2000), who, following an extensive review of literature, develops “a comprehensive approach to school administration and diversity”. She concludes that school leaders need to attend to three broad types of task: fostering new meanings about diversity; promoting inclusive practices within schools; and building connections between schools and communities. She goes on to consider how these tasks can be accomplished, exploring how the concept of practice, especially discursive practice, can contribute to a fuller understanding of the work of school principals. This analysis leads the author to offer a positive view of the potential for school principals to engage in inclusive, transformative developments. She concludes: “When wedded to a relentless commitment to equity, voice, and social justice, administrators’ efforts in the tasks of sense-making, promoting inclusive cultures and practices in schools, and building positive relationships outside of the school may indeed foster a new form of practice” (p. 71).

The Role of Networking

What emerges from the evidence summarised so far is how social learning processes stimulated by inquiry within particular contexts, can foster a greater capacity for responding to learner diversity. Achieving a deeper and more sustainable impact on the culture of schools is, however, much more difficult. This necessitates longer-term, persistent strategies for capacity building at the school level (Harris & Chrispeels, 2006). It also requires new thinking and, indeed, new relationships at the systems level. In other words, efforts to foster inclusive school development are more likely to be effective when they are part of a wider strategy (Ainscow, 2005).

This has led to an increasing emphasis on the idea of sharing expertise and resources amongst schools. Such an approach is consistent with what Stoker (2003) calls “public value management”, with its emphasis on network governance. Stoker argues that the origins of this approach can be traced to criticisms of the current emphasis on strategies drawn from private sector experience. He goes on to suggest that the formulation of what constitutes public value can only be achieved through deliberation involving the key stakeholders and actions that depend on mixing in a reflexive manner a range of intervention options. Consequently, “networks

of deliberation and delivery” are seen as key strategies. In the education service, this implies the negotiation of new, interdependent relationships amongst schools, administrations and communities (Hargreaves, 2003).

There is evidence that school-to-school collaboration can strengthen the capacity of individual organisations to respond to learner diversity (Ainscow & Howes, 2007; Howes & Ainscow, 2006). However, this does not represent an easy option for the schools themselves, particularly in policy contexts within which competition and choice continue to be the main drivers.

Recent studies, for the most part, have focused on situations wherein schools have been given short-term financial incentives linked to the demonstration of collaborative planning and activity (Ainscow, Muijs, & West, 2006; Ainscow & West, 2006; Chapman & Allen, 2006; Chapman, 2005). They suggest that collaboration amongst schools can help to reduce the polarisation of schools, to the particular benefit of those students who are marginalised at the edges of the system and whose performance and attitudes cause concern. There is evidence, too, that when schools seek to develop more collaborative ways of working, this can have an impact on how teachers perceive themselves and their work. Specifically, comparisons of practices can lead teachers to view underachieving students in a new light. Rather than simply presenting problems that are assumed to be insurmountable, such students may be perceived as providing feedback on existing classroom arrangements. In this way they may be seen as sources of understanding as to how these arrangements might be developed in ways that could be of benefit to all members of the class.

Concluding Remarks

This chapter has addressed what we see as the biggest challenge for education systems around the world: that of *making sure that every child matters*. The approach we have outlined is not about the introduction of particular techniques or organisational arrangements; rather it places emphasis on processes of social learning within particular contexts. Collaboration within and between schools, and the use of evidence as a means of stimulating experimentation, are seen as key strategies for moving such processes in a more inclusive direction. As Copland (2003) suggests, inquiry can be the “engine” to enable the distribution of leadership that is needed in order to foster participation, and the “glue” that can bind a school community together around a common purpose.

We have argued that all of this has major implications for leadership practice at different levels within schools and education systems. In particular, it calls for efforts to encourage coordinated and sustained efforts by whole staff groups around the idea that changing outcomes for all students is unlikely to be achieved unless there are changes in the behaviours of adults. Consequently, the starting point must be with staff members: in effect, enlarging their capacity to imagine what might be achieved, and increasing their sense of accountability for bringing this about. This may also involve tackling taken-for-granted assumptions, most often relating to expectations about certain groups of students, their capabilities and behaviours.

Our argument is, then, based on the assumption that *schools know more than they use* and that the logical starting point for development is with a detailed analysis of existing arrangements. This allows good practices to be identified and shared, whilst, at the same time, drawing attention to ways of working that may be creating barriers to the participation and learning of some students. However, as we have stressed, the focus must not only be on practice, it must also address and sometimes challenge the thinking behind existing ways of working.

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Making Formative Assessment the Way the School Does Business: The Impact and Implications of Formative Assessment for Teachers, Students and School Leaders

Ruth Sutton

“Formative assessment” has been the subject of conceptual pluralism for many years. In the beginning there was “assessment”, which was originally a benign and non-judgmental activity, but this has been captured over time by inferences of judgment, measurement and finality. During recent decades, when the question of purpose was posed, we have struggled to qualify the original word in ways that might indicate different purposes. The element of final judgment was denoted by the adjective “summative”. The idea of assessment informing the future rather than merely summarising the past produced another adjective “formative” but in the minds and practices of many educators the distinction has remained unclear. Black and Wiliam in their 1998 summary of global research on the practice and impact of assessment discovered that what many practitioners described as “formative” was in fact “periodic summative”, indicating a confusion between purpose and timing. The distinction between “summative” and “formative” needs to be regularly restated: The difference lies not in technique, nor in timing, but in the use to which the information will be put. “Formative assessment” is used to inform and adjust both learning and teaching.

In recognition of these prevailing ambiguities, a change of definitions appeared in the mid-1990s: Summative came to be known as “assessment of learning” and formative morphed into “assessment for learning”. In this chapter we will be exploring “formative assessment”. However, one should be mindful about the efficacy of this term when working with teachers, parents and the community, where it may not be fully understood. I would argue that the word “assessment” could distract students from reading the teacher’s feedback as well as it could divert teachers’ and other users’ attention away from the prime aim of formative assessment which is to provide feedback and use it predominantly for accountability purposes.

The key concept presented here is that formative assessment necessitates a change in hard-wired habits for learners, teachers and school leaders. Changing these habits cannot be achieved through study alone: Habits are developed through

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the limbic brain rather than the neocortex and need to be changed through the limbic brain, using experience, practice, feedback and more practice. There are no silver bullets and few shortcuts, but the investment of time, energy and perseverance will pay dividends in the improvement of student motivation and achievement. Paying attention to the motivation of the adult learners – the teachers – will also bear fruit in greater sustainability than could ever be achieved by mandate alone.

To achieve its aim this chapter firstly explores the background of formative assessment and the principles that have emerged from 20 years of intensive global research. It then discusses the implications for schools and in particular for school leaders, teachers and learners as well as for schools as learning organisations. Lastly, it briefly addresses issues of sustainability before it concludes.

Formative Assessment and the Political Context

During the 1980s, in many states and jurisdictions, the quantification of public sector outcomes became a political imperative. In the education service, this meant, *inter alia*, that student achievement now had to be communicated as a number, grade, percentage, score or points. These numbers could then be crunched and compared to determine the relative success of a group, cohort, teacher, team, school or school district. Publication of this data would have consequences, although the nature of the consequences would change from one “system” to another.

The accountability requirements that accompanied the insistence on quantification further increased the pressure on schools and teachers to take fewer risks at the very time when serious and possibly risky re-consideration of the basics of teaching – planning, questioning, marking and feedback – was being called for by the research. The student achievement data might be relatively low stake for the students, but it would be high stake for the teacher, the school leader and the school – an uncomfortable professional scenario. Despite mounting evidence about the need for assessment to be formative, the publication of and accountability for numerical analyses of student achievement seemed to push schools towards the summative. The irony lies in the fact that it is the formative, not the summative, that is most likely to actually improve the summative data.

The search for higher standards, and greater central intervention in the provision of public education, inevitably led to a plethora of “initiatives” impacting on many schools. The requirement to deliver multiple disconnected initiatives is every school leader’s nightmare. The image of juggling spinning plates comes to mind: Adoption of yet another plate could threaten the safety of all the others. Increasingly the task of finding connections among these initiatives lay with the schools themselves: Some school leaders realised this and struggled to find the conceptual and practical common ground to link them all together. Other school leaders, less comfortable with abstract conceptual analysis, believed that the answer was to work harder, and to require more of their teachers too.

Alongside quantification and accountability, fragmentation deriving from multiple initiatives has emerged as a barrier to the re-wiring of teaching and learning that is necessitated by the conclusions of the formative assessment research. The more recent research literature, such as Absolum's (2006) contribution from New Zealand, has emphasised the focus on fundamentals, starting with strong relationships between teacher and students and then linking meta-cognition and motivation to improved learning. The potential for confusion from a plethora of initiatives remains strong at the school level.

The Impact of Formative Assessment on Pupil Outcomes

Much has been written about the depth and range of worldwide research on the purpose and effect of educational assessment over the past decades. The first global meta-analysis, published by Terry Crooks in 1988, had a profound effect on people already interested in the field. As a testament to this event, Paul Black and Dylan Wiliam produced the second meta-analysis in 1998. Their findings showed that formative assessment had a significantly positive impact on pupil outcomes, with typical effect sizes of between 0.4 and 0.7. Importantly, Black and Wiliam found that formative assessment helped "the (so-called) low attainers more than the rest, and so reduces the spread of attainment whilst also raising it overall" (p. 3).¹

As regards to the implementation of assessment of learning, many of the studies reviewed in the Black and Wiliam meta-analysis of 1998 indicated that teachers intuitively understood the connection between feedback and improved student learning. Researchers also found, however, that there appeared to be a disconnect between understanding the principles of assessment for learning and following them through into normal classroom practice, and were "puzzled" by this. Clearly, there are some barriers between knowing and doing. Some of the existing patterns of assessment and feedback, including the practice of "marking" students' work, are based on the previous purpose of assessment for measurement rather than improvement: These habits are hard-wired and hard to break. Replacing marking for marks with marking for improvement, for example, raises issues of workload and manageability which deter teachers from trying to change their practice. Similarly, the pressures on teachers caused by requirements to cover existing curricula and be accountable for students' test results create a climate of risk aversion: This too will undermine teachers' and schools' confidence to replace old habits with new ones.

¹In the United Kingdom, the impact of their findings on policy is interestingly different within different parts of the UK. Wales and Scotland have each put a greater emphasis on formative assessment and downplayed the focus on testing. In England, on the other hand, at the time of writing, the testing regime remains in place, despite serious concerns about its cost-effectiveness. Recently the English government has announced the abolishing of one of its prominent exams, SATs, taken by children of the age of 14 and has replaced it with school report cards. This move, some argue, signals the beginning of the emphasis reverting to teacher assessment.

The logistics of implementation may be challenging, but in the decade since the publication of the Black and Wiliam study evidence of the potential positive impact of Assessment for Learning on students' achievement and meta-cognitive development has been offered, confirming the depth of the research base.

The UK Assessment Reform Group (ARG) in 1999 presented five “principles” drawn from the available research, which underpin the various practices teachers and schools should adopt. These principles are simply expressed but have significant implications for the way teachers do business in their classrooms.

1. “The provision of effective feedback to students
2. The active involvement of students in their own learning
3. Adjusting teaching to take account of the results of assessment
4. Recognition of the profound influence assessment has on the motivation and self-esteem of pupils, both of which are crucial influences on learning
5. The need for students to be able to assess themselves and understand how to improve”

These five key principles of formative assessment present challenging implications for school leaders, teachers, learners and the way that the school should be organised for formative assessment. In the following sections we examine these implications in greater detail.

Implications of Formative Assessment

The implementation of formative assessment poses a number of challenges for schools leaders, teachers and learners themselves, and necessitates the organisation of school structures and the development of systems within the schools for its effective implementation. This section identifies these challenges and attempts to provide ways forward.

Implications of Formative Assessment for School Leaders

As we have seen, implementing formative assessment has significant implications for the habits of both teachers and learners. These habits of approach and practice are hard-wired and therefore difficult to change. They have been learned and developed not through the neocortex, which handles our intellectual knowledge, but through the limbic brain, which handles our emotions, experiences and habits. We shall look further at “limbic learning” and the effect on the change process in Section 4, below.

- *School leaders' first steps:* On their own, principals cannot change teachers' practice, only teachers can do that. Similarly, only learners can change learning, however much the teacher knows and shares about what the learners need to do.

In order for teachers' classroom practice to change, which will be necessary in order to embed formative assessment strategies, the first task of the school leader is to understand the nature of the changes required. Principals need to understand the dilemmas around planning – for coverage or for learning. They need to approach the discussion around time and teachers' workload, which underpins much of the debate over marking and feedback, from a realistic rather than idealistic perspective. They need to accept that much of formative assessment is about the minute-by-minute and day-by-day interactions between teachers and students, behind closed doors. It is usually unhelpful to over-regulate or over-supervise this interaction. Principals also need to trust their teachers to talk to each other about classroom practice, honestly and constructively, without fear of being judged or constantly evaluated. We are asking teachers to take risks, and the involvement of a school leader, however benign, sometimes inhibits the risks teachers are prepared to take.

- *Leaders' useful behaviours:* Working backwards from these needs, we can begin to determine some of the useful behaviours for school leaders wishing to encourage the implementation of formative assessment.
 - There is learning to be done. Admitting to not knowing enough about something is not an admission of weakness. Some of the necessary learning can and should be done alongside the teachers, so that the same messages are heard and the foundations laid for further conversation based on their shared experience.
 - Many teachers, faced with new and demanding expectations, show anxiety by reverting to questions about time and workload. "When are we going to get the time to do this?" "How can I do this with so many students in my classes?" "Where's the evidence that this will make any difference?" "When are we going to get the time we need together to think this through?" These are not trivial questions, however many times they have been asked before. Leaders will need to think carefully about how they react to such anxieties.
- *Pay attention to teachers' motivations:* Most if not all school leaders no longer teach on a regular basis: It is possible that they have forgotten the time it takes to mark a set of students' work with care and patience. It is also possible that the demands have changed since their last experience of a full teaching load. Formative assessment cannot be made to happen by fiat, nor can it be implemented without the willing and continued involvement of the teachers themselves. A change process can be started through extrinsic motivation, but it cannot be sustained without the intrinsic motivation of those from whom change is expected. The roots of intrinsic feedback, for any learners, include a strong sense of self-efficacy, useful feedback and the "locus of control" being as close to the learner as possible. If adult learners are involved, offering choice will also be part of the necessary climate. The learner in this case is the teacher, and the conditions for intrinsic motivation will need to be established by the school leader.
- *Make space for change:* The necessary behaviours therefore will include accepting that some "requirements" may have to be reduced in order to make some

space for new “requirements” to take their place. A group of interested teachers would be included in the consideration and choice of strategies for change, rather than the senior leadership team making all the decisions. It will slow the process down, but it will achieve a greater level of buy-in. Teachers will be enabled, even encouraged, to ask the question, “What’s in it for us to change our practice in this way?” As well as “What’s in it for the students?” Enlightened self-interest is a powerful motivator.

- *Encourage risk-taking:* If risk-taking is expected of teachers, school leaders can recognise its importance by modelling it themselves. Learning is a risky and sometimes a messy business. Even with the best use of our very good brains, things don’t always work out first time as we expect or hope. The reaction to early difficulties is crucial: It could be irritation and blame, or it could be reflection and perseverance. Here again, teachers will take their cue from the leadership behaviours they see every day. It is not easy in the current climate of scrutiny and accountability for leaders to take risks: They are expected to deliver improved standards fast. If they fail, they expect to be punished, either through criticism or more directly through their job security. For some, this challenge will be the catalyst they need to invigorate and inspire their colleagues. For many other school leaders, however, the punitive nature of the accountability they experience may lead to them “punishing down”: They use the same strategies with those further down the accountability chain. School leaders, like any other humans under pressure in a competitive climate, might prefer to be regarded as too demanding rather than not demanding enough.
- What does leadership risk-taking actually look like? It is not professionally incautious or dangerous, such as ignoring budget considerations, putting children at risk or deliberately defying parental expectations, which could result in unnecessary and distracting crises. Risk-taking can be on a more personal and smaller scale. The principal who announces that she is learning another language and will share her struggles as well as her progress, the leader who decides to start every staff meeting with a clear expectation of the expected outcomes of the meeting, the leader who encourages experimentation in the classroom and assures those involved that he or she will take responsibility for any explanations necessary to “authority” beyond the school, the principal who admits to his peers that he is concerned that something in his school is not working as well as it should and invites feedback and support from others are leaders who are taking risks, and inferentially if not explicitly helping others to do the same.
- *Encourage teachers’ professional conversation:* Recognising the importance of “teacher talk” as a means of supporting changes in teaching habits, the leader encourages and enables such talk in practical ways, by arranging coverage if necessary to allow a team to meet together during the day. Or she may put to one side the urge to use PD time for introducing yet more “new” ideas, in favour of using this precious time for a proper opportunity to focus on the fundamentals of teaching and learning – planning, grouping, questioning, feedback, adjustment – that underpin the “techniques” that teachers use every day. Once some teachers are engaged with the classroom change process, the leader encourages these teachers to share their progress with others, in whatever terms they choose.

- *Integrate initiatives and prioritise:* The leader who is effectively encouraging classroom change will prefer long-term language to short-term: She will avoid a focus on “initiatives” and their inevitable acronyms, and talk instead of improved learning and teaching, supported by prevailing imperatives by not driven by them. She will not be afraid to “cherry-pick” the latest requirements for elements that will support the long-term goals of the school, quite deliberately leaving out some elements that seem potentially unhelpful. This might be perceived as risky, but here again the modelling of considered risk-taking behaviour provides a powerful message to others. The leader is demonstrating that the “locus of control” for the school’s change process is close to the school, concerned with intrinsic motivation and internal rather than external priorities. A caveat may be needed here: A sensible leader in a climate of public accountability thinks strategically before acting. He will be aware of what is driving the external priorities and be able to discuss them within the school, resisting any urge to write to the “Daily Bugle” and make a name for himself as a rebel, thereby attracting unhelpful attention and unnecessary complications.

Implications of Formative Assessment for Teachers

The five principles established by the ARG in 1999 provide a useful framework for the detailed examination of the implications for teachers and teaching, and we shall look at each in turn.

The Provision of Effective Feedback to Students

The work of Sadler and of other academics and researchers has highlighted that feedback needs to be specific, constructive, connected to clear criteria, timely, pointing towards next steps to close the gap between the required standard and the student’s achievement and followed through. Much of the feedback in classrooms is provided through marking, but much of it does not provide the type of feedback suggested here. Marking runs the risk of being both time-consuming and unproductive – the worst of both worlds – but as a hard-wired habit in the teacher’s repertoire it is notoriously hard to change.

We also know that students are often distracted by the seductive simplicity of the “mark” and fail to read, digest and act upon the verbal feedback that accompanies it. Parents and employers are accustomed to receiving reports on student achievement that include marks, grades and an indication of the comparison with other students or with normal standards for the age group: These expectations would make it difficult to abandon altogether the periodic gradings on which these final judgments are based.

Teachers’ habits and workload can also be called into question by the necessary “timeliness” of effective feedback. If the feedback is to be accepted and acted upon it needs to reach the learner within a few days of the work being done. The management of marking often renders such a time frame impossible, as teachers try to mark everything themselves and backlogs inevitably occur.

The clear connection to given criteria creates even more ripples in many teachers' practice: Ideally we would start every plan with clarity about what we wish the students to *learn*, but many teachers' plans focus instead on what we wish the student to *do*. The criteria derived from *activity* will reflect completion of the task but not necessarily the learning that was to be generated through the task. If this characteristic of effective feedback is to be met, it follows that teachers must first be clear in their own minds about the learning objectives and then find ways of explaining these to the students. The criteria which derive from these objectives will also need clarification.

The Active Involvement of Students in Their Own Learning

This principle assumes students' involvement in the learning and not merely in the assessment. Indeed there may be a problem if the student is left out of the learning loop but then required to participate, with the necessary understanding and motivation, in the assessment process. Teachers need to consider how the student can be involved at earlier stages: Establishing prior learning and interests at the start is one way to achieve this. Teachers' plans can then be completed and refined after checking with the students for how much they already know, and for the gaps and misconceptions. This approach to planning has a focus on learning rather than coverage as the first purpose. The prevalence of full and detailed mandatory curricula, however, puts a high priority on coverage, leaving the teacher apparently stuck between the demand for coverage and the expectation of learning, when one is not necessarily guaranteed by the other. Teachers will need to be encouraged to prioritise within the curriculum requirements, to determine what's essential, what's important and what could be "parked" or made available to some students but not explicitly taught to all. Given the emphasis on schools' accountability for "delivery" of the required curriculum, determining that some minor part – say 10% – of the given curriculum might be regarded as "expendable" may be risky, but the need to involve students is a priority if learning is to be effective, and such involvement will take time.

Co-construction of the success criteria provides a further opportunity for student involvement. Here the teacher provides the framework for the students to develop the criteria themselves. This could be achieved by providing varied examples of the product of the learning and asking students to consider the different levels of quality and their reasons for deciding which examples reflect different levels. Discussion with the students will then identify the "aspects" to be looked for in the work, and the "standard", from which a simple rubric or mark scheme can be constructed. Working in this way improves the chances of the criteria being understood and acted upon by the students, but is a slower process. In a plan for coverage, time is of the essence. Many teachers, however sure they may be that involving the students at this stage would improve the outcomes, do not actually do it because they claim they don't have time. Once again the requirement of *coverage* appears to undermine the potential for *learning*, especially for students for whom the teaching provided is "too much, too fast".

Adjusting Teaching to Take Account of the Results of Assessment

Here again teachers face the dilemma of adjustment if their plans are based on coverage rather than learning. The end-of-unit or end-of-year test may be examined by the teaching team to find areas for remediation, but it may not trigger adjustment of the plan for the next cohort, to address the difficulties experienced by the previous one. A serious attempt to adjust a long-term teaching programme would have to start with a re-examination of the coverage to be attempted. In the short term too, “minute by minute” as Wiliam and his US-based co-workers described it in 2005, teachers may want to adjust their teaching on the basis of relatively informal feedback from their students. The first task is to find a simple mechanism for communication between students and teacher: Many teachers will ask for a quick thumbs up/thumbs down reaction from students to indicate areas of difficulty. Others use green, yellow/amber or red sticks or even cups chosen by the student to indicate their state of mind relative to the current teaching. Green will mean “I’m with you, carry on”, yellow indicates confusion, and the student waving the red stick is telling you, “I’m losing the will to live.” Depending on the spread of the colours, and who’s indicating what, the teacher then decides whether she should stop and return to further explanation for everyone, or for one group, or whether she needs an individual conversation with one or two students. Having the confidence and flexibility to request and act upon feedback from students in this way denotes high-quality teaching and the teacher’s determination to focus on learning rather than coverage to drive her practice.

Recognition of the Profound Influence Assessment Has on the Motivation and Self-esteem of Students, Both of Which Are Crucial Influences on Learning

As with planning, we are now moving away from the traditional chronology of assessment design, starting with an examination of the impact of any proposed assessment practice on students’ motivation and willingness to learn. It is the attitude of the student, as much as the clarity of the necessary next steps, which will determine their ability to make progress. Other writers have commented upon the “virtual absence” of emotional factors from the literature and advocacy of educational change (see for example Hargreaves, 1998).

For teachers the implications here are complex. They have a duty to report the outcomes of learning, to students and ensure that they are able and willing to progress. To do so teachers must have an understanding of the mindset of the learner. A student who feels that his or her ability is fixed will be less likely to accept feedback and try again than the student who believes that effort is key, and that he or she can become “cleverer” by taking a risk, exercising the brain like a muscle and helping it to develop. Carol Dweck’s work on “Self Theories” and “Mindset” is the essential concomitant to formative assessment practice in this regard. We are talking here about intrinsic as well as extrinsic motivation. Relying on extrinsic alone may motivate a small proportion of students, or a larger

number when the personal stakes are very high, but it can lead to complacency for the brightest and hopelessness for the strugglers, neither of which are likely to produce the best results. Intrinsic motivation is powered by self-efficacy, excellent feedback and the “locus of control” being brought intentionally closer to the learner. This applies to learners of all ages, including of course teachers and school leaders.

The Need for Students to be Able to Assess Themselves and Understand How to Improve

This denotes that students need to be taught how to assess themselves and identify strategies on how to improve by their teachers. First, the teachers need to clarify the learning objectives and help students understand the criteria for success. Then they provide students with practice in the application of the criteria to their own and each other’s work. Self-critique and self-correction do not just happen spontaneously in the learner’s natural development: They are taught skills. Opinions differ about whether the development of these skills should begin with peer assessment, followed by self-assessment, or the other way around. We do know that many learners confuse feedback with friendship, which leads us to have the students practice first with “neutral” work before moving onto work done by their peers. We know too that most students, given coaching and support, are capable of reliable and insightful critique, and that this can be provided faster than the teacher could manage, making the feedback more timely and therefore more likely to be used.

It is important to note that if teachers, students or parents are not clear about the real difference between formative and summative assessment they may protest that student self-assessment is an abdication of the teacher’s professional responsibility. These protests have some justification but indicate confusion around purpose. Formative assessment is designed not to measure achievement but to promote it: For this purpose the case for student involvement is very strong indeed.

Implications of Formative Assessment for Learners

Some of the implications of formative assessment for learners can be inferred by the discussion of the implications for teachers above. These are:

- Students’ prior experiences may have rendered them “grade-dependent”, and students will have to allow their teachers to wean them off this dependence in order to focus on the more specific feedback.
- Students will need to trust their teachers’ intentions when they check prior learning and current interests.
- Students will need to accept a role in the co-construction of criteria.
- If students are given the opportunity to provide feedback to their teacher as the teaching proceeds, they will need to use the opportunity and respond sincerely.

- Other implications of formative assessment for learners include:
- *“Failing cool”*: The seduction of “failing cool”, a phrase that attempts to reflect the behaviour of students who have low expectations of themselves and try to maintain their peer respect by making little effort, is powerful for some students. Anticipating failure, these students plan to avoid any obvious effort so that their failure will appear to be not inevitable, but rather a choice they have made. This strategy, they surmise, will preserve the thing they prize above all else, the respect of their peers. Sometimes these students will share this decision as widely as they can and take a few more down with them, for company and for fun. Once this tactic is in place, failure is indeed inevitable, and the attitude is even harder to shift. Teachers speak of students failing cool from the age of 9 or 10 or even less. Boys are particularly prone to it, and proclamations about “boys’ underachievement” don’t help. They seem to say that “real boys” don’t do well academically, and a “real boy” would therefore be well advised to hide his academic light under the nearest bushel.
- *Taking responsibility*: Above all, if formative assessment is to be successful, students have to be persuaded to take responsibility for their own learning, from the earliest possible age, so that it becomes a permanent feature of their learning lives. This is “a big ask”. Taking responsibility is part of growing up and many young people fear that as much as they embrace it. It is easier if some expectation of learner responsibility has been there from the very beginning of schooling. Examination of the best of early education reveals that children are indeed regarded as essential partners, but somewhere in the middle years of schooling we seem to lose the plot, when teaching for coverage of specialist knowledge overtakes teaching for learning. Unfortunately, this may correspond to the time when the child moves from “elementary” to “secondary” models of schooling, with multiple teachers, more fragmentation, fixed time frames, more summative assessment and of course puberty with all its distractions.
- *The tenacity of habits*: When the implications for both teachers and learners are brought together, there should be no surprise that there is a prevailing gap between teachers’ intellectual understanding of formative assessment and their ability, or willingness, to make it happen. To do so demands not only a change in the teacher’s fundamental professional habits but also a similar change in their students’ habitual approach to learning. It should not be difficult to understand how teachers and students might even collude with each other to avoid formative assessment, especially if neither group is really clear about what’s in it for them.

So far we have examined the implications of formative assessment for students and teachers. Some of their hard-wired habits will need to change if formative assessment is to be effective. School leadership is also a product of habits developed over time, which can be very resistant to change. Similarly, schools develop ways of doing business which will need to be re-examined and in some cases reconstructed. How will school leadership, systems and structures adapt to the need for sustainable change?

Implications of Formative Assessment for Organising School Structures and Systems

Last but not least in this section, we discuss the implications of formative assessment on schools' structures and systems. School leaders, teachers and learners have to support and be actively involved in the following processes if formative assessment is to be implemented effectively. These structures and systems involve:

- *Teacher Evaluation.* We have looked at how the leader's behaviour will influence the change process. In addition we need to examine the specific school systems and procedures that can be adapted to support formative assessment practices. One of these will be the criteria applied in the evaluation of teaching and teachers. These criteria will need to be re-examined, to ensure that the expectations are explicit enough to guide teachers' practice, and in keeping with best practice. If, for example, the school wishes to see teachers' planning flexible enough to adjust to student feedback, then the definition of high-quality planning needs to address this. It is not enough to talk about "quality" in any aspect of teaching without being explicit: Experienced teachers are then alerted to expectations that may have changed, and young teachers are encouraged in the right direction. Once the criteria for teaching quality are in place, they can be adopted widely across the school, wherever teaching is observed and feedback provided. Formative assessment applies to teachers and teaching just as it does to learners and learning: In both processes clear goals, criteria and feedback are essential to improvement.
- *Procedures for Marking and Grading.* Part of these developing expectations will involve teachers' responsibilities towards marking and grading of their students' work. Many schools have adopted consistent policies in this area, but these policies do not always, and now should, reflect the principles of formative assessment. Instead of pursuing uniformity of the symbols used for annotating student work, the focus needs to be on the adoption of feedback techniques that maximise the positive connection between feedback, "feedforward" and improvement. If students need to be involved, that should be reflected in school policy and not left to the discretion of individual teachers, teams or departments. The techniques adopted may be different in a science class than in art or social studies, and should reflect the different needs of different age groups, but the principle of student involvement could and should be the consistent underpinning of all teachers' practice.
- *Reports to Parents.* Another aspect of school life that should reflect the formative assessment we aspire to will be how the school reports to parents about learning and progress. In some districts, reporting requirements are fixed and difficult to change, but even so the school will do whatever it can to close the gap between formative assessment and summative reporting. The purpose of reporting, as with every other aspect of school activity, is to improve achievement not just to measure it. If the purpose is other than developmental, it is difficult to justify the

time and effort. To achieve a learning-focussed purpose, the information offered to parents must give some specific and explicit indication of where the student is currently doing well, and where change and improvement is necessary. The next steps expected of the student will also be made explicit, with a particular emphasis on those steps that parents can help with. Too much detail may be as unhelpful as too little. Grades and scores may be a requirement, but grades and scores alone will provide only the crudest and potentially misleading summary of important information, and leave no clue about steps necessary for improvement. If reports are to be more specific, and less reliant on grades and generic euphemisms, they will probably take teachers longer to produce. Another aspect of reporting that will need to be reviewed is the frequency. Communicating with students about progress, strengths, challenges and next steps will be an on-going process, but frequent poor-quality reports to parents are unlikely to generate improvement. One report mid-year, identifying the next steps, and another at year-end should be quite sufficient to balance accountability with usefulness. Semester structures may complicate the issue, but there still remains little justification in communicating with parents more frequently than twice in a school year. Every hour beyond this spent on report writing is an hour that could have been spent on teacher activity far more likely to improve students' learning and achievement.

- *Student-led Conferencing.* Many schools engaged in formative assessment have identified the importance of "student-led" or "student-involved" conferencing as a more appropriate way of communicating with parents. If formative assessment necessitates the involvement of the students in self-critique and self-correction, it follows logically that they should also be involved in self-presentation. Much has been written about student-led conferencing: Suffice to say here that all levels of schooling could benefit from careful and purposeful introduction of this practice, probably as an addition to written reports rather than a substitute for them. Elementary and middle schools seem more likely to use this process than high schools, despite the fact that the responsibility of the student for high-quality reflection and self-presentation should increase as the student gets older. With some flexible thinking, and with an eye on the long-term meta-cognitive development of their students, secondary schools should give serious thought to introducing a form of student-led conferencing, in recognition of the limited value of traditional parental reporting.
- *Teachers' Professional Development.* Finally, we have already seen how a school's approach to PD might be reviewed, reflecting the premise that formative assessment applies with equal force to teachers as well as their students, and indeed to school leaders too. If we are clear that teachers are adult learners, and that their continued learning is essential to the success of their students, then we have to use PD to maximise the opportunities for teacher learning. The principles of adult learning will apply: choice, recognition of prior learning and preferred learning styles, a balance of intrinsic and extrinsic motivation, good feedback, sensible risk-taking, collegiality and challenge. Few of these needs are met by the classic PD event, involving teachers in undifferentiated groups being presented

with undifferentiated information by external experts, and then expected to follow through without regard to starting point, reflection, support or challenge. It's expensive and it doesn't work. Happily many PD models are already adopting a more adult learning model: Incorporating formative assessment strategies as part of the process of PD as well as its content will drive this process forward.

If schools organise for formative assessment taking into consideration the above, then formative assessment could be implemented effectively within a school. However, the ultimate goal should be about sustainability; and this is what we turn our attention to in the next section.

Sustainability and Formative Assessment: Possibilities and Pitfalls

As we have already seen assessment for learning opens up a number of possibilities for improving teaching and learning and student achievement. However, there are a number of pitfalls one has to be mindful of for the effective implementation of formative assessment and for sustainability.

First, if sustainable change is to be achieved, the behaviour of the school leadership is one of the most crucial factors. The most useful metaphor for sustainable classroom change through leadership in a school is gardening. Successful leaders are like good gardeners. A good gardener examines the soil in his garden, and before planting anything considers what will be most suited to the conditions. If he wishes to change the receptiveness of the soil, he takes steps to do so before planting anything. Manure and compost may be needed to prepare the ground. Seedlings are protected from the most obvious threats but vigilance is also needed, and judicious weeding to protect the seedlings as well as possible. Most threats to growth can be predicted, but not controlled. A good gardener is alert and flexible, gathering information on the progress of the crop and adjusting his actions appropriately.

Second, as it has already been suggested in the introduction, the term "formative assessment" could cause some confusion. One has to be clear about what "formative assessment" means. "Formative assessment" is about planning, questioning, feedback and feedforward. It is about the purpose of development not measurement: It is distinguished from the summative not by technique or even timing but by the use to which the information is put. If a school is to implement "formative assessment" effectively it has to be clear about what it entails; and all teachers in the school have to share the same definition and implement it consistently across the school.

Third, a three-stage change process of implementing formative assessment has to be followed. Stage 1 requires a light touch, inviting some interested people to discover and try some formative assessment strategies in their teaching. The range and credibility of these "pioneers" is important to motivate the "settlers" to follow their example. Encouraging them to share their progress with their peers will also happen at this stage. At Stage 2 a larger proportion of teachers will become

involved, learning from their peers and interested in the benefit for themselves as well as their students. The focus remains on voluntary involvement rather than compulsion, although the leader is already clear about the ultimate direction the school will take. The roots of Stage 3, when systems and structures are adapted to embed the principles of formative assessment for adults as well as students, have been encouraged right from the start by the leader, and at this stage they become the prime focus, to support those teachers already involved and to provide a nudge in the right direction for those still hesitating. By now, the school leader will be taking action around teacher evaluation, planning, marking, reporting and PD, all of which will be designed to translate formative assessment strategies into the fundamental routines of the school.

During Stages 2 and 3 effective feedback is necessary so that proper adjustments can be made for continued growth and success. Great feedback is based on good information, and good information on good questions. As part of sustainability, therefore, the school gathers and uses high-quality triangulated data: This can be drawn from student outcomes, classroom practice and the responses of students, teachers and parents. Careful statistical understanding and analysis is required for the student outcomes; sampling, observation and interviews provide valid and reliable information for the other aspects. The self-review process is deliberately designed as a formative assessment exercise, aimed at growth not merely measurement. The findings are considered carefully and used to adapt the school's development plans.

In *Working the Shadow Side* (1994) Gerard Egan memorably characterised the organisational change process in terms of three potential pitfalls: inertia, overload and entropy. The strategic leader will think constantly about the potential for damage of these three elements and plan to circumvent if not avoid them altogether. Inertia is tackled by enabling a few pioneers to lead the way and allowing the reluctant settlers to take their time before joining the change process. Tackling overload will necessitate a willingness to let some old expectations go rather than merely grafting on new ones. One of the causes of entropy can be as simple as the level of staff turnover in a school. Where turnover is slow, injections of fresh ideas and experiences will need to be sought from visits to other schools or inviting outsiders in. Where staff turnover is high, newcomers will need a proper introduction to the underlying principles and purposes of formative assessment, not just the classroom techniques that emanate from them. Regular refreshment and repetition of a few simple underpinnings will help to keep teachers focussed.

Also, one should also pay attention to the emotional rather than technical roots of teaching. Recent studies of Emotional Intelligence (EI) also shed light on the factors which encourage and sustain change in teaching, and in leadership: the connection between emotions, habits and the operation of the limbic brain. At an individual level, teachers and students will need to identify and change some basic habits if formative assessment is to become embedded in the ways they do business. We know that changing habits is managed by the limbic brain, not the neocortex. It requires "limbic learning", managed by emotionally intelligent, not just technically competent, leaders. We know too that changing hard-wired habits usually follows

an identifiable process. Proshaska et al. (1992), an addiction theorist and significant contributor to EI, describe it thus: “pre-contemplation; contemplation; preparation; action; maintenance”. The sustainable change process scales up from individual to institutional change, reflecting this process at a collective level. In the first stage, teachers consider and explore the possibilities, and experiment; in the second they take more systematic action; in the third they focus on successful maintenance – sustainability. Each of these stages will probably take at least a year: Going more quickly is possible but you may end up with compliance rather than commitment. Sustainability may be compromised as a result.

Conclusion

The goal of this chapter is not to repeat or review the global evidence accumulated over the past 25 years supporting the link between effective feedback and improved learning, teaching and meta-cognition. Rather, the goal is to consider the apparent gap between “knowing” and “doing” and the challenge of sustainability.

In particular, a strong link is suggested between sustained improvement in assessment practice and the quality of school leadership. School leaders need both expertise about assessment and the intellectual and interpersonal skills to translate this expertise into daily professional behaviour. Assessment for Learning is a multi-layered process: School leaders’ clear expectations and feedback to teachers are as important as teachers’ clear expectations and feedback to their students. Leaders need to model the behaviours they want of their teachers.

Changes in fundamental habits are required, not merely adjustments to current practice. Such habit changes necessitate a very particular change process involving the limbic brain rather than the neocortex, similar to other familiar habit-changing programmes such as Weight Watchers. The characteristics of such a change process are clear, important agreed goals; small steps and continual feedback; perseverance; collegial support and accountability; recognition of success.

For teachers and school leaders, assessment literacy is necessary but not sufficient. A patient and determined approach to change is also essential. Enlightened self-interest also has a part to play: Successful formative assessment brings such obvious, tangible and satisfying benefits to teachers and to the school as a whole that there is a strong motivation to make this the way we do business.

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Self-Evaluation for School Improvement

John MacBeath

How do schools improve? One view within the policy community is that it takes an exogenous shock to the system to move schools from inertia and complacency into active agendas for change. The need for strong intervention from central or local government underpins the rationale for the No Child Left Behind policy in the United States and increasing interest in inspection as a mechanism by which schools may be held to account. In December 2007 in California, state officials met with academics, union personnel from England, and representatives from other American states to discuss the viability of the English approach to school inspection. The inspection service in England, the Office of Standards in Education (known by its acronym Ofsted) does not, however, offer an exemplary model for school improvement, founded as it was in a political climate of a frontal attack on the academic establishment and failing schools. Establishing an independent inspection in 1992, Margaret Thatcher's secretary of state (Kenneth Baker's) advice to the prime minister was to employ "big cats prowling the educational landscape" in order to frighten recalcitrant schools and failing teachers into compliance (Learmonth, 2000).

Naming and shaming poorly performing schools allied to publication of performance tables and disseminating of good, or "best", practice has commended itself to many governments impatient for a quick fix (Stoll & Myers, 1997). The publication of international "league tables" of country performance by OECD has added a further sense of urgency among policy makers to raise standards and to identify the levers that can improve schools and reduce the gap between the highest and lowest achievers. As all OECD countries struggle with these issues, the question remains – To what extent does school improvement rest on achieving the balance between internal and external evaluation and between pressure and support?

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The Case for Inspection and External Review

To what extent is the impetus for improvement to be found in systems of inspection or other forms of external review? There appears to be a common consensus across countries with well-developed school systems that school improvement requires an external eye, some form of monitoring and systematic assurance that schools are not failing children. The Icelanders have a term for this – the *visitor's eye view*. It refers to that unique perspective offered by the fresh eye, untrammelled by habits of seeing, able to perceive what is significant in the commonplace. However, the dilemma lies in the nature of the invitation, or the “passport” carried by the external visitor. It is a form of entry to the school which may be met by a defensive, a guarded or an open welcome.

The evidence from England is salutary. As one of the oldest inspection systems in the world, born in 1839, it has witnessed a progressive series of shifts in paradigm and practice in search of the most appropriate form of support or intervention. It has struggled with the balance between a focus on improvement or accountability but never successfully resolving the inherent tension between these two driving motives.

A fairly substantial body of evidence, however, proves highly equivocal evidence as to Ofsted's impact on improvement. Cullingford and Daniels' (1998) study reported an adverse effect on examination performance for a sample of schools, although dismissed by the then-chief inspector of schools (Woodhead, 1999, p. 5) as “deeply flawed, ineptly executed and poorly argued.” Rosenthal's (2001) study in the following year, however, also found “a significant negative effects of Ofsted visits on school exam performance in the year of the inspection.”

Ofsted visits seem to have adverse effects on the standards of exam performance achieved by schools in the year of the Ofsted inspection. Perhaps the efforts required by teaching staff in responding to the demands of the school inspection system are great enough to divert resources from teaching so as to affect pupil achievement in the year of the visit (p. 16).

In Hertfordshire, a group of secondary students conducted their own study of inspection (Dannawy, 2001) and reported a tenuous relationship with their teachers, with special lessons being rehearsed beforehand, students and teachers having to be constantly “on show” ever ready for the inspector's visit. “Trouble students” were sent away to an outdoor pursuits centre to partake in a week-long-alternative education programme. Students also wrote “Teachers are too busy being stressed;” “Some of them have no time to teach, they are so busy getting ready;” and “Everyone is telling us what to say and how to act. What is this dictatorship? Are we expecting Stalin or Hitler next week?”

Such reactions are to be expected in systems where inspection carries high-stakes consequences for teachers and tends to inhibit an improvement drive rooted in external and internal processes working together to achieve the same ends. In England, Ofsted's current strapline is *Improvement through Inspection* yet, as their ex-Chief Inspector David Bell (now Permanent Secretary at the Department for

Family School and Community) was ready to admit, inspection does not of itself improve schools. Ofsted's own analysis in 2004 found that in some cases schools made greater progress after inspection, while in other cases they did not. Ofsted commented that "there is little significance to be read into this except to say that inspection is neither a catalyst for instant improvement in GCSE results nor a significant inhibitor" (Matthews & Sammons, 2005). David Bell's conclusion was that inspection can do little more than validate or challenge the quality of a school's own self-evaluation, in his words, "providing good clues to those in schools who are going to bring about improvement" (MacBeath, 2006, p. 30).

The Case for Self-Evaluation

Not all schools view an impending inspection with apprehension or dread. Many feel they have a good story to tell and welcome the potential of an external challenge to improve further. Ouston and Davies' (1998) study found that schools that were most positive about the inspection experience did not allow the process to intimidate them. These school staff had a high level of professional self-confidence, enough to challenge the Ofsted team's findings and were able to make their own professional judgments as to what was right for their school. In other words, there was already in these schools an incipient, or well developed, self-evaluation culture. The importance of this was recognised by a Parliamentary subcommittee which, reporting in 1999, acknowledged the dysfunctions inherent in the system and the stress it caused to teachers. It recommended that the chief inspector "should be concerned to improve morale and promote confidence in the teaching profession" and that inspectors should "take account of self-evaluation procedures used by the school."

This advocacy by the Select Committee resonates in other countries where there has been a progressive move away from external quality assurance towards what Alvik (1996), the Norwegian researcher, described as a "sequential" system in which school self-evaluation precedes, and is the focus of, external evaluation. The sequential system now finds favour in most countries, reflecting a developing consensus that strong self-evaluation is bolstered by informed and intelligent external support. In Hong Kong, for example, the move to a sequential system – a dual approach comprising systematic internal evaluation complemented by external school review – is beginning to show clear dividends (MacBeath, 2007; MacBeath & Clark, 2004). The success of the initiative is explained by a number of factors – the Education Bureau's ongoing formative support for schools through provision of tools, processes and performance measures to assess strengths and weaknesses, together with extensive professional development for senior leaders, teachers and for inspection teams themselves.

In Europe, the sequential approach has been endorsed and promoted by SICI (the Standing International Conference on Inspection). Reporting on an empirical international study in 2004, it commented,

The school visits conducted as part of the project have shown that self-evaluation is most effective in countries that have the strongest external support to the process and thus have created a culture and climate for effective school self-evaluation.

Self-Evaluation: A Matter of Definition

What constitutes self-evaluation is, however, problematic. It has been defined in a number of different ways and enjoys a confusing lexicon of terms – *self-assessment*, *self-review*, audit and QA, for example. What these varying approaches have in common, however, comes down to some key ideas – that:

- schools themselves require some form of internal review of their own quality and effectiveness
- internal processes of review/evaluation have to take account of evidence
- planning is responsive to findings, is evidence based and forward looking
- self-evaluation/review is essentially formative in nature
- evidence may also be used for internal and external accountability purposes

While subscribing to these broad principles, national or state systems do not always agree as to how those principles are to be realised in practice and what their relationships ought to be to external evaluation. The balance of power between the inspection teams and school teams and the weight given to the external report and the internal narrative differ widely, although virtually by definition a government body is likely to have the last word. The “last word,” of course, carries quite different significance in countries where the outcomes of review are publicly available and are competitive and “high stakes” as against being seen as purely for the school itself. It is the inequality of the relationship that prompted the Dutch academic Leeuw (2001) to argue for a reciprocity of relationship, what he calls the “me-to-you-too” principle. In other words, if external evaluators are to make judgements about school or classroom practice, professional principles require that judgments be mutual, negotiated and shared on an equal basis.

The form which self-evaluation assumes in practice also varies widely from more grounded bottom-up processes to more tightly defined top-down formulae. In well-developed inspection regimes, there is a compelling logic for governments to devolve their own frameworks to schools, providing the goals, criteria and protocols to schools so that they engage in a form of self-inspection. Therein lies a paradox, however. It appears that the more governments provide the template, the less inventive and spontaneous the process at school and classroom levels. Self-evaluation can all too easily become a ritual event, a form of audit in which senior leaders assume the role of an internal inspectorate applying a set of common criteria. Self-inspection and self-evaluation may be characterised (Fig. 1) as arising from quite different assumptions about the nature of improvement.

Fig. 1 Self-inspection and self-evaluation

SELF-INSPECTION	SELF-EVALUATION
top-down a one-off event provides a snapshot at a given time is time-consuming is more about accountability than improvement applies a rigid framework uses a set of predetermined criteria creates resistance can detract from learning and teaching encourages playing safe	bottom-up is continuous and embedded in teachers' work is a moving and evolving picture is time saving is more about improvement than accountability is flexible and spontaneous uses, adapts and creates relevant criteria engages and involves people improves learning and teaching takes risks

Improvement: A Contested Notion

“Improvement” is a word which figures largely in everyday discourse and carries a quite commonsensical meaning. Embedded within the self-inspection and self-evaluation models, however, are varying assumptions as to how improvement works and what it means. One the one hand, improvement is seen as coming through a requirement to be accountable; on the other, it is argued that improvement precedes and shapes accountability. One view advocates a well-structured and predetermined framework; the other argues for a more spontaneous and pragmatic stance. One sees the effort required to document improvement as time-consuming and detracting from the day-to-day work of the classroom; the other locates improvement integrally in the moment-to-moment endeavours of teachers and students. One has a clear weather eye on specific outcomes; the other focuses on the processes of learning – individual, professional and systemic.

These differing perspectives arise for a number of reasons, dependent on where one stands, or sits – whether as policy makers, school leaders, teachers or students. For a student, improvement may be evidence of progress in his or her learning. For the teacher, it may be watching a whole class grow in confidence and expertise. For researchers, the word has been invested with a specific, and sometimes doctrinaire, meaning. Its origins lie in the school effectiveness movement and a widely accepted definition of an effective school as one in which students progress further than might be expected from consideration of intake, so laying the foundation for improvement to be tied quite explicitly to student performance. This has in turn lent support to the drive for value-added indicators which could furnish policy makers with comparative trajectories of improvement school by school on an apparently more even playing field.

For its critics, this is an insufficient definition on at least three counts. First, it defines improvement singularly in terms of student attainment, ignoring other forms of organisational or social capital (Wrigley, 2003). Second, it narrows, “abysmally

and progressively the vision we have of education itself” (Wolf, 2002, p. 254). Third, it attributes value added to what happens within the walls of the school when in fact much of raised attainment in the most affluent schools is explained by tutors, by rapidly proliferating Kumon centres, and other tutorial agencies such as the “jukus” in Japan where students complement their 15,000 hours of schooling with about half as much again out of school hours.

If improvement is to be understood as having wider and deeper significance, school self-evaluation has to be understood as concerned with more much than student performance gains on measured tests and periodic tables. It has to be about capacity-building in the sense identified by John Gray and colleagues in their 1999 study. They found evidence of three distinct approaches to improvement which they termed, *tactical*, *strategic* and *capacity-building*. Most prevalent in English schools in their study were tactical approaches – a focus on raising tests scores by a range of tactics such performance targets, coaching, and cramming and prioritising students most likely to cross the threshold of the key indicator of A–C grades. While strategic approaches were wider in compass and with a longer term view, they were, nonetheless, fixed firmly on raising achievement. A small minority of schools were categorised by the researchers as “capacity building” because they paid attention to long-term investment in professional development and in deep learning (Entwistle, 1987) not just of its students but of staff and of itself as an organisation (Cheng, 2005; Senge et al., 2000).

Self-evaluation as capacity-building has a number of key features. It understands the iterative relationship between classroom life and school life, and between school learning and out of school learning. It recognises that students’ learning and teachers’ learning are integrally connected and that teachers’ learning feeds from, and feeds into, organisational learning. It is this complexity and dynamic that is the missing ingredient in ritualised and formulaic approaches to self-evaluation, the box ticking and form filling that makes it such an onerous and tedious process for teachers and school leaders. Grasping the complexity and dynamic of school as a living growing entity is what Arnold Tomkins, a New York administrator, wrote about over a century ago:

The organisation of the school must be kept mobile to its inner life. To one who is accustomed to wind up the machine and trust it to run for fixed periods, this constantly shifting shape of things will seem unsafe and troublesome. And troublesome it is, for no fixed plan can be followed; no two schools are alike; and the same school is shifting, requiring constant attention and nimble judgement on the part of the school leader (1895, p. 4).

Keeping a school mobile to its inner life is what self-evaluation is about, a continuing process of reflection which is implicit in the way people think and talk about their work and what they do to make their practice explicit and discussable. The quality of a school is located primarily in the nature of the dialogue that occurs in the classroom, in staff rooms, in formal meetings, in “the essential conversation” (Lawrence-Lightfoot, 2003) that takes place between parents and teachers. Most crucially perhaps, and least accessible of all, it is in the conversations that take place in the home between parent and student because, as we know from three decades

of effectiveness research, it is there that learning takes root and either flourishes or withers on the vine. As Campbell's Law dictates, the more critical to learning and improvement, the less easy it will be to measure.

Measuring Improvement

Attempts to establish causal links between self-evaluation and school improvement are muddled by the nature of evidence that schools have improved in Gray et al's (1999) capacity-building sense as opposed to short-term demonstrable improvement, driven by tactics and with a weather eye on the political fallout. Where self-evaluation is genuinely concerned with capacity-building, on the other hand, the causal linkages are harder to demonstrate because capacity is difficult to pin down and even harder to measure, at least in ways that would satisfy impatient governments.

What then is the nature of the data which schools find most helpful in feeding into an improvement agenda? The term "data" itself has become associated with numbers and in particular with student performance measures which are taken as the most important proxies for school improvement but are often data rich but information poor. The kinds of data that speak most powerfully to teachers are what young people have to say about their learning experience in and out of school. This is at the very epicentre of self-evaluation – what it means to be a student, what it means to keep alive the natural inborn drive to learn, to be alert to how learning travels between home and school, self and peer group, and what schools do to both constrain and develop that inner drive. Yet, the very culture of the school and conventions of the classroom tend to militate against such insights. Gaining access to the inner thought and true feelings is fraught with difficulty and tends to be submerged into the underlife of the classroom.

Teachers revel in the occasional Eureka moment when the inner light goes on but most of the time they have to assume much and second-guess their pupils' states of mind. They have to try to infer thinking from external evidence of posture, eye contact and other configurations of body language. "Neurons connect parts of our brains with one another but no cables made of neurons drape from person to person," writes David Perkins (2003, p. 3). "We develop our individual and joint intelligence when we talk about what we are doing, when we share insights, when we pool recollections". So the classroom becomes a learning laboratory in which teachers and students together embark on a journey into this dense and deeply fascinating territory. The following anecdote from a self-evaluation project give some flavour of such a classroom.

Visiting a Cambridgeshire Year 5 classroom for a morning I was hugely impressed by the mature quality of the conversation among young people and in dialogue with their teacher about their learning. These nine and ten year olds were reflective, analytic and challenging in their feedback to the teacher who herself modelled reflective behaviour, listening attentively to their comments, not reacting to the implicit criticism but, as was obvious from her body language and demeanour, genuinely interested in how they viewed the classroom and

the relationships within it as a site for learning. It was in large part her own modelling of learning behaviour that created an ethos in which children were able to share their thinking in the way they did.

When I remarked at the end of the morning on the insights and maturity of these young people, the teacher responded – ‘You don’t think they came that way do you? This is the third year in which I have had these children and has taken three years to get them to that level of confidence and access to a vocabulary through which to talk critically and constructively about their learning (MacBeath and Dempster, 2008).

As this teacher reported, it is both a slow and long-term investment. Observing is, likewise, a slow and patient process. As teachers frequently report in relation to being inspected, they employ fast-paced question and answer, keeping students on their well-conditioned toes. They know that pace is what inspectors look for and that question and answer is primarily a form of crowd control. This limiting strategy does not allow for thinking, or reflection time. There is no time for puzzling, wondering, conjecturing, hypothesising. Making thinking visible requires alternative forms of self-evaluation, inventive and continuously recreating itself.

While student voice has assumed a new status in recent years, “voice” can only really be apprehended within the complex dynamic of beliefs, relationships, conventions and latent differential power that characterise the culture of a school. It is in the sensitivity to the counter weight and balance of the fluctuating acoustic of teachers, pupils’ and parents’ voices that institutions become learning organisations. The ability to listen and tune in to secret harmonies and discords of the school’s “inner life” is what characterises sophisticated and deeply embedded self-evaluation. It requires a fundamental re-orientation to learning at all levels of the school, a re-alignment in respect of knowledge creation and ways in which teachers and students are able to support and enhance their own and one another’s learning. For McGilchrist, Myers and Reed (2004, p. 94), teachers’ learning is an essential ingredient in the culture of the *intelligent* school: “A culture of inquiry and reflection pervades the *intelligent* school and support for teachers’ own learning is fundamental to this culture.”

Schools Need Friends

Michael Apple has argued that the academic world has to recognise that teachers work in increasingly intensified conditions, demanding that academics and those who work with them act as “story tellers and secretaries” for teachers so as to enable their voices to be heard (Apple, 2006). The weight of policy, the troubled world of young people and the more frenetic pace of change all conspire to keep teachers preoccupied and to make reflective and collegial dialogue something of a luxury. The notion of the self-improving, autonomous and self-evaluating school is, in most contexts, more an aspiration than a reality.

Schools are more likely to improve when they enjoy external support. That is the conclusion of Baker and associates (1991), who compared schools which drew on external support and those that did not. This was a key issue in research undertaken

in Scotland between 1997 and 2000. Researchers and critical friends worked with 80 Scottish schools over a 3-year period, collecting and feeding back data to support schools in their own self-evaluation and improvement planning (MacBeath & Mortimore, 2001). Half of the schools had the support of a critical friend who advised on collection and use of data, feeding back findings and helping head teachers and staff to make sense of them. It became immediately obvious just how significant that support was as, in virtually every case, it proved challenging, especially for school leaders. While attainment and value-added data were often seen as disappointing, it was the attitudinal data from teachers and students that was most difficult for school staff to confront and needed the sensitive intervention of the critical friend to interpret and contextualise the data. In the half of the schools who did not benefit from the support of a critical friend, they found it easier to simply set the findings aside. One primary school head teacher without critical friend support phoned the research team to tell them that all the teacher attitudinal data was wrong as she personally had gone round the school and asked every member of staff if they had made such a comment. All of them, she said, had denied such calumny!

In schools with the ongoing support of a critical friend, such support provided deeper opportunities to explore the consonances and dissonances between teachers' and students' views of what was important, on the one hand, and the effectiveness of practice, on the other. The data revealed that teachers consistently underestimated the goodwill and enjoyment of learning that students brought with them to school, often failing to recognise the obstacles and disincentives that prevented those aspirations bearing fruit.

Adapting the ISEP approach in an English context (Pedder, James, & MacBeath, 2005), there were similar responses to the role of the critical friend in helping school staff to make sense of, and use, data effectively. One of the key foci of the study was schools' capacity for double loop learning (Argyris, 1993; Argyris & Schön, 1978); that is, the willingness and ability to stand back from the processes of learning and to reflect more deeply on the evaluation experience itself. The double loop is one of the distinguishing marks of ongoing self-evaluation as against the more routinised process of self-inspection. While the latter adopts a single loop process of data collection – interpretation – target setting and improvement planning – the double loop offers an escape route from that cycle, keeping its own evaluation activity under continuing and critical review.

Leading the Self-Evaluating School

There is a crucial policy lesson to be learned from mandated self-evaluation wherever it has occurred. Removing the locus of control from the classroom has been widely seen as one of the causal factors of the recruitment and retention crisis and a growing disenchantment with what as seen as a vocation now robbed of initiative, spontaneity and ownership (Ball, 2001; Fielding, 2001; Nicholls & Berliner, 2007) leading to what Lauder (1999) has termed “trained incapacity”:

To reformers, teachers are both the problem and solution. Precisely because of this paradox, reformers in every generation have dreamed of teacher-proof curriculum, texts, and other materials to promote designs that leapfrog the teacher and get students to learn. No classroom reform I have ever studied from reading through using computers or participated in over the last half-century has ever been fully implemented without teachers understanding the change, receiving help in putting it into practice, and adapting it to fit the particular classroom (Cuban, 2001, p. 7).

A failure to put teachers centre stage in self-evaluation and improvement is a failure of leadership. Leadership requires creativity in managing the tension between the external policy world and the internal world of the school, between improvement as seen by government and the learning agenda as seen by schools themselves. The attempt to remain distinctive, reflecting the goals and aspirations of those who constitute the school community, is inevitably at odds with the countervailing forces of public accountability to mandated performance standards. Neil Dempster (2008) describes school principals as starting from a “first impulse”, from an ethically intuitive position, sometimes experienced as a “gut” reaction, sometimes as a firm conviction arising spontaneously from the deep values that they hold as an individual. “Other people do not always share the intuitions we find self-evident,” he writes, arguing that one’s own “first impulse” should be tested in the light of how others see the situation, building trust and enrolling others in the decision-making process

[Effective leaders] find ways to release the creative energy of teachers and students, for this is the force that fosters experimentation and that breathes life, excitement, and enthusiasm into the learning environment for students and for teachers. This implies, of course, that leaders are comfortable with ambiguity, that they are more interested in learning than in outcomes, and that they trust teachers and students to work their magic in the classrooms (Sackney & Mitchell, 2007, p. 87).

Learning leaders, whatever their status or lack of it, champion self-evaluation that inspires teachers and students and gains their commitment because it strives to catch, and to keep alive, the magic. It is aware of the deadening influence of reductionism, categorisation and definitive scoring systems. It revels in ambiguity because ambiguity invites further exploration. It prefers multi-faceted perspectives to simple truths. It confronts all data with a healthy scepticism.

The most notable trait of great leaders, certainly of great change leaders, however, is their quest for learning. They show an exceptional willingness to push themselves out of their own comfort zones, even after they have achieved a great deal. They continue to take risks, even when there is no obvious reason for them to do so. And they are open to people and ideas even at a time in life when they might reasonably think—because of their success—that they know everything (Hesselbein, Goldsmith, Beckard, & Drucker, 1996, p. 78).

It is in the continuing quest for learning, individually and collectively, at student, teacher and system level, stretching the organisational comfort zone that self-evaluation comes into its own and drives improvement.

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The Emerging Politics of Curriculum Reform: Technology, Knowledge, and Power in Homeschooling

Michael W. Apple

In the late 1960 s, the critically oriented curriculum theorist Dwayne Huebner urged us to broaden the focus of curriculum scholarship to institutions outside the formal school setting. If we were too wedded to *schools*, we would limit our opportunity to envision new possibilities (Huebner, 1966). For Huebner, new technologies offered now possibilities, if they were used in ethically wise ways. At nearly the same time, the influential Brazilian educator Freire (1970) developed both a theory and practice of doing critical education based almost entirely on experiences from working with people and institutions that were expressly informal. Both urged us to act as social and moral critics as we worked to envision different configurations of knowledge, power, pedagogy, and educative environments.

We have much to learn from their joint emphasis on developing critical understandings of curricula and pedagogy from “the outside.” Indeed, I want to argue that while there is a good deal of insightful literature on the relationship between curriculum and educational reform, too much of the field has focused entirely on state-sponsored institutions of formal schooling. Yet, some of the most powerful examples of the politics of curriculum and of the ways in which reforms get institutionalized can be found in those movements that – for good or bad – are currently being built, which are expressly *anti-school* and very often extremely mistrustful of professionally trained teachers. Let me add that many of these movement are ones with which I have strong disagreements. However, ignoring them impoverishes our understanding of the politics of curriculum and makes it easier to continue a tradition of not thinking coherently enough about the relationship among education, knowledge, and power.

In this chapter, I will provide an example of how we might continue to build the alternative tradition of thinking the moral and the political in ways that illuminate these relations in real educational settings – but not schools, curricula, and teaching as we are used to seeing them. In order to do this, I shall need to focus on a

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A briefer treatment of the issues raised in this chapter can be found in Apple (2006).

number of things: the power of new social movements to effect transformations in our institutions; the role that technologies are now playing in creating the material conditions for new educational forms; the ways in which power dynamics involving gender work in using these new forms; the politics of knowledge that are embodied in these new forms; and finally, what the implications of all of this are in terms of an emerging reality in educational reform. As you will see, I am not entirely happy with all of this.

In *Educating the “Right” Way* (Apple, 2006; see also Apple et al., 2003), I spend a good deal of time detailing the world as seen through the eyes of “authoritarian populists.” These are conservative groups of religious fundamentalists and evangelicals whose voices in the debates over social and educational policies are now increasingly powerful. I critically analyzed the ways in which they construct themselves as the “new oppressed,” as people whose identities and cultures are ignored by or attacked in schools and the media. They have taken on subaltern identities and have (very selectively) re-appropriated the discourses and practices of figures such as Dr. Martin Luther King to lay claim to the fact that they are the last truly dispossessed groups.

Here, I examine the ways in which the claim to subaltern status has led to a partial withdrawal from state-run institutions and to a practice of schooling that is meant to equip the children of authoritarian populist parents, both with an armor to defend what these groups believe is their threatened culture and with a set of skills and values that will change the world so that it reflects the conservative religious commitments that are so central to their lives. I shall focus on the ways in which new technologies such as the Internet have become essential resources in what authoritarian populists see as a counter-hegemonic struggle against secular humanism and a world that no longer “listens to God’s word” (Apple, 2006). Much of my discussion will center around the place of gender in these movements, since conservative women have multiple identities within them (one of these identities being that of a teacher), simultaneously able to claim subaltern status based on the history of dominant gender regimes and having dominant status given their positioning in relationship to other oppressed groups.

Technology and Social Movement Resources

There has been an explosion of analyses of the Internet in education, cultural studies, sociology, the social studies of technology and science, and elsewhere. Much of this material has been of considerable interest and has led to a good deal of discussion of the use, benefits, history, and status of such technologies (see, e.g., Bromley & Apple, 1998; Cuban, 2001; Godwin, 2003; Hakken, 1999; Jordan, 1999). However, much of this debate is carried on with limited reference to the contexts in which the Internet is actually used; or the context is mentioned as an issue but remains relatively unexamined. As one of the more perceptive writers has said on the social uses and benefits of the Internet, “We can only understand the impact of the Internet on

modern culture if we see that symbolic content and online interaction are embedded in social and historical contexts of various kinds” (Slevin, 2000, p. ix). As Manuel Castells reminds us, rather than having a unitary meaning and use, the new communications networks that are being created “are made of many cultures, many values, many projects, that cross through the minds and inform the strategies of the various participants” (1996, p. 1999).

New technologies have both been stimulated by and themselves stimulated three overlapping dynamics: the intensification of globalization, the de-traditionalizing of society, and the intensification of social reflexivity (Slevin, 2000, p. 5). In the process, technologies such as the Internet have provided the basis for new forms of solidarity as groups of people seek to deal with the transformations brought about by these dynamics. Yet, the search for such forms of solidarity that would restore or defend “tradition” and authority can itself lead to the production of new forms of social *disintegration* at one and the same time (pp. 5–6).

I will examine a growing instance of this paradoxical process of solidarity and disintegration. By focusing on the social uses of the Internet by a new but increasingly powerful group of educational activists – conservative Christian evangelical homeschoolers – I want to contribute both to our understanding of how populist conservative movements grow and support themselves ideologically and to the complex ways in which technological resources can serve a multitude of social agendas. I also want to challenge the ordinary ways we think about where curricula come from, who designs them, and how curricula and teaching are situated in this society. One key here is technology and how it is situated institutionally. In essence, technology will be the lever that I use to pry open new understandings of the connections between curricula and a new politics of knowledge. I argue that only by placing these technologies back into the social and ideological context of their use by *specific* communities (and by specific people within these communities) can we understand the meaning and function of new technologies in society and in a new set of power relations among curricula, teaching, and educational reform education. In order to accomplish this, I also focus on the labor of homeschooling, on how it is organized, on new definitions of legitimate knowledge, and on how all this has been partly transformed by the ways in which technological markets are being created.

Technology and the Growth of Homeschooling

The connections between conservative evangelical forms and technologies are not new by any means. Elsewhere, I and others have written about the creative use of electronic ministries both nationally and internationally by the authoritarian populist religious right (see, e.g., Apple, 2006). Technological resources such as television and radio have been employed to expand the influence of conservative religious impulses and to make “the word of God” available to believers and “those who

are yet to believe” alike.¹ While understanding the increasing range and impact of such efforts is crucial, here I am less interested in such things. I want to point to more mundane but growing uses of technologies such as the Internet in supporting evangelical efforts that are closer to home. And I do mean “home” literally.

Homeschooling is growing rapidly. But it is not simply the result of additive forces. It is not simply an atomistic phenomenon in which, one by one, isolated parents decide to reject organized public schools and teach their children at home. Homeschooling is a *social movement*. It is a collective project, one with a history and a set of organizational and material supports (Stevens, 2001, p. 4).

While many educators devote a good deal of their attention to reforms such as charter schools, and such schools have received a good deal of positive press, there are many fewer children in charter schools than there are being homeschooled. In 1996, homeschool advocates estimated that there are approximately 1.3 million children being homeschooled in the United States. More recent estimates put the figure even higher. Given the almost reverential and rather romantic coverage in national and local media of homeschooling (with *The New York Times* and *Time* providing a large amount of very positive coverage, for example), the numbers may in fact be much higher than this and the growth curve undoubtedly is increasing. At the very least, more than 2.2% of school-age children in the United States are homeschooled (Sampson, 2005).

The homeschooling movement is not homogeneous. It includes people of a wide spectrum of political/ideological, religious, and educational beliefs. It cuts across racial and class lines (Sampson, 2005). As Stevens notes, there are in essence two general groupings within the homeschool movement, “Christian” and “inclusive.” There are some things that are shared across these fault lines, however: a sense that the standardized education offered by mainstream schooling interferes with their children’s potential, that there is a serious danger when the state intrudes into the life of the family, and that experts and bureaucracies are apt to impose their beliefs and are unable to meet the needs of families and children (Stevens, 2001, pp. 4–7). These worries tap currents that are widespread within American culture, and they too cut across particular social and cultural divides.

Yet, it would be wrong to interpret the mistrust of experts by many homeschoolers as simply a continuation of the current of “anti-intellectualism” that seems to run deep in parts of the history of the United States. The mistrust of science, government experts, and “rationality” became much more general as a result of the Vietnam War, when the attacks on scientists for their inhumanity, on government for lying, and on particular forms of instrumental rationality for their loss of values and ethics spread into the common sense of society. This was often coupled with a mistrust of authority in general (Moore, 1999, p. 109). Homeschoolers are not only not immune to such tendencies, but combine them in creative ways with other elements of popular

¹The Right has been in the forefront of the use of the Internet: Not only in creating linkages among existing members on key issues of concern, even in understanding that youth are among the heaviest users of the Internet, conservative organizations have creatively employed such technology to build sophisticated websites whose form and content appeal to youth (Hardisty, 1999, p. 46).

consciousness concerning the importance of education in times of rapid change and economic, cultural, and moral threat.

Demographic information on homeschoolers is limited, but in general homeschoolers seem to be somewhat better educated, slightly more affluent, and considerably more likely to be White than the population in the state in which they reside (Stevens, 2001, p. 11). While it is important to recognize the diversity of the movement, it is just as crucial to understand that the largest group of people who homeschool have conservative religious commitments and are what I called earlier “authoritarian populists” (Apple, 2006). Given the dominance of conservative Christians in the homeschooling movement, this picture matches the overall demographic patterns of evangelical Christians in general (Smith, 1998).

Based on a belief that schooling itself is a very troubled institution (but often with widely divergent interpretations of what has caused these troubles), homeschoolers have created mechanisms where “horror stories” about schools are shared, as are stories of successful homeschooling practices. The metaphors that describe what goes on in public schools and the dangers associated with them, especially those used by many conservative evangelical homeschoolers, are telling. Stevens puts it in the following way:

Invoking the rhetoric of illness (“cancer,” “contagion”) to describe the dangers of uncontrolled peer interaction, believers frame the child-world of school as a kind of jungle where parents send their kids only at risk of infection. The solution: keep them at home, away from that environment altogether (2001, p. 53).

Given these perceived dangers, through groups that have been formed at both regional and national levels, homeschooling advocates press departments of education and legislatures to guarantee their rights to homeschool their children. They have established communicative networks – newsletters, magazines, and increasingly the Internet – to build and maintain a community of fellow believers, a community that is often supported by ministries that reinforce the “wisdom” (and very often godliness) of their choice. And as we shall see, increasingly as well the business community has begun to realize that this can be a lucrative market (Stevens, 2001, p. 4). Religious publishers, for profit publishing houses large and small, conservative colleges and universities, Internet entrepreneurs, and others have understood that a market in cultural goods – classroom materials, lesson plans, textbooks, religious material, CDs, and so forth – has been created. They have rushed to both respond to the expressed needs and stimulate needs that are not yet recognized as needs themselves. But the market would not be there unless what created the opportunity for such a market – the successful identity work of the evangelical movement itself – had not provided the space in which such a market could operate.

Understanding Social Movements

Conservative Christian homeschoolers are part of a larger evangelical movement that has been increasingly influential in education, politics, and cultural institutions

such as the media (Apple, 2006; Binder, 2002). Nationally, White evangelicals constitute approximately 25% of the adult population in the United States (Green, 2000, p. 2). The evangelical population is growing steadily (Smith, 1998) as it actively provides subject positions and new identities for people who feel unmoored in a world where, for them, “all that is sacred is profaned” and where the tensions and structures of feeling of advanced capitalism do not provide either a satisfying emotional or spiritual life. The search for a “return” – in the face of major threats to what they see as accepted relations of gender/sex, authority and tradition, and nation and family – is the guiding impulse behind the growth of this increasingly powerful social movement (Apple, 2006).

Social movements often have multiple goals that may or may not be reached. Yet, it is important as well to understand that they also can produce consequences that are much broader than their avowed goals and that are not always foreseen. Thus, social movements that aim at structural transformations in state policies may produce profound changes in the realms of culture, everyday life, and identity. The mobilizations around specific goals as well can strengthen internal solidarities, cement individual and collective identity shifts in place, create a new common sense, and ultimately lead to perceptible shifts in public attitudes about a given issue (Giugni, 1999, pp. xxi–xxiii). They also create “innovative action repertoires” and have an influence on the practices and culture of mainstream organizations (Amenta & Young, 1999, p. 34). As we shall see, this is exactly what is happening within the lives of homeschoolers, but also in the ways in which organized public school systems have responded to the perceived threat to their financial well-being by a growing homeschool population.

A key to all this is something I mentioned above – the importance of identity politics. For social movements to prosper, they must provide identities that constantly revivify the reasons for participating in them. They must, hence, have an emotional economy in which the costs of being “different” are balanced by the intense meanings and satisfactions of acting in opposition to dominant social norms and values. This doesn’t happen all at once. People are changed by participating in oppositional movements such as homeschooling. As social movements theorists have widely recognized, there are crucial biographical impacts of participating in movements. People become transformed in the process (see, e.g., McAdam, 1999). This point is clearly made by Meyer:

By engaging in the social life of a challenging movement, an individual’s experience of the world is mediated by a shared vision of the way the world works and, importantly, the individual’s position in it. By engaging in activism, an individual creates himself or herself as a subject, rather than simply an object, in history and . . . is unlikely to retreat to passive acceptance of the world as it is (1999, p. 186).

Public Education and Homeschooling

A large portion of social movement activity targets the state (Amenta & Young, 1999, p. 30), and this is especially the case with the homeschooling movement.

While there is often a fundamental mistrust of the state among many religiously conservative homeschoolers, there are a considerable number of such people who are willing to compromise with the state. They employ state programs and funds for their own tactical advantage. One of the clearest examples of this is the growing homeschooling charter school movement in states such as California. Even though many of the parents involved in such programs believe that they do not want their children to be “brainwashed by a group of educators” and do not want to “leave [their] children off somewhere like a classroom and have them influenced and taught by someone that I am not familiar with” (Huerta, 2000, p. 177), a growing number of Christian conservative parents have become quite adept at taking advantage of government resources for their own benefit. By taking advantage of homeschool charter programs that connect independent families through the use of the Internet and the web, they are able to use public funding to support schooling that they previously had to pay for privately (pp. 179–180).

But it is not only the conservative evangelical parents who are using the homeschooling charter possibilities for their own benefit. School districts themselves are actively strategizing, employing such technological connections to enhance their revenue flow but maintaining existing enrolments or by actively recruiting homeschool parents to join a homeschool charter.

For example, by creating a homeschool charter, one financially pressed small California school district was able to solve a good deal of its economic problems. Over the first 2 years of its operation, the charter school grew from 80 students to 750 (Huerta, 2000, p. 180). The results were striking.

Along with the many new students came a surge of state revenue to the small district, increasing the district’s budget by more than 300 percent. [The home schooling charter] garnered home school families by providing them with a wealth of materials and instructional support. In exchange for resources, families would mail monthly student learning records to the school. Learning records are the lifeline of the school and serve a dual purpose—outlining the academic content completed by students and serving also as an attendance roster from which [the charter school staff] can calculate average daily attendance. . . . Thus, parents’ self-reported enrollment data permit [the school district] to receive full capitation grants from the state (Huerta, 2000, p. 180).

In this way, by complying with the minimal reporting requirements, conservative Christian parents are able to act on their desire to keep government and secular influences at a distance; and at the very same time, school districts are able to maintain that the children of these families are enrolled in public schooling and meeting the requirements of secular schooling.

Yet, we should be cautious of using the word “secular” here. It is clear from the learning records that the parents submit that there is a widespread use of religious materials in all of the content. Bible readings, devotional lessons, moral teachings directly from on-line vendors, and so on were widely integrated by the parents within the “secular” resources provided by the school. “Write and read Luke 1:37, memorize Luke 1:37, prayer journal” are among the many very non-secular parts of the sample learning records submitted by the parents (Huerta, 2000, p. 188).

Such content, and the lack of accountability over it, raises serious question about the use of public funding for overtly conservative religious purposes. It documents the power of Huerta's claim that "[i]n an attempt to recast its authority in an era of fewer bureaucratic controls over schools, the state largely drops its pursuit of the common good as public authority is devolved to local families" (2000, p. 192). In the process, technologically linked homes are reconstituted as a "public" school, but a school in which the very meaning of public had been radically transformed so that it mirrors the needs of conservative religious form and content.

Homeschooling as Gendered Labor

Even with the strategic use of state resources to assist their efforts, homeschooling takes hard work. But to go further we need to ask an important question: *Who* does the labor? Much of this labor is hidden from view. Finding and organizing materials, teaching, charting progress, establishing and maintaining a "proper" environment, the emotional labor of caring for as well as instructing children – and the list goes on – all of this requires considerable effort. And most of this effort is done by *women* (Stevens, 2001, p. 15). And in the process, a very different understanding of what it means to be a teacher and who that teacher might be is being built.

Because homeschooling is largely women's work, it combines an extraordinary amount of physical, cultural, and emotional labor. This should not surprise us. As Stambach and David (2005) have powerfully argued, and as Andre-Bechely (2005) and Griffith and Smith (2005) have empirically demonstrated, assumptions about gender and about the ways in which mothers as "caretakers" are asked to take on such issues as educational choice, planning, and in the case we are discussing here actually doing the education itself underpin most of the realities surrounding education. But homeschooling heightens this. It constitutes an intensification of women's work in the home, since it is added on to the already extensive responsibilities that women have within the home, and especially within conservative religious homes with their division of labor in which men may be active, but are seen as "helpers" of their wives who carry the primary responsibility within the domestic sphere. The demands of such intensified labor have consistently led women to engage in quite creative ways of dealing with their lives. New technologies, as labor saving devices, have played key roles in such creative responses (see Schwartz Cowan, 1983; Strasser, 1982).²

This labor and the meanings attached to it by women themselves need to be situated into a much longer history and a much larger context. A number of people have argued that many women see rightist religious and social positions and the groups that support them as providing a non-threatening, familiar framework of discourse and practice that centers directly upon what they perceive to be issues

²Actually, many of these technologies in fact were *not* labor saving ultimately. See Schwartz Cowan (1983) and Strasser (1982).

of vital and personal concern: immorality, social disorder, crime, the family, and schools. Yet, the feelings of personal connection are not sufficient. Rightist action in both the “public” and the “private” spheres (see Fraser, 1989, regarding how these concepts themselves are fully implicated in the history of gendered realities, differential power, and struggles) empowers them as women. Depending on the context, they are positioned as “respectable, selfless agents of change deemed necessary, or as independent rebels (Bacchetta & Power, 2002, p. 6).”

Historically, right-wing women have consistently exalted the family. It is seen as a privileged site of women’s self-realization and power, but one that is threatened by a host of internal and external “Others.” It is “the” family that is the pillar of society, the foundation of a society’s security, order, and naturalized hierarchy that is given by God (Bacchetta & Power, 2002, p. 8).

Usually, fundamentalist and evangelical women are depicted as essentially dedicated to acting on and furthering the goals of religiously conservative men (Brasher, 1998, p. 3). This is much too simplistic. Rather, the message is more complex and compelling – and connected to a very clear understanding of the realities of many women’s lives. Women are to have not a passive but a very active engagement in their family life and the world that impinges on it. They can and must “shape their husband’s actions and alter disruptive family behaviors.” The latter tasks are becoming especially important since this is a time when all too many men are abdicating their family responsibilities, often impoverishing women and their dependent children (Brasher, 1998, p. 3). Further, only a strong woman could mediate the pressures and the often intensely competitive norms and values that men brought home with them from the “world of work.” Capitalism may be “God’s economy” (see Apple, 2006), but allowing its norms to dominate the home could be truly destructive. Women, in concert with “responsible” men, could provide the alternative but complementary assemblage of values so necessary to keep the world at bay and to use the family as the foundation for both protecting core religious values and sending forth children armed against the dangers of a secular and profane world.

To conservative religious women, what from the outside may look like a restrictive life guided by patriarchal norms feels very different on the inside. It provides an identity that is embraced precisely because it improves their ability to direct the course of their lives and empowers them in their relationships with others. Thus, intense religiosity is a source of considerable power for many women (Brasher, 1998, pp. 4–5).

Based on her extensive research on conservative Christian women, Brasher is very clear on this. As she puts it,

[Although such women] insistently claimed that the proper relationship between a woman and her husband is one of submission, they consistently declared that this submission is done out of obedience to God not men and is supposed to be mutual, a relational norm observed by both spouses rather than a capitulation of one to the other. . . Submission increases rather than decreases a woman’s power within the marital relationship (1998, p. 6).

Divine creation has ordained that women and men are different types of beings. While they complement each other, each has distinctly different tasks to perform.

Such sacred gender walls are experienced not as barriers, but as providing and legitimating a space for women's action and power. Interfering with such action and power in this sphere is also interfering in God's plan (pp. 12–13).

Echoes of this can be found in other times and other nations. Thus, an activist within the British Union of Fascists – an anti-Semitic and proto-Nazi group before World War II – looked back on her activity and said that her active membership demonstrated that she had always been “an independent, free thinking individual” (Gottlieb, 2002, p. 40). This vision of independence and of what might be called “counter-hegemonic thinking” is crucial not just then but now as well. It connects with today's belief among conservative religiously motivated homeschoolers that the world and the school have become too “PC” (“politically correct”). Bringing conservative evangelical religion back to the core of schooling positions secular schooling as hegemonic. It enables rightist women to interpret their own actions as independent and free thinking – but always in the service of God. Let me say more about this here.

Solving Contradictions

One of the elements that keeps the Christian Right such a vital and growing social movement is the distinctive internal structure of evangelical Protestantism. Evangelicalism combines orthodox Christian beliefs with an intense individualism (Green, 2000, p. 2).

This is a key to understanding the ways in which what looks like never-ending and intensified domestic labor from the outside is interpreted in very different ways from the point of view of conservative religious women who willingly take on the labor of homeschooling and add it to their already considerable responsibilities in the domestic sphere. Such conservative ideological forms do see women as subservient to men and as having the primary responsibility of building and defending a vibrant godly “fortress-home” as part of “God's plan” (Apple, 2006). Yet, it would be wrong to see women in rightist religious or ideological movements as only being called upon to submit to authority per se. Such “obedience” is also grounded in a call to act on their duty as women (Enders, 2002, p. 89). This is what might best be seen as *activist selflessness*, one in which the supposedly submerged self reemerges in the activist role of defender of one's home, family, children, and God's plan. Lives are made meaningful and satisfying – and identities supported – in the now reconstituted private and public sphere in this way.

There is an extremely long history in the United States and other nations of connecting religious activism and domesticity.³ This has consistently led to mobilizations that cut across political lines that bridge the public and private spheres. In Koven and Michel's words:

³Much of this literature, however, draws upon the experiences of *White* women. The meaning of domesticity and the discourses of motherhood among Black women cannot be understood from the standpoint of dominant groups. For more on this crucial point, see Boris (1993). Since the vast majority of right-wing home schoolers are indeed *White*, I have drawn upon a literature that is based on their experiences.

Essential to this mobilization was the rise of domestic ideologies stressing women's differences from men, humanitarian concerns for the conditions of child life and labor, and the emergence of activist interpretations of the gospel . . . [including] evangelicalism, Christian socialism, social Catholicism, and the social gospel. Women's moral vision, compassion, and capacity to nurture came increasingly to be linked to motherliness (1993, p. 10).

Often guided by a sense of moral superiority, when coupled with a strong element of political commitment, this became a powerful force. Maternalism could be both progressive and retrogressive, often at the same time. While it is the conservative elements of this ideological construction that have come to the fore today, forms of maternalism also had a major impact on many of the progressive programs and legislation that currently exist (see, e.g., Kessler-Harris, 2001; Koven & Michel, 1993; Ladd-Taylor, 1994).

The restorative powers of domesticity and "female spirituality" could be combined with a strong commitment both to democratic principles and education and opportunities for women (Koven & Michel, 1993, p. 17). The key was and is how democracy – a sliding signifier – is *defined*.

Protecting and educating one's children, caring for the intimate and increasingly fragile bonds of community and family life, worrying about personal safety, and all of this in an exploitative and often disrespectful society – these themes are not only the province of the Right and should not be the province of women only. Yet, we have to ask how identifiable people are mobilized around and by these themes, and by whom.

The use of a kind of "maternalist" discourse and a focus on women's role as "mother" and as someone whose primary responsibility is in the home and the domestic sphere does not necessarily prevent women from exercising power in the public sphere. In fact, it can serve as a powerful justification for such action and actually *reconstitutes* the public sphere. Educating one's children at home so that they are given armor to equip them to transform their and others' lives outside the home establishes the home as a perfect model for religiously motivated ethical conduct for all sets of social institutions (see Apple, 2006). This tradition, what has been called "social housekeeping," can then claim responsibility for non-familial social spaces and can extend the idealized mothering role of women well beyond the home. In Marijke du Toit's words, it was and can still be used to forge "a new, more inclusive definition of the political" (2002, p. 67).

Such maternalism historically enabled women to argue for a measure of direct power in the redefined public arena. One could extol the virtues of domesticity and expand what counts as a home at the same time. Thus, the state and many institutions in the public sphere were "a household where women should exercise their . . . superior skills to create [both] order [and a better society]" (Du Toit, 2002, p. 67).⁴

All of this helps us make sense of why many of the most visible homeschool advocates devote a good deal of their attention to "making sense of the social category of motherhood." As a key part of "a larger script of idealized family relations,

⁴I would like to thank Rima D. Apple for her helpful comments on this section.

motherhood is a lead role in God's plan" for authoritarian populist religious conservatives (Stevens, 2001, p. 76). Again in Stevens' words, "One of the things that homeschooling offers, then, is a renovated domesticity—a full-time motherhood made richer by the tasks of teaching, and [by] some of the status that goes along with those tasks" (p. 83).

Yet it is not only the work internal to the home that is important here. Homeschooling is outward looking as well in terms of women's tasks. In many instances, homeschooling is a collective project. It requires organizational skills to coordinate connections and cooperative activities (support groups, field trips, play groups, time off from the responsibilities that mothers have, etc.) and to keep the movement itself vibrant at local and regional levels. Here too, women do the largest amount of the work. This had led to other opportunities for women as advocates and entrepreneurs. Thus, the development and marketing of some of the most popular curriculum packages, management guides, self-help and devotional materials, and so on has been done by women. Indeed, the materials reflect the fact that homeschooling is women's work, with a considerable number of the pictures in the texts and promotional material showing mothers and children together (Stevens, 2001, pp. 83–96). A considerable number of the national advocates for evangelically based homeschooling are activist women as well.

Marketing God

Advocacy is one thing, being able to put the advocated policy into practice is quite another. In order to actually *do* homeschooling a large array of plans, materials, advice, and even solace must be made available. "Godly schooling" creates a market. Even with the burgeoning market for all kinds of homeschooling, it is clear that conservative evangelicals and fundamentalists have the most to choose from in terms of educational and religious (the separation is often fictional) curricula, lessons, books, and inspirational material (Stevens, 2001, p. 54). Such materials not only augment the lessons that homeschooling parents develop, but increasingly they become *the* lessons in mathematics, literacy, science, social studies, and all of the other subjects that are taught. This kind of material also usually includes homework assignments and tests as well as all of the actual instructional material. Thus, a complete "package" can be assembled or purchased whole in a way that enables committed parents to create an entire universe of educational experiences that is both rigorously sequenced and tightly controlled – and prevents unwanted "pollution" from the outside world.

The A Beka Book program provides a clear example. An offshoot of Pensacola Christian College, it markets material for nursery school up to the end of secondary school. It offers the homeschooler a curriculum in which Christian teachings are woven into every aspect of knowledge. Little is left to chance. Preschool children learn through the use of Bible story flannelgraphs. At the age of 5, they begin a complete "bible curriculum," and as they move up in age, their texts include *Bible*

Doctrines for Today and Managing Your Life Under God. The elementary level science textbooks, *God's World*, are based in an inerrantist approach to the Bible and a literalist reading of Genesis and creation, one in which evolution is dismissed. The difference between right and wrong is seen as answerable only through reference to biblical teachings (Stevens, 2001, p. 55).

Easily ordered on the web, similar kinds of material are made available by other religiously based publishers – Bob Jones University Press, Christian Liberty Academy, Alpha Omega Publications, KONOS, the Weaver Curriculum Series, and a number of others. While there are pedagogic differences among these sets of materials, all of them are deeply committed to integrating biblical messages, values, and training throughout the entire curriculum. Most not only reproduce the particular biblically based worldviews of the parents, but they also create an educational environment that relies on a particular vision of “appropriate” schooling, one that is organized around highly sequenced formal lessons that have an expressly moral aim. Technological resources such as videos are marketed that provide the home-schooler with both a model of how education should be done and the resources for actually carrying it out (Stevens, 2001, p. 56).

The *organizational form* that is produced here is very important. As I have argued elsewhere (Apple, 2006), since much of the religiously conservative homeschooling movement has a sense of purity and danger in which all elements of the world have a set place, such an organization of both knowledge and pedagogy embodies the ideological structure underlying the evangelical universe. As Bernstein (1977) reminds us, it is often in the form of the curriculum that the social cement that organizes our consciousness at its most basic level is reproduced.

While the form of the curriculum is clearly a collection code in key ways (Bernstein, 1977), the content is partly integrated. Project methods are also used in many conservative homeschoolers' practices. For example, at the same time as parents may use the detailed sequential curriculum purchased from The Weaver Curriculum Series because it enables lessons to be related as well to a sequential reading of the Bible, these same parents also approve of the ways in which such curricular material includes creative ideas for student projects. Thus, one parent had her children engage in brick-making as part of the study of the Tower of Babel. She also used the genealogies of the Old Testament to stimulate her children's study of their family tree (Stevens, 2001, p. 58).

This kind of integration is found in nearly all of the widely used material. Stevens clearly describes a common situation.

By creative elaboration, curriculum authors spin out a wide range of lessons from biblical passages. Every word and phrase can be a metaphor for a revered character trait, a starting point for a science lesson. In this instance the first line of the first verse of the Sermon on the Mount, “Seeing the crowds, he went up the mountain,” commences lessons on sight, light, and the biological structure of the eye, as well as character studies on the virtues of alertness. [The parent] noted that her children's “entire curriculum will be Matthew 5, 6, and 7. Through high school.” Detailed lesson plans provide project descriptions and learning guides for children of various ages, so that the whole family can do the same lesson at once. “Our part in this,” [the parent] explained, “is to read through the booklet” (2001, pp. 58–59).

This sense of the importance of structured educational experiences that are infused with strong moral messages is not surprising given the view of a secular world filled with possible sins, temptations, and dangers. The emphasis then on equipping children with an armor of strong belief supports a pedagogical belief that *training* is a crucial pedagogic act. While children's interests have to be considered, these are less important than preparing children for living in a world where God's word rules. This commitment to giving an armor of "right beliefs" also "nourishes demands for school material" (Stevens, 2001, p. 60). A market for curriculum materials; workbooks; lesson plans; rewards for doing fine work such as merit badges, videotapes and CDs; and so many other things that make homeschooling seem more doable is created not only out of a strategy of aggressive marketing and of using the Internet as a major mechanism for such marketing, but it is also created and stimulated because of the ideological and emotional elements that underpin the structures of feeling that help organize the conservative evangelical homeschooler's world (see Apple, 2006).

Technology and the Realities of Daily Life

Of course, parents are not puppets. While the parent may purchase or download material that is highly structured and inflexible, by the very nature of homeschooling, parents are constantly faced with the realities of their children's lives, their boredom, and their changing interests. Here, chat rooms and Internet resources become even more important. Advice manuals, prayers, suggestions for how one should deal with recalcitrant children, and biblically inspired inspirational messages about how important the hard work of parenting is and how one can develop the patience to keep doing it – all of this provides ways of dealing with the immense amount of educational and especially *emotional* labor that homeschooling requires.

The technology enables women who may be rather isolated in the home due to the intense responsibilities of homeschooling to have virtual but still intimate emotional connections. It also requires skill, something that ratifies the vision of self that often accompanies homeschooling parents. We don't need "experts"; with hard work and creative searching we can engage in a serious and disciplined education by ourselves. Thus, the technology provides for solace, acknowledging and praying for each other's psychic wounds and tensions – and at the same time enhances one's identity as someone who is intellectually worthy, who can wisely choose appropriate knowledge and values. What, hence, may seem like a form of anti-intellectualism is in many ways exactly the opposite. Its rejection of the secular expertise of the school and the state is instead based on a vision of knowledgeable parents and especially mothers who have a kind of knowledge taken from the ultimate source – God.

Thus, one of the most popular of the evangelically oriented websites that markets products for homeschoolers sells such things as "The Go-to-the-Ant Chart." The wall chart contains pictures of common situations and biblical passages that speak to them. A list of the topics that the chart covers speaks to the realities that

homeschooling parents often face – serving God, gratefulness, honesty, perseverance, obedience, thoroughness, responsibility, initiative, consideration, and redeeming time. In language that not only homeschooling parents will understand, it says:

This chart arms parents with Scripture for working with the easily distracted or “less than diligent” child. The chart covers every area of laziness we could think of, plus a Bible verse for each problem for easy reference when they are driving you crazy! Take your child to the chart, identify his slothful action or attitude, read what God says about it, and pray for His strength to obey.

It is important to note that the Internet is not only an effective tool for marketing and for movement building, and as I have just noted, for dealing with the emotional and intellectual labor homeschooling requires. Just as importantly, it has become an extremely powerful tool for advocacy work and lobbying. Thus, the Home School Legal Defense Association has been at the forefront of not only homeschooling, but in active and aggressive efforts to coordinate lobbyists inside and outside the Washington “Beltway.” The HSDLA’s Congressional Action Program has proven how powerful and responsive a tool such as the Internet can be in mobilizing for and against Congressional and state laws and in defending the interests of its conservative positions (Stevens, 2001, pp. 178–179).⁵ However, once again, such mobilizing about homeschooling needs to be situated within its larger context if we are not to miss some crucial connections between conservative-oriented homeschooling and the more extensive authoritarian movement of which it is a key part. In this regard, it is worthwhile remembering what I noted earlier – that one of the most visible leaders of the homeschool movement nationally is Michael Farris. Farris plays a crucial leadership role in the HSDLA (Green, Rozell, & Wilcox, 2000) and is the president of Patrick Henry College. Patrick Henry is a college largely for religiously conservative homeschooled students and it has one major – *government*. The principles that animate its educational activities are quite clear in the following description:

The Vision of Patrick Henry College is to aid in the transformation of American society by training Christian students to serve God and mankind with a passion for righteousness, justice and mercy, through careers of public service and cultural influence.

The Distinctives of Patrick Henry College include practical apprenticeship methodology; a deliberate outreach to home schooled students; financial independence; a general education core based on the classical liberal arts; a dedication to mentoring and disciplining Christian students; and a community life that promotes virtue, leadership, and strong, lifelong commitments to God, family and society.

⁵One of the most powerful figures in HSLDA is Michael Farris. He acts as both a public spokesperson for conservative home schoolers and a legal advocate in court cases around the country. Farris has a long history of rightist activism. He ran for Lieutenant Governor of Virginia in 1993 on a strikingly conservative platform. Interestingly enough, he did not receive the endorsement of a number of other conservative Christian groups and national figures who believed that his public positions might alienate swing voters and actually harm the rightist cause. See Rozell and Wilcox (1996).

The Mission of the Department of Government is to promote practical application of biblical principles and the original intent of the founding documents of the American republic, while preparing students for lives of public service, advocacy and citizen leadership (<http://www.phc.edu/about/FundamentalStatements.asp>).

These aims are both laudable and yet worrisome. Create an environment where students learn to play active roles in reconstructing both their lives and the larger society. But make certain that the society they wish to build is based wholly on principles that themselves are not open to social criticism by non-believers. Only those anointed by their particular version of God and only a society built upon the vision held by the anointed are legitimate. All else is sinful.

One can get a sense of how close students with this vision are to the seat of power in the United States from the little-known fact that interns from Patrick Henry have been working in the White House (Rosin, 2005) during the past Bush administration in offices that have been at the center of a good deal of rightist strategy nationally. Thus, Patrick Henry is more than a little effective in its goal of placing students as apprentices to positions of authority in which they can indeed “promote practical application of biblical principles and the original intent of the founding documents of the American republic, while preparing students for lives of public service, advocacy and citizen leadership.”

Thus, for all of its creative uses of technology, its understanding of “market needs” and how to fill them, its personal sacrifices, the immense labor of the women who are mostly engaged in the work of actually doing it, and its rapid growth fostered by good press and creative mobilizing strategies, a good deal of home-schooling speaks the language of authoritarian populism. There’s an inside and an outside. And for many authoritarian populists, the only way to protect the inside is to change the outside so that it mirrors the religious impulses and commitments of the inside. Doing this is hard political, educational, and emotional work. And new technologies clearly are playing a growing role in such personal and social labor.

Conclusion

I began this chapter with an argument that those involved in trying to understand the complexities of the relationships among curriculum, power, and educational reform need to turn more of their attention to movements and practices outside of what we normally take for granted – that is, away from formal school settings and professionally trained teachers. I have examined a number of the complexities involved in the cultural and political efforts within a rapidly growing movement that has claimed subaltern status. This has involved critically analyzing a set of technological resources – the Internet – and situating it within the social context of its use within a specific community and by specific people within that community. In so doing, I have suggested that in order to understand the social meaning and uses of these technologies in a particular educational space, we need to examine the social

movement that provides the context for their use and the identities that are being constructed within that social movement.

I have also argued that we need to critically analyze the kind of labor that is required in homeschooling, *who* is engaged in such labor, and how such labor is interpreted by the actors who perform it. Only in this way can we understand the lived problems such technologies actually solve. And I have pointed to how the space for production of such “solutions” is increasingly occupied by ideological and/or commercial interests who have responded to and enlarged a market to “fill the needs” of religiously conservative homeschoolers.

A good deal of my focus has been on the work of mothers, of “Godly women” who have actively created new identities for themselves (and their children and husbands)⁶ and have found in new technologies solutions to a huge array of difficult personal and political problems in their daily lives. Such Godly women are not that much different from any of us. But they are “dedicated to securing for themselves and their families a thoroughly religious and conservative life” (Brasher, 1998, p. 29). And they do this with uncommon sacrifice and creativity.

The picture I have presented is complicated; but then so too is reality. On the one hand, one of the dynamics we are seeing is social disintegration, that is the loss of legitimacy of a dominant institution that supposedly bound us together – the common school. Yet, and very importantly, what we are also witnessing is the use of the Internet not to “de-traditionalize” society, but in the cases I have examined here, to *re-traditionalize* parts of it. However, to call this phenomenon simply re-traditionalization is to miss the ways in which such technologies are also embedded not only in traditional values and structures of feeling. They are also participating in a more “modern” project, one in which self-actualized individualism intersects with the history of social maternalism, which itself intersects with the reconstitution of masculinities as well.

But such maternalism needs to be seen as both positive and negative, and not only in its partial revivification of elements of patriarchal relations – although obviously this set of issues must not be ignored in any way. We need to respect the labor and the significant sacrifices of homeschooling mothers (and the fathers as well, since the question of altered masculinities in homeschooling families is an important topic that needs to be focused upon in a way that complements what I have done here). This sensitivity to the complexities and contradictions that are so deeply involved in what these religiously motivated parents are attempting is perhaps best seen in the words of Jean Hardisty when she reflects on populist rightist movements in general.

... I continue to believe that, within that movement, there are people who are decent and capable of great caring, who are creating community and finding coping strategies that are enabling them to lead functional lives in a cruel and uncaring late capitalist environment (1999, pp. 2–3).

⁶I am not assuming the normative heterosexual family here. There is no literature on gay and lesbian home schoolers. Given the ideological position that the vast majority of conservative evangelicals take on the question of sexuality, I am simply reflecting their own assumptions.

However, recognizing such caring, labor, and sacrifice – and the creative uses of technologies that accompany them – should not make us lose sight of what this labor and these sacrifices also produce. Godly technologies, godly schooling, and godly identities can be personally satisfying and make life personally meaningful in a world in which traditions are either destroyed or commodified. But at what cost to those who don't share the ideological vision that seems so certain in the minds of those who produce it? Only by expanding our analyses of the relationship among knowledge, power, technology, and educational reform beyond what has been dominant in the field can we make sense of this question.

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Supporting the Education and Care of Young Children: Putting into Practice What We Know

Beverly Falk

Children are the living message we send to a time we will not see.

– John W. Whitehead

Dramatic changes over the past several decades have coincided to impact the education of young children in the United States. One change has to do with the explosion of research in the neurobiological, behavioral, and social sciences. This has led to major advances in understandings about how children learn and develop as well as the conditions that influence that learning and development. The other change is in the social and economic circumstances of our society. As our population has become increasingly diverse and our economy has become increasingly global, more families than ever are experiencing greater economic hardship and stress. At the same time, there is increasing awareness of the growing inequities between people of different backgrounds and there are growing concerns about how to prepare all citizens to survive in the new global economy. A major response to these phenomena has been to look to schools to solve the problems – by requiring them to enforce more rigorous standards for learning and by holding them accountable in high stakes ways for the learning outcomes of children of all ages. These efforts, while focused primarily on the elementary school years and beyond, have also influenced educational efforts aimed at the first 5 years of life, a period in which critical growth and development take place.

The convergence of new knowledge about human development and learning with the changing social and economic circumstances of our nation has created a tension between what we know and what we do in regard to the education of young children. In this chapter, I discuss understandings brought to light in recent years about how young children learn and the practices that best support their development. I review the present state of early childhood education and the context of high-stakes accountability that currently dominates US schools, sharing examples

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of how this context impacts the learning of young children. Arguing that our nation's educational policies and practices do not reflect the knowledge base we have developed, I offer recommendations for how to support children in accordance with their developmental needs and how to teach them in the ways that they learn. Only by doing this, I believe, can we help children and their families negotiate the changing demands of the twenty-first century and realize the possibilities for their futures.

What We Know About Young Children's Learning and Development

The habits we form from childhood make no small difference, but rather they make all the difference. —Aristotle

The research of the last several decades has led us to understand that children are born *wired* to learn. At birth their brains possess over 100 billion neurons. During the first year of life, the brain evolves more rapidly than at any other time. Neural synapses are created and discarded at astounding rates. In fact, 75% of the brain's growth appears by the age of 3; 90% by the age of 5. By this time, a foundation is laid for all kinds of competencies – linguistic, conceptual, ethical, social, emotional, and motor. All of these critical dimensions of early development are intertwined in the architecture of the brain, forming either a sturdy or fragile foundation for the stages of development to follow (Kirp, 2007; Shonkoff & Phillips, 2000).

During the early years of life, healthy children actively participate in their growth. They explore the environment, learn to communicate, and begin to construct ideas about how the world works. Through active engagement with materials, ideas, and relationships they make sense of new concepts and ideas, integrating them with past experiences and understandings (Bowman, Donovan, & Burns, 2001; Bransford, Brown, & Cocking, 1999; Piaget, 1975, 1998, 2000). What adults refer to as play – unstructured activities such as singing, dancing, painting, drawing, or acting – is really the work that children do to make meaning of the world (Bredekamp & Copple, 1997; Singer & Singer, 1990). Many educators have known this for a long time – as evidenced by the theories of Rousseau to the observations of Piaget. But recent developments in brain-based research have added another important dimension to our knowledge.

Through neuroimaging technologies, scientists have actually been able to observe how neural connections are made. They have confirmed that during the early years of life, the development and collaboration of various processing systems in the brain is enhanced by the play that young children do (Bowman et al., 2001; Bransford et al., 1999; Shonkoff & Phillips, 2000). The technologies have also demonstrated how affective aspects of children's lives – such as the presence of relevance, interest, enjoyment, good relationships, feelings of safety, and self-efficacy – are important supporters of learning, while pointing to how stress, boredom, confusion, low motivation, and anxiety interfere with learning (Viadero, 2007;

Willis, 2007). Without a doubt, the cognitive and emotional aspects of development are intricately intertwined.

Other research has led to additional understandings about the link between cognitive and social development. Children's social relationships and their social environment, specifically, the family, community, and culture have been found to have an impact (through both formal and informal teaching) on children's efforts to understand the world (Brown & Reeve, 1987; Lave & Wenger, 1991; Moll & Whitmore, 1993; Newman, Griffin, & Cole, 1989; Rogoff & Wertsch, 1984; Vygotsky, 1978). Language and culture impact children's learning too (Au & Jordan, 1981; Ballenger, 1997; Banks, 1988; Cummins, 2001; Krashen, 1981; Ladson-Billings, 1995).

The research is thus clear that learning is not just a cognitive and physical process but also a social and emotional phenomenon that in turn impacts all aspects of growth. Emotions, social relations, and cognition are interwoven in the brain and in the ways children live their lives (Siegel, 2001). The research is also clear that development does not proceed in a uniform, one-size-fits-all manner. Rather, different children bring different strengths and intelligences to the learning process (Gardner, 1983, 1991, 1997). They develop at different paces and in different ways. Diversity and variation are the norm (Brown & Reeve, 1987).

But development does not occur in isolation; it requires supportive environments of caring adults in families, schools, neighborhoods, communities, and our larger society (Brown & Campione, 1994; Rogoff, 2003; Sampson, Sharkey, & Raudenbush, 2007). A number of important studies provide compelling evidence of this fact.

A dramatic example of the impact of family and life circumstances on growth and development is a study conducted by Hart and Risley (1995) on language development. These researchers tracked the number of words spoken to children by their families over the first 4 years of life. By the time the children were 4 years old, those growing up in poor families had been exposed to 32 million fewer words than those from more affluent families! What is more, the researchers even found that 4-year-olds from professional families had larger vocabularies than the parents of the poorest 3-year-olds. The researchers used this information about this huge discrepancy not to argue that people with fewer resources have less innate intelligence, but rather, that differences in life circumstances can make a huge difference to their development.

These findings are reproduced in other studies as well. Two notable studies that point to how family circumstances matter are ones conducted on reading by Noble, Wolmetz, Ochs, Farah, and McCandliss (2006) and on the IQs of twins by Turkheimer (2003). These demonstrate how measurable IQ and the realization of potential can largely be predicted by families' socioeconomic standing, not simply because they have more money, the researchers' reason, but rather because the money the families have enables them to allocate more time and resources to enhancing their child's development. Most recently, the Early Childhood Longitudinal Study-Birth Cohort, conducted by the Institute of Education Sciences in the US Department of Education on a sample of almost 9,000 children, which

began when the children were born in 2001, provides more evidence that socioeconomic status impacts children's skill development. Forty percent of children from low-income families mastered early math skills compared with 87% in high-income households (Jacobson, 2007b; National Association of Elementary School Principals, 2004). The implications of these studies are powerful: the context into which a child is born can have a dramatic impact on developmental outcomes.

Not only does the social and economic environment in which children grow up (prenatally into the early years of life) have a powerful impact on how they develop and what they learn, but the quality of their relationships, especially the primary caregiving relationship, affects the quality and extent of their learning (Bowman et al., 2001). Close and dependable early relationships that provide love, nurturance, and security; are responsive to needs; foster connections; and encourage engagement and exploration promote optimal development. When children do not have such a nurturing environment – or at least one close and dependable relationship – their development can be seriously disrupted (Garbarino, Dubrow, Kolstelnly, & Pardo, 1998).

This disruption, however, does not have to be forever. If nurturing, resources, and supports are subsequently provided, it is possible that development can be restored (Doidge, 2007). Possibilities always exist. Potentialities are not fixed from birth. What is inherited genetically can be altered by experience. While heredity may define the limits of intelligence, experience largely determines whether and how those limits will be reached.

Evidence is amassing to demonstrate that genetic and environmental influences work together over the course of development. In this evolving relationship, the two influences can function either as sources of risk or possibility. A study conducted of cabdrivers in London illustrates the interconnectedness of this relationship. Brain imaging of the cabdrivers' brains, taken at 6-month intervals over several years, showed that as the drivers gained more experience navigating around the city, the part of their brain responsible for navigational skills grew. While pointing directly to the plasticity of the brain, this finding has implications as well for the possibilities of all aspects of growth throughout a lifetime (Kirp, 2007).

A number of other studies tracking children's growth over time provide support for the adaptive relationship between nature and nurture and the notion that possibilities for growth are boundless. Studies tracking the development of adopted children demonstrate how their initially measured low IQs (so low that they were considered to be in need of a lifetime of institutionalization) changed after they had lived in loving and supportive environments. After 30 years the IQs of these same children had jumped so much that they were considered to be able to lead normal, independent lives (Skeels, 1966).

Other studies that demonstrate the impact of nurturing and care are those of the Perry Preschool in Ypsilanti, Michigan, the Abecedarian Early Childhood Intervention Project in Chapel Hill, North Carolina, and the Chicago Child-Parent Centers. These show that early experiences can make a profound difference in children's subsequent lives. Following hundreds of poor and predominantly minority children who received high-quality education in their early childhood years and

comparing them with peers who did not have access to the same experiences, the studies found that the odds for increased developmental outcomes were dramatically increased on almost every measure imaginable for those who received high-quality care and educational supports.

The most famous of these studies is the one of Perry Preschool graduates, a group of 123 South Side Chicago children, 58 of whom were randomly assigned to the Perry program, while the rest, identical in virtually all respects, were not given the same educational opportunity. Most of the children began the program at age 3 and stayed for 2 years. They attended 3 hours a day, 5 days a week. The curriculum they experienced emphasized active learning and problem solving rather than rote learning and drill on skills. Child/teacher ratios were small, and the teachers, most of whom had master's degrees, were paid public school salaries. Weekly visits were made to the children's homes, at which time families were educated about early learning and urged especially to read to their children.

The early findings of this study were mixed: children's IQs spiked while they were in the program, but after 1 year they equalized with the IQs of those in the control group. By the 4th grade, however, a noticeable difference appeared: The children who had attended the Perry Preschool had higher achievement scores than their non-preschool peers.

But the really interesting findings actually came later, demonstrating the limitations of relying solely on standardized tests scores to show overall human development and growth. Data were collected on the children every year from the time they were 7 until they were 11; then at age 14, 15, 19, and 27; and, most recently, at 40. Researchers were able to keep track of 97% of those who started in the study. What they found was that, over the years, the Perry Preschool children were significantly less likely than the control group to skip school, to be assigned to special education, and to repeat a grade. They had more favorable attitudes toward school; likewise, their parents were more enthusiastic about it. Overall, their high school GPAs were higher. By age 19, two thirds of them had graduated from high school compared with only 45% of the control group. At 27, they scored higher on literacy tests. And by 40, by almost any measure – education, income, crime, or family stability – the contrast between the two groups was striking. Nearly twice as many had earned college degrees; more of them had jobs: 76% versus 62%. They were also less likely to have been on welfare, use drugs, have problems with their health, and to have gone to prison. A greater percentage of the males had been married and raised their own children. Both women and men were more likely to own their own home, own a car, and have a savings account. They earned 25% more than their counterparts who had not gone to preschool (Schweinhart et al., 2005).

These stunning results are supported by still other evidence. When Arthur Reynolds compared the progress of 989 youngsters who attended the Chicago Child-Parent Centers (a comprehensive support program for families) with children from similar backgrounds who did not have the same experience, he found that from elementary school on, the children who went to one of these child-parent centers did significantly and consistently better than those who did not. Those who did best of all stayed in the program for 5 years (from ages 3–8). By the time they were 21, the

research showed, they were less likely to have been left back for a grade and more likely to have graduated from high school. A 2007 update on this group of children concludes that the benefits of being in the program have persisted into young adulthood. Alumni of the Child–Parent Centers were less likely than their peers to have been in prison and more likely to have gone to college, have health insurance, and to have avoided being clinically depressed (Reynolds, 2000; Reynolds et al. 2007).

Similar findings were produced by a study of graduates of the Abecedarian Early Childhood Intervention Project in Chapel Hill, North Carolina. It followed 57 children, all poor and nearly all African American, who were enrolled in the project's full-day, year-round comprehensive support program soon after they were born and stayed connected for several years, some until they were 8 years old. Researchers tracked these children until they were 21. Compared with a similar group who did not receive the same education, the project's alumni had higher IQs, were three times more likely to have gone to college, were more likely to have a good job, and half as likely to have been teen parents (Campbell, Ramey, Pungello, Sparling, & Miller-Johnson, 2002).

There are other studies too: The National Impact Study and the Head Start Family and Child Experiences Survey are yielding findings that show the positive impact of Head Start on children's learning (Administration for Children and Families, US Department of Health and Human Services, 2007a, 2007b; Phillips & Ludwig, 2007; Society for Research in Child Development, 2007).

All of these demonstrate that the disparities in developmental outcomes generally attributed to poverty can be redressed by providing children with the rich supports found in quality early care and education – environments that attend to all aspects of the whole child, involve and support families, and emphasize thinking and decision making versus rote learning. The achievement and life quality gap can be lessened, if not even done away with, if children receive such supports (National Institute for Early Education Research, 2007).

Current Contexts for Early Childhood Learning

The world in which young children are being educated today is global, competitive, and technological and changing so fast that it is commonly conjectured that the careers of the majority of today's kindergartners have not yet even been invented. Preparing children to enter this rapidly changing world means that they must know more than basic skills and facts. They need to be able to think critically and analytically, to both pose and solve problems in innovative and creative ways (Rothstein, 2004). While in past generations young people who had difficulties in school and/or dropped out were able to earn a living in some sectors of the economy, for young people who do not finish school today much fewer options are available. The factory jobs that once provided decent wages for those without education have virtually left this country. Now, the difference in income over a lifetime between those who complete school and those who do not is the difference between being able to survive or not.

Other significant changes have taken place in our society as well. The percentage of those from diverse backgrounds in our population is nearing 40% and is expected to increase by the year 2020 to nearly 50% nationwide. One of every five students is Hispanic, one in seven is black, and one in five speaks a language other than English at home. And yet, schools serving students from these diverse communities (which are made up also of a disproportionate number of high-poverty homes) spend less per student, employ higher proportions of inexperienced or unqualified teachers, and are in greatest need of physical renovation (US Department of Education, 2005).

Mixing with these statistics is the fact that families with young children in the United States today struggle to balance workplace and family responsibilities. More women are working outside of the home, and more children are being raised in single-parent families. As a result, more and more children are spending increasing amounts of time in childcare, many of which are settings of inferior quality. Economic hardship among families is increasing as well, with the gap between the haves and have-nots widening. These conditions have led to greater disparities in the health and developmental outcomes of young children. At the same time, however, there is a greater awareness of the negative effects of these societal stresses on young children. While any one child may not be affected by all of these stresses, their cumulative effects on the millions of young children growing up in the United States are cause for concern and warrant attention.

In recognition of these problems and issues, there has recently been a movement in the United States to establish universal PreK programs. Oklahoma and Georgia have adopted universal preschool education. Connecticut has a preschool program serving the children of the poor (Schumacher, Hamm, Goldstein, & Lombardi, 2006). Other states have programs they call universal, but, due to insufficient funds, these serve only a proportion of those eligible. Many of the candidates seeking office in the 2008 US elections proposed to better fund public early childhood education. And at the end of 2007, the US Congress approved a bill to increase Head Start eligibility to serve more of the nation's poor.

While these efforts are positive steps toward acknowledging the potential power of early education in life's development, they must be viewed as only a beginning in addressing the many problems that still exist. Quality early education and care is needed not just for the children of the poor but for all children. (The gap in school performance between middle-class and rich children is just about the same as the gap between poor and middle-class children.) Not only is PreK good for everyone (although the benefits have been shown to be even more significant for those who are poor), but it needs to expand to include *all* children in order to generate a constituency that will advocate to maintain and continue its funding. As Edward Zigler has said, "The only way to have a preschool program that is safe from budget cuts and that gets funded for all the poor is by giving it to everybody" (Perkins-Gough, 2007, p. 10).

Universal PreK is a good start but, in addition, the needs of the rest of the birth through age 5 group, a period that has such a profound effect on lifelong development, are also critical. Affordable programs for young children and their families at all points of the early developmental spectrum are needed. For example, research suggests that 2 years of a quality program give more benefits than 1 year (National

Institute for Early Education Research, 2007), so we really need a universal program for 3-year-olds as well as 4-year-olds. And at birth and before, when development starts, is another period of development that is critical. Yet, the US government takes so little responsibility for this period that our infant mortality rate is the second worst in the developed world. Only Latvia is worse off (Save the Children, 2006).

This shocking statistic is matched by US maternity and childcare leave policies. Out of 168 nations reviewed in a recent study, the United States was one in only five (including Lesotho, Papua New Guinea, Swaziland, and Australia) that do not provide paid maternity leave. The United States and Australia are the only industrialized countries in the world that do not provide paid leave for new mothers nationally. (The US Family and Medical Leave Act provides for 12 weeks of job-protected leave, but it only covers those who work for large companies. And although Australian mothers do not get paid leave, they at least are guaranteed their jobs for 1 year if they choose to take a parent leave.)

In contrast, many other countries have comprehensive services not only to help families balance work and family life but also to provide for what they consider to be a right for all – access to a caring early childhood environment. Some examples: Canada offers 14 months of paid maternity leave; Sweden 16 months of parental leave at 80% pay; the Scandinavian countries have childcare for all who need it starting in the first year of life. Providers are highly skilled pedagogues, and families pay only a small percentage of the costs incurred (Day Care Trust, 2005).

In the United States, however, quality care is too expensive for most people to afford. Unlike other countries that subsidize childcare, provide universal health care, and pay for extended parenting leaves, the United States has no system in place to support families through the early years of child rearing. Instead, we have a hodgepodge of for-profits, not-for-profits, family day care, and kith-and-kin care (care provided by informal arrangements of family and friends). Teachers who work in early childhood programs are frequently undereducated and underpaid. And programs vary so widely in quality, content, and organization that children and families often do not realize the benefits that good early care has been documented to offer. This nonsystem is compromising children's school readiness. Too many children, especially poor children, begin elementary school unable to take full advantage of the learning opportunities there. It is estimated that this figure is about 35%; for poor children it is probably closer to 50 or 60% (Perkins-Gough, 2007).

Current Problems with Early Childhood Practices

Yet, when children get to school at age 5, many have difficulties because the settings often are inappropriate for the ways in which they learn – emphasizing rote learning, behaviorist approaches to teaching and discipline, and developmentally inappropriate early academics. Such practices, unfortunately, replace the kinds of active and multifaceted experiences that support the natural manner in which young children learn.

This problem is exacerbated by the testing and high-stakes accountability practices that currently dominate schools and schooling. Driven by concerns about preparing citizens to live in and contribute to our increasingly complex global economy, schools' increasing focus on tougher standards that are measured by tests and enforced by sanctions or rewards is driving the curriculum and learning materials to mimic what is on the tests. Because the tests are predominantly multiple-choice and focus on the recall of isolated skills, they in turn drive the curriculum to focus on simplistic facts and lower-order thinking. This is happening in younger and younger grades. Recently I saw an ad for a DVD that promises to introduce babies and toddlers to the early speech skills they need: "... the first 300 words and phrases, including: vowel and consonant formation, letter and shape identification, counting games, and basic manners (<http://www.phonics4babies.com>).” At the kindergarten level, a growing number of states administer standardized tests to young children and judge the programs that care for them by the results (Armstrong, 2006; Jacobson, 2007a). And in the elementary through middle school years, the No Child Left Behind Act (United States Department of Education, 2002), which mandates yearly tests for children in grades 3–8 and applies sanctions and rewards based on test outcomes to students, teachers, administrators, and schools, makes it difficult to do anything but teach to the test. All of this is happening despite the fact that consensus exists among most educators that standardized tests are inappropriate ways to assess young children and actually get in the way of creating environments supportive of their learning (National Association for the Education of Young Children, 1987, 2003; National Association of School Psychologists, 2005; Perrone, 1991).

In contrast, tests in other countries noted for their students' academic achievement focus on higher-order skills: critical thinking, problem solving, and tasks that ask children to apply their knowledge, solve real-world problems, and defend their ideas. These assessments, which include research projects, science investigations, writing samples, mathematical and computer models, and other authentic products, demonstrate how children are able to understand and apply complex skills. They give teachers timely information that can be used to shape instruction to help students improve. Unlike machine-scored standardized tests, which often take months for scores to be reported, these observational and performance assessments are generally scored by teachers and are available immediately. In addition, these assessments of other nations are not used to rank or punish schools, or to deny promotion or graduation to students. Rather, they are used to help schools improve – to evaluate curricula and guide professional learning (Darling-Hammond, 2005).

A growing body of research has shown that the more stakes become attached to tests, the more the curriculum is narrowed to what is tested and the more subject area knowledge becomes fragmented. More time is spent on language arts and math, while less is spent on science, history, physical education, and the arts (Au, 2007; Jennings & Rentner, 2006; Kroger, Campbell, Thacker, Becker, & Wise, 2007; US Department of Education, 2007). This is happening all over the nation, but especially in schools serving poor and minority children. The subjects that survive in the school curriculum are frequently taught through mandated one-size-fits-all

programs that are scripted and paced so that everyone does the same thing on the same day (Nichols, Glass, & Berliner, 2005).

Test-preparation activities have trickled down into early childhood settings (Gao, 2005). In the hopes of better preparing children for when they have to take tests, teachers are using more teacher-center pedagogies and are emphasizing mastery of symbols and skills before the children have developed a capacity to comprehend such abstractions (Elkind, 2001). Children's lack of developmental readiness for this kind of formal instruction is a large part of the reason, no doubt, that children in the upper grades do so poorly in reading and math comprehension (Currie & Thomas, 1995).

An example of how the teaching of skills is emphasized over the teaching of comprehension with young children can be found in the following excerpt of an article written by Melanie Quinn describing what happened to reading in her son's school as a result of the district's drive to raise test scores. Her description of the books her first grader was assigned to read demonstrates how reading for meaning has taken a back seat to skill instruction (Quinn, 2007):

One of the photocopied "books" was *The Big Pig's Bib*. I'd give a synopsis of the tale, but it makes no sense and is little more than a collection of unrelated words. The story begins by introducing the human characters and saying, "It is Tim and it is Mim." In standard English, the word *this* would be used to introduce Tim and Mim — i.e., "This is Tim and this is Mim." Unfortunately, the program has not yet presented the word *this*, so instead it introduces the characters using clumsy, non-standard English: "It is Tim and it is Mim."

At one point, the story says the pig is not big but then at the end, Tim and Mim fit it with a "big pig's bib" — even though there are no events or clues as to how the pig, who was not big, can now wear a "big pig's bib."

Then there's the story of *Can Pat Nap*? The simplistic line drawings show a child sitting down under a tree. In the tree is a bird that one assumes is a woodpecker. The text reads, "*Pat can nap. Tap, tap, tap. Pat can not nap. Tap, Tap, Tap. Sap on the cap. Can Pat nap? Not here, Pat!*"

I am confused. Can Pat nap or can't he? Better still, who cares?

This description of texts, so focused on the teaching of skills that they are written in ways that do not even make sense, leaves little doubt about why children are having difficulty learning to comprehend. How can a steady diet of this kind of material possibly prepare learners to make meaning of what they read?

Another negative consequence of the increased emphasis on skills without benefit of meaningful contexts that is taking place in response to concerns about high-stakes testing is the loss of such important elements of early childhood programs as nap time, free play, block play, and recess (Carr, 2004; MacDonald, 2005; Miller & Almon, 2009; Zernike, 2000). The kindergartens of today are looking more and more like upper grade classrooms, with teacher-directed, paper-and-pencil skill instruction taking place at the expense of play experiences and open-ended explorations. Less and less time is being allotted for activities that are most appropriate for their age: those that stimulate children's imaginations and support them to learn in holistic ways.

The problem extends to homework assignments too. It is now common for homework to be given out in kindergartens all over the country. Instead of encouraging appropriate activities such as hands-on experiences or reading, in many settings homework assignments focus exclusively on skills-based worksheets – practicing letters and their sounds or sight words and word families that are part of the district’s reading series (Armstrong, 2006).

Additionally, the use of computers and other forms of media with young children – heralded in our technological age as the most up-to-date resources for learning – are potentially problematic and warrant caution. Although educational television and computer programs have been considered a staple of education since the advent of *Sesame Street* and the creation of educational software programs, and although they have potential for enhancing learning – especially the learning of older children – research is documenting that they have limitations as learning vehicles for the early childhood years. Because these technologies cannot provide the hands-on interaction or the social/emotional experiences with real live people that young children need, and because what is presented by these media are already structured environments designed by the software or program designers, there is little opportunity when interacting with them for children to engage in the symbolic or pretend play necessary to construct their own understandings (Alliance for Childhood, 2000; Healy, 1999). Television and computers are highly limited in their abilities to provide children with the interactive human environments that they need to learn.

Some of the products developed may actually do more harm than good. In a recent study on the effects of popular videos such as the *Baby Einstein* and *Brainy Baby* series, researchers found that these products actually delay language development in toddlers (Zimmerman, Christakis, & Metzoff, 2007). For every hour per day spent watching videos and DVDs, infants learned 6–8 fewer new vocabulary words than those who never watched them. The strongest detrimental effect was on babies 8–16 months old, the age at which language skills start to form. The more videos they watched, the fewer words they knew. What is missing, the researchers conjecture, is the human interaction needed to learn (Park, 2007).

Not only does TV and video watching get in the way of the human interaction needed for language development, it can also have other negative health effects. The rapid scene changes found in videos and TV can overstimulate young children and be a contributing factor to attention span problems later in life. In addition, because many younger children cannot discriminate between what they see and what is real, the messages conveyed through television and videos can negatively influence their perceptions and behaviors about violence and aggressive behavior, sexuality, body concept and self-image, nutrition, dieting and obesity, and substance use and abuse. One recent study has linked excessive television watching with obesity in preschool children. Those in the study who watched more than 2 hours of television a day were more likely to become overweight and have more body fat than children who watched less than 2 hours a day (Mendoza, Zimmerman, & Christakis, 2007). All of these concerns have led the American Academy of Pediatrics to issue an advisory discouraging television viewing for children 2 years and younger and encouraging

more interactive activities that promote brain development, such as talking, playing, singing, and reading together (American Academy of Pediatrics, 2001).

Given what is known about how children learn, educational settings and materials that focus narrowly on academics at too early an age and that emphasize skills over meaning at the expense of other developmental areas – all in the name of preparing children for standardized tests – limit children’s capacity for learning, their potential for serious intellectual work, and ultimately the possibilities for their futures.

Strengthening Early Education and Care: Turning Knowledge into Action

The research is clear that children’s cognitive growth is integrally connected to their physical, social, and emotional development. The educational implications of this are also clear: children are more successful when they are healthy – physically and emotionally; when they experience a broad, challenging, and engaging curriculum; when they feel connected to the people in their school and broader community; and when schools are safe and trusting places (Association for Supervision and Curriculum Development, 2007). For young children, this specifically means providing quality cognitive stimulation, rich language environments, and the facilitation of social, emotional, and motor development in the context of good physical care and warm affective relationships. Such quality, caring environments improve social and intellectual competence and the ability to take advantage of subsequent learning opportunities. These qualities of education and care are important for all children, but particularly critical for those who have limited resources and, as a result, are at greater risk for school failure and for realizing their human potential (Bowman et al., 2001; Bransford et al., 1999; Shonkoff & Phillips, 2000).

In recent years, much knowledge has been accrued about the development of young children and the conditions that support their development. The challenge now is to turn this knowledge into action. Coherence is needed between policies, practices, and the allocation of resources to support not only academic learning but also other aspects of *the whole child* that are so critical for young children’s growth. Specifically, the research suggests a need for the following:

Quality early care for all children and families. Attention needs to be paid to the full range of factors that foster positive early development. Although our society traditionally has viewed the care of young children as an individual responsibility, the changing circumstances of life in the twenty-first century call for a different balance between what individuals do and what the society provides. Families of all income levels need supports – such as prenatal care, maternity/paternity leaves, preventive measures against such environmental influences as violence and substance abuse, etc. – to be able to effectively care for their children. They also need more affordable options for childcare and early education. Such initiatives require a coordinated infrastructure that will reduce the fragmentation of existing early childhood policies

and programs (Bowman et al., 2001; Schumacher et al., 2006; Shonkoff & Phillips, 2000).

Attention to the full range of early development in programs that care for and educate young children. In early care and education settings, attention needs to be paid to the full range of factors that impact the health and well-being of children and families, with special emphasis placed on reducing the disparities that lead to the skill gap occurring at school entry in children from different backgrounds. Accomplishing this will entail marshalling resources, comparable to those currently focused on literacy and numeracy, to translate “the knowledge base on young children’s emotional, regulatory, and social development into effective strategies for fostering: (1) the development of curiosity, self-direction, and persistence in learning situations; (2) the ability to cooperate, demonstrate caring, and resolve conflict with peers; and (3) the capacity to experience the enhanced motivation associated with feeling competent and loved” (Shonkoff & Phillips, 2000, p. 387).

High-quality teaching practices, curricula and assessments. Teaching practices, curricula, and assessments used in early childhood programs can be strengthened if they are guided by what is known from research about children’s thinking and learning. Special attention needs to be given to approaches that enable children – who are from different cultural and linguistic backgrounds, who are at different developmental levels, as well as those who have different learning styles and strengths – to learn (Bowman et al., 2001). Key to accomplishing this goal is the use of assessment to inform instruction. Multiple forms of observational and performance assessments, which offer insight to the many different kinds of knowledge and ways that children learn, can be a sound basis for making pedagogical decisions – for individual children as well as for groups (National Association for the Education of Young Children & National Association for Early Childhood Specialists in State Departments of Education, 2003; National Association of School Psychologists, 2005; Perrone, 1991).

When considering how technology can be used in programs for young children, decisions about what to do should be guided by findings from research about the critical role of human interaction and active engagement in the learning process of young children. Since the process of early childhood education is one in which interaction between the adult/teacher and the child/student is the most critical feature, the best utilization of technology may be for the teachers rather than for direct use with the children themselves. Internet communication among teachers AND CAREGIVERS – to share information on curricula, research, and the effects of different teaching strategies – could prove to be how technology can be put to the most beneficial use among early childhood teachers. Videos of teaching, which offer images of the practice of others, can help to *make teaching public* (Hatch & Pointer Mace, 2006), promoting understanding of the complexities and nuances of teaching not easily communicated in the written word.

Support for early childhood teacher development. “At the heart of the effort to promote quality early childhood programs . . . is a substantial investment in the education and training of those who work with young children” (Bowman et al., 2001, p. 311). Just as is the case in other developmental levels of education, the quality

of the teacher is the single-most important factor that determines the quality of the educational experience and the quality of the outcomes of that experience (National Commission on Teaching and America's Future, 1996). Thus, to ensure quality education and care, attention needs to be paid to ensuring that all teachers who work with young children have specialized education related to early childhood. As it now stands, there is a huge gap between this goal and the level of preparation that typifies early childhood educators. Progress toward a high-quality teaching force for young children will require an investment in supports to improve the recruitment, preparation, professional development, and compensation of those who want to work in the field. Changes of particular importance to be encouraged are the establishment of more field-based preparation programs grounded in the most current knowledge of how children develop and learn, and the provision of high-quality leadership and supervision for all early childhood centers (Bowman et al., 2001).

Public policies that support quality early childhood experiences. Through standards and appropriate assessments, sound regulations, and sufficient funding, public agencies can play a significant role in promoting early childhood program quality. In developing such structures and policies, however, caution should be exercised to counter the inappropriate expectations and punishing consequences of current accountability mechanisms. Rather, efforts should be made to ensure that the natural variability in development of young children is recognized and supported and that the policies and structures made encourage programs and practices to adapt to this diversity (Bowman et al., 2001; Shonkoff & Phillips, 2000).

Educating the public about how children learn and develop. Preparing children to negotiate the challenges they will face as the citizens of the future requires public awareness of the kind of educational experiences that can best support them to develop the skills and knowledge that they will need. To accomplish this, efforts are needed to develop better public understandings about what constitutes quality early childhood education and care. Prevailing beliefs about teaching that run counter to research – about the effectiveness of skill and drill practices, of punishing high-stakes accountability measures, and of one-size-fits-all teaching – need to be countered with clear and accessible explanations of what child/family-centered, developmentally appropriate, culturally responsive quality education and care look like. The advocacy of an informed citizenry is essential for closing the gap between what is known and what is done in early education (Association for Supervision and Curriculum Development, 2007; Bowman et al., 2001).

Research on child development and education. Research initiatives on how children learn have influenced the development of early childhood curriculum and pedagogy. Likewise, research on early childhood programs has led to better understanding about how children learn. Continued research to inform practice and practice to inform research can hopefully expand understandings that will influence both of them for the better (Schumacher et al., 2006; Shonkoff & Phillips, 2000; Bowman et al., 2001).

Conclusion: Early Education and Care Matter

The research literature on development and learning, as well as on early education and care, suggests that the quality of care children receive in their early years is critical to ensuring that they experience a life of personal fulfillment and economic success. There is also consensus that *quality* is signified by a relationship between child and caregiver in which the adult is responsive to the active nature of the child and the full range of the child's needs – social, emotional, physical, as well as cognitive – that influence development.

Much work still needs to be done to translate these understandings into practice. But from what is known about other countries, it is clear that accomplishing this goal is certainly possible. The need to do it is economic, political, and social – because we want children to be prepared to begin school, to achieve academic success, and ultimately to sustain economic independence and engage constructively with others as adult citizens. But it is an ethical and moral need too. If we want *all* children to realize their full potentials, their health, education, and well-being need to be nurtured. As the conditions of life in the twenty-first century make it necessary for more and more families in the United States to seek care for their children in the early childhood years, the need for a comprehensive system of quality early childhood education is greater and more urgent than ever before.

*Many of the things that we need can wait.
Not the child.
Now is the moment when her bones are being formed,
Her blood is being made,
And her senses are being developed.
We cannot answer her with "Tomorrow."
Her name is "Today."*

– Gabriella Mistral, 1946

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Reforming Upper Secondary Education in England: A Necessary but Difficult Change

Ann Hodgson and Ken Spours

Upper secondary education in England has become a major policy priority for government because there has not been significant growth in post-compulsory education participation rates since the mid-1990s, and the government fears that this puts the country at a disadvantage when compared internationally (DIUS, 2007). At the same time, reforming the upper secondary phase is proving to be difficult. This chapter describes the current upper secondary system in England, outlines the government's approach to reform and suggests an alternative way forward.

In England, the upper secondary phase is now defined as the education of 14–19 year olds. Currently, the statutory school-leaving age in England is still 16, although the participation age is due to rise to 18 in 2015 (DCSF, 2007a). The idea of a long phase rooted in secondary education gained support throughout the 1990s as a way of overcoming what is termed the 16+ divide, a point at which young people have to decide whether or not to progress to post-compulsory education. Two further arguments are made for a 14–19 phase. It has the potential to reinforce social cohesion because those young people who stay longer in education and gain any level of qualification are more likely to be in employment than those who do not (Macintosh, 2004). In addition, engagement with education and lifelong learning delivers wider individual and social benefits in terms of outcomes such as health, civic participation and crime reduction (Schuller, Preston, Hammond, Brassett-Grundy, & Bynner, 2004). Another argument suggests that there is something distinctive about learners between the ages of 14–19, because they are seeking to develop their own identity at a period of transition between childhood and adulthood and are having to make choices about their future.

Creating a 14–19 phase in England, however, is proving to be contentious because of the different views educationalists and policy-makers hold about how it should be organised and developed. While there is widespread agreement that such a phase should exist, this breaks down when confronted by deep-seated system features – how far a reformed 14–19 phase should be based on a traditional

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academic/vocational divide or on a more unified approach; how to motivate young people to stay on to study and how to overcome the institutional and governance barriers based on established separate 14–16 and 16–19 phases. Moreover, these are not simply issues of educational design but ones of social consequence. According to Lumby and Foskett, 14–19 is “the phase where staying in or moving class is most crucially negotiated” (2005, p. 10).

The Current 14–19 System in England

There are a number of key features that affect the shape of the current 14–19 system in England and the role it plays in young peoples’ lives. These include the role of qualifications and which ones young people take; where they study; how the system is organised and governed and the shaping influence of employers, the labour market and higher education.

Curriculum and Qualifications

Qualifications play a fundamental shaping role in the English 14–19 system, but the role of curriculum is much weaker. Qualifications define what learners study and how they are assessed and, in many cases, determine how they are taught (Ecclestone, 2007). The English system has a National Curriculum at the beginning of the 14–19 phase. It ensures a core of common curricular experiences for all learners up to the age of 16, comprising English, mathematics, science, ICT, physical education, citizenship, work-related learning and enterprise and religious, personal, social, health and careers education. While on first sight this appears quite a broad range of subjects, in international terms it is narrow. Since 2002 and the publication of the Government’s 14–19 Green Paper (DfES, 2002), 14–16 year olds no longer have to study a modern foreign language, the arts, humanities or design and technology, although these have to be on offer to them should they wish to continue with them up to the age of 16. The accent in policy has been on flexibility, choice and “personalisation” throughout the 14–19 phase, with a very limited notion of common entitlement for post-16 learners, which only extends to functional English, mathematics and ICT, although even these are not compulsory. Compared internationally, two things stand out in relation to the English 14–19 curriculum. First, it is not possible to continue in general education post 16 unless you achieve the benchmark of 5 A*–C grades in the 16+ single-subject General Certificates of Secondary Education (GCSEs). Second, there is a very limited notion of curricular breadth post 16 both for those taking Advanced General Certificates of Education (A Levels) and for those taking a vocational route. This has been a source of controversy for at least two decades.

The corollary to a weak curriculum approach to 14–19 education and training is the strength of the qualifications hierarchy. There is a perverse synergy between

general and vocational qualifications, with the former always shaping the latter. The culture of the 14–19 phase is determined by A Levels and GCSEs, which are not only numerically dominant (virtually all 14–16 learners take one or more GCSEs, and 40% of 16–19 year olds take two or more A Levels) but also politically totemic. A Levels have a history going back nearly 60 years, and GCSEs are seen as the direct descendants of O Levels, which had a similar pedigree.

Vocational qualifications for 14–19 year olds, on the other hand, are much newer and suffer from constant reform and name change, either as a result of government policy or private awarding bodies attempting to sell a new product.¹ They are taken by a much smaller number of young people, are seen as “alternatives” to mainstream A Levels and GCSEs and are associated with lower achievers and further education (FE) colleges. As a leading educational commentator put it, “vocational education – a great idea for other people’s children” (Wolf, 2002).

The purposes, pedagogy and assessment regimes are very different in general and vocational qualifications (Ecclestone, 2002). In the former, the dominant features are preparation for higher study, subject and theoretical knowledge and external assessment, with an accent on selection and rationing (Young, 1998). Vocational qualifications, on the other hand, are primarily designed for preparation for work or higher-level occupational study at advanced level, although, at the lower levels, they have also been used by government for social inclusion purposes (Fuller and Unwin, 2003). Thus 14–19 qualifications have become a site of social competition (Lumby and Foskett, 2005), as they divide young people and social groups (Clarke, 2007) and increase social inequality, a process exacerbated by the market reforms of school and college finances (Machin and Vignoles, 2006).

Organisation and Governance

The English institutional landscape has become more complex over the last 20 years as a result of policies of successive governments to increase choice and competition (Hayward et al., 2005, 2006). The 14–19 phase is not delivered by dedicated 14–19 institutions. Instead, there is a rich “mixed economy” of providers – 11–16 schools, 11–18 maintained and independent schools, sixth form colleges, local authority (LA)-controlled sixth form centres, skills centres and academies, general FE colleges, tertiary colleges, City Technology Colleges, new academies, independent training providers and, of course, employers. Only one of these institutions, the 11–18 school, covers the whole phase, but 11–18 schools are often highly selective offering mainly GCSEs and A Levels. The result is that, in institutional terms, the 14–19 phase does not exist in any meaningful sense. Not only is there a sharp institutional break at 16+, but this is compounded by curricular and qualifications

¹The English system is alone in having private awarding bodies, which are regulated by a non-departmental public body, the Qualifications and Curriculum Authority (QCA).

division, in which different providers deliver different balances of academic and vocational programmes. The effects of this division and complexity are felt most acutely by those learners who fail to achieve 5 A*–C grades at GCSE and who are often forced to leave school at 16 in order to access vocational learning (Hodgson and Spours, 2006a). Moreover, competition between schools and between schools and colleges makes the provision of impartial guidance for young people difficult to achieve.

While institutional arrangements work against the concept of a 14–19 phase, recent government policy has attempted to reform governance arrangements to underpin a more coherent approach to funding, planning, guidance and inspection. In 2007, the Department for Education and Skills (DfES) was split into two new ministries – the Department for Children, Schools and Families (DCSF) and the Department for Innovation, Universities and Skills (DIUS). The former is responsible, among other things, for 14–19 education and training and from 2010, LAs will fund, plan and co-ordinate the 14–19 phase at local level. The Common Inspection Framework now covers all education and training provision for 14–19 year olds as a result of the merger between the Office for Standards in Education (Ofsted) and the Adult Learning Inspectorate (ALI) in 2006. The Connexions service, which is responsible for the well-being and guidance of young people, has been brought back under LA control (DfES, 2006a). However, LAs do not have jurisdiction over FE colleges, which are independent corporations, nor over independent schools, academies, trust schools, training providers or employers, which makes it difficult for them to organise a coherent 14–19 landscape at the local level.

Influence of the Labour Market, Employers and Higher Education

The youth labour market has played a defining role in the 14–19 education and training system in England, because it has been a major factor in determining post-16 participation patterns (Ashton and Green, 1996). On the other hand, employers are noted for their relative lack of involvement in the provision of apprenticeships and their “curious absence” in relation to the education and training system as a whole (Keep, 2005). Government policy in this area has been described as voluntarist with a weak regulatory framework to promote employer engagement in education and training (Hayward et al., 2006). The effects of the relatively marginal role of employers in the organisation and provision of the 14–19 phase has not allowed the work-based route to flourish and to provide high-quality vocational learning for large numbers of young people (Nuffield Review, 2008). This vacuum has had to be filled by FE colleges, independent training providers and government initiatives, such as Young Apprenticeships and Entry to Employment. Despite employers’ relative lack of engagement, their voice is privileged by government in an attempt to make the 14–19 phase more “employer-led” (e.g. DIUS, 2007) and has been influential in shaping government policy, not only on vocational qualifications but also on GCSEs and A Levels. Higher education providers also have a long history

of shaping secondary and post-16 education (Wilde and Wright, 2007), and their influence on an emerging 14–19 phase is as strong as ever because they control entry to sought-after university places (Lumby and Foskett, 2005). With this power, universities affected the course of the advanced level reforms in England (Hodgson, Spours, & Waring, 2005). The key historical and system features of the current English upper secondary system are summarised in Fig. 1.

- education-based and largely rooted in schools, even though increasing numbers of young people study in further education colleges and with work-based learning providers;
- qualifications-led because of the role of accreditation in defining learning experiences of young people and in measuring the out comes of the phase;
- track-based – three main tracks – general, broad vocational and work-based/occupational (We use the term ‘track’ to refer to a qualification-led curriculum which has a distinctive content, assessment and mode of learning which tends to channel learners in a particular direction, minimising opportunities for flexible movement between different types of qualifications and curricula. We contrast the notion of a ‘track’ with the idea of a curriculum ‘route or routeway’ which allows learners to progresseither horizontally or vertically, and which is made possible when qualifications are less distinctive and share common properties in terms of assessment, knowledge and skills).
- dominated by a selective general education based on individual qualifications (GCSEs and A Levels) with no common ‘leaving’ or ‘graduation’ certification at the age of 18/19;
- having a ‘reactive’ vocational education that is largely determined by the selective academic track as it is compelled to take on social inclusion functions and struggles for parity of esteem with its dominant general education neighbour;
- containing a small work-based and apprenticeship system;
- complex and competitive in terms of institutional arrangements;
- retaining a strong break at 16+ in terms of curriculum and qualifications, institutional arrangements and governance;
- shaped by powerful external forces such as higher education and employers;
- market-based and socially competitive, making it highly politicised.

Fig. 1 Key characteristics of the English 14–19 system

System Strengths and Weaknesses

These key characteristics highlight major weaknesses of the English system – its elective nature, which prevents breadth and strong common learning; its academic/vocational divide, which contributes to social segregation that is reinforced by complex and competitive institutional arrangements. However, the English 14–19 system is also judged to have strengths when compared internationally. It is

seen to be flexible, offering strong opportunities for “second chance learning” and to have a long-standing tradition of “bottom up” innovation (Raffe, 2002). One of the challenges of reform is to build on these strengths while addressing long-standing system weaknesses.

The government’s 14–19 Reform Programme

The Beginnings of an Officially Recognised 14–19 Phase

It was only in 2002 with the publication of a consultative Green Paper *14–19 Education: Extending Opportunities, Raising Standards* (DfES, 2002) that reforming 14–19 education became official government policy, even though the idea of a 14–19 phase had been part of education professional debates since the mid-1980s (Hodgson and Spours, 2006b). This Green Paper was seen by government as modernising secondary education by making the curriculum more flexible and individualised to improve learner motivation, achievement and employability. While representatives of the education profession broadly welcomed the focus on 14–19 and on greater flexibility, many of the Green Paper proposals were criticised for being too cautious and piecemeal. Professional associations (e.g. Association of Colleges, 2002; Association of Teachers and Lecturers, 2002) argued for more radical reform affecting GCSEs and A Levels, as well as vocational qualifications.

The government’s response was *14–19 Excellence and Opportunity* (DfES, 2003), which, among proposals for increasing flexibility for 14–16 year olds, also established a working group under the chairmanship of an ex-Chief Inspector, Mike Tomlinson, to examine longer term 14–19 reform. Moreover, the government’s response sounded a note of urgency in terms of education and training system performance by focusing on the 17+ participation figure and the fact that the UK ranked 25th out of 29 OECD countries, just ahead of Greece, Mexico and Turkey. More importantly, something that was to shape events over the next 2 years was its comments on GCSEs and A Levels. Out of the ten criticisms of the current education system, no less than seven of them related directly to these qualifications – GCSE was seen as contributing to truancy and poor behaviour in the last 2 years of compulsory education, and it was even suggested that young people were “bored by their GCSE studies” (DfES, 2003, p. 10). It was now viewed as a barrier to participation for those young people who saw themselves as “failures” because they did not achieve 5 A*–C grades. A Levels, despite earlier reforms, were described as providing narrow programmes of study. Vocational awards were characterised as “a jungle of alternative courses and qualifications, too many of which lack status, clarity of purpose and brand recognition with employers”, and Modern Apprenticeships were dubbed “variable” in quality with “unacceptably low completion rates”. This picture of 14–19 education and training in England was then contrasted unfavourably with other national systems which, as a result of five key features, performed more effectively – a common curriculum in the lower secondary phase; continuation of a broad

range of subjects in the upper secondary phase; vocational routes providing access to higher education; measures to engage disaffected students and grouped awards, like the French Baccalaureate (DfES, 2003, p. 12).

The Tomlinson Proposals for a Unified Curriculum and Qualifications System

The 14–19 White Paper concluded with a remit for the independent Working Group for 14–19 Reform to consider three strategic directions for change – coherence in 14–19 learning programmes for all young people; making assessment arrangements more appropriate and manageable and developing a unified framework of qualifications. The scene was set for 2 years of unprecedented discussion about a new long-term vision for 14–19 education and training.

Throughout the latter half of 2003 until October 2004, 14–19 education and training became a high-profile topic of public debate for the first time in England as the Tomlinson Working Group involved large numbers of policy-makers and researchers and thousands of education professionals in an extensive consultation exercise. Its final report stressed the importance of a balanced curriculum and suggested the development of a new diploma framework for all 14–19 year olds, covering the whole of their learning programme, that would gradually subsume all existing qualifications (Working Group on 14–19 Reform, 2004). This might be seen as a major shift towards a more baccalaureate-style form of certification for the English 14–19 system.

Over the period of the three reports, a broad consensus for reform had been built. While there were dissenting voices in the media early on, primarily expressing concern about the loss of A Levels (e.g. Daily Mail, 2004), for the most part there was considerable professional excitement about the possibility of holistic rather than piecemeal reform (e.g. Stanistreet, 2004) and even those newspapers not normally supportive of the government were cautiously positive (e.g. Financial Times, 2004). Educational professionals, who had championed the cause of a more unified and inclusive 14–19 phase throughout the 1990s, saw this as the point where their ideas were finally being taken seriously and might shape the future 14–19 system. However, this is not quite what happened.

The government's 14–19 White Paper

In February 2005, a newly-appointed Secretary of State, Ruth Kelly, published the government's official response to the Tomlinson Final Report. The White Paper *14–19 Education and Skills* (DfES, 2005a) rejected the main Tomlinson recommendation for a unified multi-level diploma system, largely on the grounds that it would prove to be too politically contentious (Baker, 2005). Instead, the government proposed the development of 14 lines of “Specialised Diplomas” to provide a

ladder of progression of broad vocational qualifications throughout the 14–19 phase. These new qualifications would form the centre-piece of the first ever statutory 14–19 National Entitlement for learners, aimed at providing both breadth and choice of study and institutional setting.² A Levels and GCSEs were viewed as “by far the most well recognized and understood route to success” (DfES, 2005a, p. 19) and would, therefore, be retained “as cornerstones of the new system” (p. 6). They would be modified to make them more “challenging”.

The New 14–19 Diplomas

The government’s plans for raising the participation age to 18 to address historic low staying-on rates rely heavily on the new Diplomas providing a progression route for those not taking a full suite of academic GCSEs and A Levels. The government intends the Diplomas to provide “an exciting, stretching and relevant programme of learning for young people of all backgrounds and abilities” (DfES, 2006b, p. 3). It is claimed that the new awards will achieve this by their blend of general and applied learning in “real world environments” and that they have been designed primarily by employers.

The first 14 lines of Diplomas, which will be gradually introduced from September 2008, are focused on vocational sectors – IT; Society, Health and Development; Construction and the Built Environment; Engineering; Creative and Media, Land-based and Environmental; Manufacturing; Hair and Beauty; Business Administration; Finance; Hospitality; Public Services; Sport and Leisure; Retail and Travel and Tourism. The sector-based approach to Diplomas suggests that they are an alternative to academic study. More recently, however, three additional lines in science, humanities and languages (DCSF, 2007b) have been announced in an attempt to broaden the appeal of Diplomas to learners who would, in the past, have chosen A Level programmes.

However, since these new Diplomas are meant to co-exist with established GCSEs and A Levels, a big question arises as to which learners will choose to take what could still be regarded as a lower status qualification and how they will be viewed by parents, employers and higher education providers. Previous government attempts to introduce broad vocational qualifications into upper secondary education have not succeeded in attracting a wide range of learners, real recognition by employers in recruitment or sufficient status to be accepted by the most prestigious universities.

²All 14–16 year olds are entitled to National Curriculum core subjects (English, mathematics and science), foundation subjects (ICT, PE, citizenship, work-related learning and enterprise, religious education, personal, social, health and careers education, access to all the diplomas lines, a choice of courses in the arts, design and technology and modern foreign languages. 16–19 year olds are entitled to access to all the diploma lines, functional English, mathematics and ICT up to at least Level 2 (the minimum level associated with employability) (DfES, 2005b).

Reforming General Education

The government is pursuing a separate strategy for general education, with reforms scattered across a number of initiatives.

- *A Levels* will become less modular and will be made more challenging through greater emphasis on external assessment and the introduction of an A* grade to allow universities to distinguish the most high-achieving learners.
- *GCSEs* are undergoing similar changes, with course-work being replaced by controlled assessments in most subjects and a greater focus on the attainment of mathematics and English.
- *Functional skills qualifications* in English, mathematics and ICT are being introduced to improve young peoples' performance in these areas. These awards constitute a compulsory component of all the new Diploma qualifications and form part of the 14–19 Entitlement.
- *An Extended Project*, intended to develop and improve learners' critical, reflective and independent capacities, is being introduced as a core element of all the Diplomas and will also be available as a freestanding award for A Level learners, although it is not compulsory for the latter.
- *The International Baccalaureate (IB)* will be available in one institution in every LA area with the aim of offering a challenging programme other than A Levels.
- *The Foundation Learning Tier*, currently still under construction, is being designed to establish an inclusive curriculum offer at Entry Level and Level 1 for learners from 14 in an attempt to include those learners who are unable to access either GCSEs or the new Diplomas.

From a national government perspective these reforms, taken together, can be seen as an attempt to restore confidence in the ability of GCSEs and A Levels to select the brightest candidates for higher education, to address issues of basic skills highlighted by employers and to offer more choice for learners. Viewed historically, however, these changes do not substantially alter either the shape or the function of this part of the 14–19 system. General education remains dominated by A Levels and GCSE subjects; its selection function continues; there is a strong divide at the age of 16 marked by high stakes national examinations; and post-16 A Levels remain elective and narrow. The overall effect of the government's approach to general education reform places more pressure on the broad vocational and work-based routes to absorb "refugees" from "tougher" GCSEs and "strengthened" A Levels.

Apprenticeship, Vocational Learning and Employer Engagement

In compulsory education, vocational learning operates mainly as an alternative to a full suite of nine or ten GCSEs and is experienced by a minority of 14–16 year olds, usually for 1 or 2 days in the learning week (Golden, Nelson, O'Donnell, &

Morris, 2004). A recent evaluation report found that in many schools the less able, disengaged and disadvantaged learners were being targeted for vocational learning (Haines, 2006). However, while these new work-related initiatives have proved very popular with the learners who have been directed to them (e.g. Golden, O'Donnell, & Rudd, 2005), they have not broadened the 14–16 curriculum for all learners, nor have they raised the status of vocational learning. Post-16 vocational learning is both more specialised and more diverse, with most programmes being offered within FE colleges. Many of the learners taking them have found vocational courses a welcome change, having struggled with general education in school (Coffield et al., 2008). Apprenticeship is the most publicly recognised aspect of the “work-based route” in England. Since 2004, however, the “apprenticeship” brand has been used for a range of vocational learning opportunities that fall short of “‘guaranteeing’ the sort of employer-based training that has been synonymous with apprenticeship” (Fuller and Unwin, 2007). Despite this expanded and permissive approach, the numbers of young people undertaking apprenticeships are both small and declining, particularly at Advanced Level (Nuffield 14–19 Review, 2008).

Notwithstanding constant policy intervention by successive governments over the last 30 years, vocational learning and the work-based route are still struggling. Even as recently as 2007, it is possible to argue that they are caught in a low-supply, low-status, low-visibility and low-quality syndrome because the government has used vocational learning for social inclusion purposes (Fuller, 2004), largely to offset the negative effects of a highly selective general education track. This problem is compounded by the lack of substantial employer engagement in education and training. The English system has followed a voluntarist paradigm (Hayward and James, 2004) in relation to employers rather than developing the type of social partnership arrangements which elsewhere have been able to produce a higher quality apprenticeship system (Steedman, 2001).

Collaboration in the 14–19 Phase

The government's emphasis on a 14–19 Entitlement, including access to all Diploma lines in a local area, has significant implications for the organisation and governance of the 14–19 phase. Schools, colleges and work-based learning providers are being encouraged to collaborate to make the entitlement a reality for young people in each locality. Many institutions recognise the benefits of collaboration both for their learners and for their own viability. For 11–18 schools with small sixth forms collaboration can provide economies of scale and greater choice. The 11–16 schools benefit from collaboration because it allows them to provide a more motivational curriculum for 14–16 year olds and clearer progression routes post 16. For colleges and work-based learning providers, collaboration with local schools potentially attracts more learners into post-16 study in their organisations. The Nuffield Review of 14–19 Education and Training (Hayward et al., 2006) cited evidence from recent studies showing that collaborative arrangements between

schools, colleges and, to a lesser extent, work-based learning providers are both expanding and deepening. Impetus has largely come from national government initiatives.

However, other major policy texts on schools (e.g. DfES, 2005c), colleges and work-based learning providers (DfES, 2006c; DIUS, 2007) stress instead the importance of institutional diversity and autonomy in terms of mission and governance, the need for “contestability” and the market to drive up quality and the overriding desire for a “demand-led” rather than a planned system. These tensions between institutional collaboration and local planning, on the one hand, and institutional competition and autonomy, on the other, are further complicated by the range of policy levers that national government uses in this area, some of which support institutions to collaborate (e.g. the Entitlement) and others of which encourage them to compete (e.g. nationally published performance tables on individual institutional qualification outcomes). Currently the levers for competition appear stronger than those for collaboration, leading the Nuffield Review (2007) to describe institutional arrangements as “weakly collaborative”.

Debating the Future

The Problems of an Adaptive Strategy

The government’s approach to 14–19 reform seeks to remedy the deficiencies of the English system by introducing additional provision and learning experiences so that more learners can benefit, by encouraging institutions to collaborate to make this possible and by exhorting employers to play a stronger role in the education and training of young people. At the same time, it has not tackled long-standing features of the English system – the divisions between academic and vocational learning, competition between institutions and the voluntarist role of employers. In order to bring about change, it is thus compelled to pursue two agendas.

Hall’s (2003) concept of “New Labour’s double-shuffle” addresses this duality. He characterises New Labour’s approach to policy and policy-making as a “hybrid regime” of dominant neo-liberal and subordinate social democratic strands. The dominant strand involves the continued use of, for example, the discourses and practices of the new public management, while the subordinate strand contains more social democratic aims, such as attempts to cater for less advantaged learners. As we have illustrated earlier in this chapter, New Labour’s hybrid regime can be seen across all aspects of 14–19 policy and helps us to understand why reform is so complex and how the 14–19 system has experienced what Lumby and Fosskett (2007) refer to as “turbulence without change”. The government’s approach to 14–19 reform also makes it difficult for those involved in the implementation process. Practitioners and policy-makers all want the reforms to succeed for the sake of learners, even if they have varying degrees of reservation about how far piecemeal, rushed and even contradictory policies will work.

The government's adaptive strategy is a world of half-measures, which can be viewed as either half-full or half-empty. Those who adopt a half-full perspective, focusing on the subordinate social-democratic strands of policy, would see government as taking a modest step in the right direction. They would hope that a particular initiative, such as the Diplomas, might have a significant impact on the 14–19 system as a whole. Those who place reform proposals in their wider historical and system context, on the other hand, would see policy as half-empty, with a more pessimistic assessment of the power of a single measure to effect system change. The issue is whether what we have termed “half measures” become the steps and stages of an explicit and comprehensive longer-term vision and strategy. This latter approach would require recognition of the strengths of the English system in order to build on areas of success and to maximise consensus for enduring change while, at the same time, gradually addressing fundamental historical and system weaknesses.

A Unified Approach to Learning and Qualifications

If division is the major historical problem for the English system, then unification is arguably its future solution. By unification we do not mean uniformity. A unified system along the lines outlined in Fig. 2 offers the possibility of balancing common forms of learning, which all young people need for the future, with choices and opportunities for specialisation that develop individuals' talents and interests. By balancing commonality and diversity, unification avoids a “one-size fits all” approach.

If all young people are to experience a common core of knowledge and skills, general education will need to change. We support the Nuffield Review's argument (Hayward et al., 2006) that general education, while retaining a strong disciplinary knowledge and skills base, should also become more applied, practical and experiential, thus connecting it better to the modern world. All learners, regardless of their level of ability, would benefit. Furthermore, as we have argued earlier, this shift in the nature of secondary schooling would allow vocational and work-based learning to assume its proper place as a preparation for and an engagement with the labour market, rather than becoming a refuge for young people disengaged from a narrow and selective general education. However, a new approach to vocational learning, as international comparison suggests, would also need to contain a strong strand of general education to provide both greater levels of skill formation and enhanced progression opportunities to higher study. We, therefore, see a unification strategy leading to the simultaneous strengthening of both general and vocational education.

Because of the dominant role that qualifications play in the English education system, we believe that the curriculum principles we have described above need to be embodied in a comprehensive qualifications framework that is able to promote breadth and depth of learning together with clear and flexible progression opportunities. As we have argued elsewhere (Hodgson, Spours, & Wilson, 2006), these broad aims are best supported by a unified diploma system that combines

To create a unified, comprehensive, equitable and high-quality upper secondary phase of education for all 14–19 year olds and involving a wide range of social partners to meet the needs of twenty-first century society.

1. *A unified and inclusive system* – a single multi-level system of certification from Entry Level, which embraces general and vocational achievement for 14–19 year olds in all learning contexts.

2. *Entitlement and cohesion* – a common core of learning for all 14–19 year olds to develop knowledge, skills and attributes for successful learning, progression and active citizenship.

3. *Breadth, choice and specialisation* – a qualifications and organisational framework to support breadth, depth and ‘effective’ curriculum choice, underpinned by independent information, advice and guidance.

4. *A focus on progression* – a flexible, non-age-related, credit-based qualifications ‘climbing frame’ to promote both horizontal and vertical progression across the phase and to articulate with lifelong learning.

5. *The mutual improvement of general and vocational education* – the linked reform of general education (making it more inclusive, practical and challenging) and vocational education (associating it more closely with employment and raising its status with learners and employers).

6. *Assessment for learning* – focusing assessment on empowering learners and improving learning outcomes rather than on emphasising selection and accountability.

7. *Strong local learning systems* – creating strongly collaborative organisational arrangements from 14+ reinforced by supportive governance and accountability frameworks.

8. *Equity and efficiency* – approaches to resourcing that recognise the greater needs of the most disadvantaged; provide equity of conditions for those working across the 14–19 phase and promote efficient allocation.

9. *A ‘learning’ policy process* – a deliberative and reflective approach to policy-making, which is capable of learning from professional experience, from the past and from international comparison.

10. *System-wide change* – the new curriculum and qualifications framework to be supported by reciprocal institutional, governance and labour market reforms.

Fig. 2 A unified vision and ten key principles for a 14–19 phase

features of baccalaureates and modular approaches. The former are notable for their ability to provide coherence and breadth of learning, while the latter are viewed as supporting the gradual accumulation of achievement, flexibility and choice.

A New Policy Process

Changing upper secondary education in England is so difficult because the 14–19 phase is a “social battleground” (Lumby and Foskett, 2005). These are the years when qualifications and institutions function to sort and to select young people for different routes and destinations and where parents continue to vie for educational and social advantage. This is why the UK Labour government has felt the need to tread carefully, fearful of the political consequences of disturbing the fundamental features of the system. Instead, it relies on a hybrid strategy, which introduces new system features while preserving the old. However, as we have explained, this approach leads to complexity, confusions and policy tensions in which the effectiveness of reform is compromised.

We have argued for radical reform to break with past failed piecemeal policy-making. Effective reform needs to take a system-wide perspective so that changes in one area have a positive and symbiotic relationship with changes in another. At the same time, such an approach to reform will have to be evolutionary and to build on the strengths of the system, reflecting what we have termed elsewhere “strategic gradualism” (Hodgson and Spours, 2003). By the term “strategic” we mean sustainable reform, guided by a strong and clearly articulated vision and direction, together with an explicit set of principles to which all social partners can contribute. Gradualism suggests the need for deliberation and the capacity to engage in policy learning (Raffe and Spours, 2007). It is important to take time to get the main principles and system design right and then to use local experimentation and reflection to ensure effective implementation. A slower policy process also safeguards those who are on the sharp end of change, particularly learners and teachers. The effective reform of the 14–19 phase is, therefore, not just about the content of policy but also about how policy is conducted.

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Gender and Educational Change

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The purpose of this chapter is to explore issues of gender in educational change. The scholarship on change rarely explores gender issues, and, when gender is considered, it is usually synonymous with female.¹ Searching feminist scholarship for work on change, the results are similar – few studies and gender means female. There is, however, a healthy body of research that examines gender, still mostly female gender, and leadership. Therefore, this chapter will begin with the literature on women and leadership, examining those studies which are most useful for understanding change. This chapter highlights primary studies identified in two previous reviews of women and leadership (Shakeshaft, 1985, 1989; Shakeshaft, Irby, Brown, Grogan, & Ballenger, 2007).

Gender and Leadership Chronology

A number of researchers have noted that leadership and change theories are based primarily on studies of males, resulting in findings which may not be very useful for females, males trying to understand females, or males who don't fit into the traditional patterns. By looking at predominantly male behavior, it is also possible that we are failing to identify change strategies or paradigms that might be very successful for male leaders, even though not common among them. Additionally, a mono-gender sample and/or analysis framework is not likely to capture gender issues that either impede or support change. Such an approach also ignores historical and social factors that have shaped the kinds of change that occur, the ways in which change is conceptualized and carried out, and the sustainability of change.

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¹Gender has become a codeword for female. Having now accumulated considerable work on women's leadership to add to the already existing research on male leadership, we might be able to begin to examine the ways in which gender, race, and educational context influence leadership behaviors and outcomes, rather than looking at women in isolation.

Gender-conscious change theory offers the hope of understanding change within a more inclusive historical and social context. Thus, in as much as change requires leadership, the study of leadership practices which result in change needs to be inclusive.

In 1995, Brown and Irby echoed a 1984 challenge issued by Shakeshaft and Nowell (1984) that theories of leadership and change include the experiences of all involved, not just the hierarchical leader. They indicated that existing theories “are negatively impacting the field because they (a) do not reflect currently advocated leadership practice; (b) do not address the concerns, needs, or realities of women; (c) perpetuate the barriers that women encounter; and (d) do not prepare women or men to create and work effectively in inclusive systems” (pp. 42–43). Grogan (1999) concurred suggesting that, “it is reasonable to imagine that because women’s lived experiences as leaders are different from men’s, a new theoretical understanding of a leadership that is premised on social justice might emerge” (p. 533). Such a perspective, by its very nature, incorporates aspects of change.

Early studies of women’s leadership more often looked at the process, not the product. These studies examined administrative styles and behaviors and even when change was addressed, it was the actions of the formal leader, not the informal implementers, which were documented. Nevertheless, a number of these studies, at the very least, provoke questions about change and, in their most robust form, increase the understanding of how gender might be related to change.

As more women moved into school administration and as scholars argued that women’s styles should be researched in their own right, more leadership studies emerged that observed, interviewed, and surveyed only women administrators. At this point in the evolution of the gender leadership research, comparisons with men were replaced with serious examinations of women’s worldview and experience. These studies sought to identify the ways in which women lead as well as to describe best practice, regardless of whether or not there were differences in the ways that men and women administer schools. Although occasional gender comparison studies have continued to be published, the bulk of the studies from 1985 to 2009 are single-sex (female) inquiries. These studies add to the literature on the many approaches to effective leadership and now provide a starting point for examining leadership through a number of additional perspectives.

It is from these studies that research on women leaders related to change is drawn in an effort to identify behaviors common to women that facilitate change. The research that focuses on women’s leadership style is very much related to, and sometimes the catalyst for, a number of leadership concepts and/or leadership theories that have either addressed female styles directly or have described leadership approaches that are consistent findings on female leadership. Several of these have informed the analysis of female leadership: interactive leadership (Rosener, 1990); caring leadership (Grogan, 1998, 2000); relational leadership (Regan & Brooks, 1995); power-shared leadership (Brunner, 1999); learning-focused leadership (Beck & Murphy, 1996); authentic, moral, servant, or value-added leadership (Sergiovanni, 1991, 1992, 1994); and synergistic leadership (Irby, Brown, Duffy, & Trautman, 2002).

Female Imprint on Leadership

The body of research that examines female administrative behavior suggests several components that are commonly associated with women. Documentation of leadership behaviors that predominate among women is not the same as saying that women lead differently than men. In more than 50 studies which compare female and male approaches to leadership, the results are mixed, with 100% of the qualitative studies and 14% of the quantitative studies identifying differences (Shakeshaft et al., 2007). The analysis of findings and methodology do not offer a clear explanation of the differences, but it is important to note that quantitative studies tend to measure or describe leadership differently than qualitative studies. Instruments developed to examine male leadership often left out behaviors that both females and males use, but that were less valued by traditional leadership scholars.

Where differences are reported, women are more likely than men to be rated by both those who work with them and by themselves as instructional, task-oriented leaders. Nogay's (1995) study of teacher and superintendent evaluations of 76 high school principals (38 women and 38 men) using the Principal Instructional Management Rating Scale found that women principals were rated more highly than men principals. Spencer and Kochan's (2000) survey of 42% of male and female principals in Alabama found that women rate themselves higher in skill level and also access the importance of student, relational, and learning skills higher than do males.

In both qualitative and quantitative studies of principals and superintendents, women are identified as more relational and interpersonal, logging in more one-on-one contacts with staff (Counts, 1987; Nogay, 1995; Perry, 1992). However, men send more memos and write longer ones to staff than do women (Rogers, 1986). Genge's (2000) interviews with male and female secondary principals found that women are more likely to use humor as part of their leadership style and especially to diffuse conflict. Garfinkel (1988) reported differences in the ways in which the five women and five men superintendents he studied define loyal staff members. For women, a loyal staff member is one who is competent. For men, the most loyal staff members are the ones who agree with them publicly.

According to Gardiner, Enomoto, and Grogan (2000), Gardiner and Tiggeman (1999), and Eagley and Johnson (1990), the gender context of the workplace makes a difference in leadership style. Women not only exhibit more interpersonal behaviors than males in female-dominated workplaces, but are equally interpersonal in male-dominated workplaces as well. Women are equally task oriented in female-dominated organizations, but more task oriented than men in male-dominated organizations. We don't know whether women increase their task orientation and interpersonal interactions or whether they stay the same and the differences come from changes in male behavior.

Among the 12 female secondary principals that Applewhite (2001) studied, leadership approaches were strategically chosen based on the context, with women using strategies sometimes more female identified and sometimes more male identified. Barbie (2004) and Rottler (1996) both describe a mix of traditionally male

and female styles among the women superintendents they studied. Kanter and others would argue that these aren't really choices, but rather pragmatic options. For instance, women might not wish to use caring, connected styles but must use them to be successful. These considerations lead to questions about whether women's leadership styles are hard-wired, socialized and learned, dependent on context, or not different than male styles.

Women's Leadership and Change

In most school organizations, particularly at the secondary level and in the superintendency, adding a woman to the leadership roster all by itself is change. In those situations, women don't have to do anything to make change; they *are* the change. We seldom consider how this addition of "other" alters organizational members and effectiveness, neither have we acknowledged that adding a woman to a mix that has had no women is a disruption to the organization.²

Examining what the "work" of women's leadership looks like – whether or not it is qualitatively different than the "work" of leaders who are men, may provide insights into alternative models of leadership that lead to change. Kanter (1977) argues that differences are based on context and that tokens of all definitions behave similarly within organizations. Others connect women's approaches to early socialization, gender interactive expectations (Shakeshaft et al., 2007), critical mass (Kanter, 1977), and biology (Kruger, 2008). Nevertheless, researchers have identified at least five themes that are likely to be part of women's leadership (Shakeshaft et al., 2007); three of these have implications for educational change – commitment to social justice, relationship orientation, and commitment to instruction and learning.

Commitment to Social Justice is Change

The history of women and work as well as the social context of women's lives provide a strong overlay to the motivation of women in education. Women are likely to report that they enter the field of education because they want to "change" the status quo. Studies of teachers indicate that women, more than men, identify educational careers as social justice work, even if they don't use such an explicit language. Women, more often than men, talk about entering teaching to change the lives of children, to make the world a fairer place, and to change institutions so that all children have a chance.

Hargreaves and Goodson (2006) in their study of educational change over time, conclude that "most mainstream educational change theory and practice in the field of educational administration neglects the political, historical, and longitudinal

²Disruption represents a change to something different.

aspects of change to their detriment” (p. 3). This is certainly true of the role of women in change initiatives. Power and value deficits, a history of disenfranchisement and discrimination, and the unhurried pace of advancement influence the motivations and behaviors of women in educational settings.

While women were recruited into teaching in the United States because it was cheaper to employ them than men, women soon came to be seen as carriers of the status quo. Linking teaching to mothering, early expectations were of subservience and culture reproduction. Historical accounts from women teachers in the mid-1800s in the United States indicate women’s collusion in this story, believing that arguments that centered on economic need or justice would be coded as radical. Playing the “family/culture” card was a way in. Once in, women tried to shape what was to become a profession that progressively became more female identified. Women teachers were central in establishment of the National Education Association in the United States and were active organizers in getting women elected as state superintendents of education.

Throughout the history of women teachers in the United States there is a strong message of teaching as a “world changing social mission” (Hargreaves & Goodson, 2006). In the United States, women watched first as large groups of men came back into teaching in the 1960s and 1970s to avoid the draft, and then as these men moved quickly into administrative positions, from which they are only now retiring. This cohort of women teachers provides a mixed critique of male administrators from describing men in leadership positions as mere managers who cared only about their own careers to declaring male administrators irrelevant since real power and change were in the classroom or in curriculum development.

A number of studies have documented women’s reluctant decision to move into administration as a resignation to “get things right.” Women often report that they had no intention of becoming an administrator, a position they believed was not very important, but finally moved into the job because “something had to be done.” They see their move into administration as service or as sacrifice to improve the education of children. Whether entering administration reluctantly or purposefully, these women equate the move into administration as necessary to make a difference. This “revolutionary” perspective threads throughout the accounts of women administrators. While males also report the desire to make the world more just, women are more likely than men to report being motivated by a desire to make change.

Commitment to social justice is documented in a number of studies which isolate social justice as an initial motivator as well as a continuing mission (Sanders-Lawson, 2001; Shapiro, 2004; Smith-Campbell, 2002; Strachan, 1999, 2002). Interviews with four female superintendents of African descent (Sanders-Lawson), a dozen administrators across the K12 spectrum (Shapiro, 2004), six female middle school principals of African descent (Smith-Campbell, 2002), and three female secondary school principals in New Zealand (Strachan, 1999, 2002) document commitment to social justice as a thread that runs across descriptions of what motivates women to enter administration and what keeps them focused. These studies describe behaviors that are compatible with moral leadership (Sergiovanni, 1999), servant leadership (Schlosberg, 2003; Sergiovanni, 1992), value added

leadership (Covey, 1990; Sergiovanni, 1994), and synergistic leadership theory (Brown & Irby, 2006).

Women discuss their desire to “make things better,” right social wrongs, and increase support for underserved groups. Several studies cast women’s approach as “servant leadership” (Alston, 1999; Brunner, 1999), in which women seek to serve others by being the facilitator of the organization, bringing groups together, motivating students and staff, and connecting with outside groups. In these studies, women “minister” to others in the spirit of the Latin roots of “administer.” For instance, the 10 women superintendents of African descent in Collins’ (2002) study described their jobs as “a mission.” Although not specifically identified as striving for or achieving a social justice mission, the work of Hines (1999) categorizes women administrators as transformative leaders on the Leadership Practices Inventory; Burdick (2004) found that teachers were more likely to rate women principals, as opposed to men, as reform leaders.

The reasons for women’s focus on social justice and change are not thoroughly understood. From a token or under-represented framework, one explanation is that women seek to change the status quo because they are not well treated in a world that privileges white heterosexual men. From a socialization perspective, women’s focus on changing the social order might be related to the messages that females receive early in their development – be good, do good, help others. This early training, along with the expectation that a woman’s life is a helping life, results in women who believe that they are supposed to nurture, speak up for those less fortunate, and work for change. While the career and achievement expectations for females have changed in the past several decades, there still exists an established norm of “caring.” Whatever the explanation for the social justice emphasis, the reality remains that working for social justice – at least in the United States – means working for change.

If social-justice change is the end product for many women, hope, spirituality, and belief in God collectively is the motor that propels many of them to work to change the system. Being spiritual does not necessarily predict interest in social change nor is a social justice advocate required to be spiritual. However, it is the case among women administrators that many women are both focused on social justice and rely on what they describe as a higher power to help them in this fight.

Several studies document an additional dimension that some women add to their social justice, moral, or servant leadership approach. For instance, studies of women principals and superintendents of African descent describe leaders who extend the ministerial aspect of their leadership and include a spiritual dimension (Bloom, 2001; Collins, 2002; Jones, 2003; Logan, 1989; Sanders-Lawson, 2001). Donaldson (2000), Stiernberg (2003), and Millar (2000) noted, as well, the spiritual dimensions of white women administrators.

Both women of color and white women administrators discuss the relationship between spirituality and the ways they model behavior and inspire others. Further, these women acknowledge the importance of their spirituality to their success and ability to push forward, often in conflicting and difficult situations. More relevant to the purposes of this chapter, many women educational administrators report that it

is their spirituality that gives them hope, increasing their resilience so that they can keep working for change.

Simmons and Johnson (2008) in their study of superintendents of African descent in the United States, document themes of hope that ran through the ways these women approached their jobs. Their lives and work were not just directed toward changing the social context in which children grow and learn, their lives – all by themselves – represented change. In other words, the women were the change. As a black woman, becoming a superintendent challenged the status quo and was a disruption to the accepted institutional culture and mission. The combination of being the representation of change and the struggle that it took to make that happen were dual achievements for these women.

One superintendent voiced the motivator that kept her going: “I can’t stop because too many have suffered for me to get here. This door would be shut forever . . . I have tried to make race and gender somebody else’s problem because race and gender is my reality” (p. 234). However, while these women truly became the change they wanted to happen, their positions sometimes constrained them. Knowing that, as black women, they were not likely to get a second chance at the superintendency added urgency to their work. Many felt that had just one chance to use the position to achieve their goals.

I have this huge responsibility to be productive and be a very positive representative of them because they certainly gave more than I’m giving to get me here . . . Those of us who are in these positions, it is imperative that we give it our all and we do everything, just so that they can never say that we didn’t try. Or, that she didn’t work out, so we don’t have to try for another hundred years. I’m totally committed to that. That they will never have a reason not to select another African American female for this position (p. 237).

Relatedly, these women use what Simmons and Johnson refer to as “passionate language” in their leadership. Contrary to admonitions to present a “professional” measured image, these women did not allow themselves to be silenced, instead using passion as a motivator, both for themselves and for those with whom they worked. Simmons and Johnson define passion in language as daily conversations that “vocalized from a deep commitment to justice, and articulated with emotional imagery of tone, diction, and context that conveys one’s convictions for hope.” (p. 239). This language usually serves as an “anti-oppressive gesture” that contests the cultural and political postures typically associated with white paternalistic norms. In these organizations, the change is the way in which language is used to compel “emotion for a cause.” (p. 239)

Further, the case for these women clearly demonstrates their ability to communicate their hope through language – passion, in hope of stimulating others to help act in a manner that moves the organization toward transformation (p. 241).

By using passionate language, these women changed the expectations of institutional behavior. Although when they talked about race or gender, they risked being interpreted negatively, in many cases they up-ended these stereotypes by modeling a

“different” professional language that portrayed them as “skilled in leadership communication . . . appropriately employing emotional appeal in order to gain support for their hopes” (p. 239).

While leading with passion and hope does not necessarily mobilize action, it prevented these women from becoming “paralyzed by their life’s realities and circumstances,” feeding their resilience as they pushed change agendas.

An additional perspective on the social justice and change motivations that drive women is found in the Oplatka and Mimon (2008) study of female principals. These principals identify that improvement and change are necessary for job satisfaction. The administrators in the study go so far as to say that “every educator, whether teacher or principal should be constantly involved in improving the educational service and be on the alert lest their pupils be damaged and stunted” (p. 143). Among these women, satisfaction is seen as a “dangerous negative concept” to be avoided. The female principals in her study believed that job dissatisfaction has positive outcomes. They concluded that if a woman principal is satisfied, she must not be doing a good job.

Relational Power as a Strategy for Accomplishing Change

In as much as power is necessary to change, the literature on women and power – and the types of power that women wield – is relevant. Moreover, studies suggest that women conceptualize power differently and are likely to seek to expand everyone’s power. This approach has considerable impact on organizational behavior and change.

Women school leaders historically have been ambivalent about their own power. Early studies of women’s reactions to questions about power identified unease with stereotypically male notions of power. Formisano (1987), Carnevale (1994), and Smith (1996) in their studies of women assistant principals, principals, assistant superintendents, and superintendents noted women’s discomfort with being described as powerful or as having power. Fennell (2002) reports that women leaders and feminist scholars “have often expressed discomfort with structuralist perspectives of power and sought alternative theories of power” (p. 100). Blackmore (1989) concurs, writing about women who are alienated by the “masculinist portrayal of power, leadership and organizational life which emphasizes control, individualism and hierarchy” (p. 123).

Rather than conclude that women were not powerful, Hartsock (1983), Shakeshaft (1989), Kreisberg (1992), Hurty (1995) and many others began to move to redefine this concept as power with rather than power over. These observations are underscored in a variety of studies which ground power within relationships. Grogan (2000) and Brunner (2000) both identify relational approaches to power in the work of women educational administrators. Women often describe power as something that increases as it is shared. Therefore, it is not surprising that in order for many women to be comfortable with the notion of holding power, power needs

to be conceptualized as something that is shared with others and that is not power over, but rather, power with.

Women's conceptions of power are closely tied to the importance they place on relationships. Power used to help others strengthens relationships, while power used to control damages relationships (Brunner, 2000). Thus, power through relationships is more likely to be how women confront change.

While it is certainly true that some women have legitimate, formal power, many studies also report that women are more likely to turn to other sources of power – such as relational power and even moral power – in promoting change. And, even within a formal power structure, women are less likely to dominate than to relate. Women understand that power requires a relationship or, conversely, that all relationships have a dimension of power.

Many researchers who study women leaders³ see power as multidimensional and multidirectional, where women “encourage empowerment of all organizational members through, the development of communities based on collective values and actions” (Fennell, 2002, p. 100). The power that women are likely to use for change is relational power or power that encourages collective action, involves people at many levels of the organization, and is likely to be transparent.

Fennell (2002) identified several types of power in her study of women principals and change: knowledge power, trusting power, role model power, and respect and responsibility power. Each of these approaches is an example of the multidimensionality of relational power as used by women administrators. For instance, knowledge power is often filtered throughout the change process when women are involved. By that I mean that women are likely to share information at a number of levels, to add to the knowledge base, and to maintain a continuous dialogue to learn more and share more. Taking seriously the adage that “knowledge is power,” many women leaders seek to share knowledge which shares power. Fennell's principals stressed the role of encouraging knowledge development and their support for growth and development of the people with whom they worked. This point has been made in discussions of feminist pedagogy, arguing that they seek to develop learner competency.

Fennell explores trusting power, in which she describes a woman principal who knew that she had to trust others to do the work. This process of letting go and trusting that it will work is a type of power. Women who are able to trust that others will come through, are women who are seen as powerful. These women work to develop open relationships. Kanter (1977) offers a different explanation for this exchange, taking us back to the chicken and egg question: which comes first, relationships that lead to power or power that allows relationships? Kanter argues that those who have opportunity are more likely to delegate power and share knowledge, believing they have nothing to lose and everything to gain in the transaction. Those with no opportunities for advancement cling to what little power they have, hoarding knowledge and trusting no one.

³See for instance, the work of Blackmore, Brunner, Grogan and Sherman.

Role modeling power is a strategy that women often use to “teach” about relational and transparent uses of power, according to Fennell. For many women, the modeling function is a form of leadership in which they engage others in the process. Fennell said this about how the principals used power to make change:

They worked with teachers, students and community members in developing positive learning environments that enabled others in the school to experience power from perspectives of mutual respect, trust, and knowledge. The emphasis each principal placed on “walking the talk” and modeling the collective vision and values of the school provided a foundation of knowledge, mutual respect and trust. In addition to modeling, the six principals consciously used strategies of dialogue to ensure that everyone felt included and “in the know” about happenings within the school and school organization.

She further points out that this dialogue was part of the change, and a changing conception of the principalship. Simmons and Johnson note that the superintendents they studied were always checking for understanding, always making sure that everyone was on the same page, with a body of shared knowledge: “I am always checking for understanding. ‘Did you hear what I said? You tell it back to me’” (p. 233).

Instructional Focus Pushes Change

Similar to learning-focused leadership recommended by Beck and Murphy (1996), a number of studies note that instruction is central to women. Women administrators are likely to introduce and support strong programs in staff development, encourage innovation, and experiment with instructional approaches. Women are likely to stress the importance of instructional competence in teachers and be attentive to task completion in terms of instructional programs. The importance of instruction overlaps with the social justice agenda of many women administrators. Both men and women superintendents believe that women are advantaged by their instructional and interpersonal strengths (Grogan & Brunner, 2005a, 2005b).

By putting instruction and learning at the center of their leadership mission, women are likely to push for instructional change that improves learning. As student populations change and as content requirements shift, instructional change is a constant within schools. The changes that women introduce in their organizations are most often those related to improving learning.

The Influence of Gender on Organizational Change

Not all change comes from the “top.” Where women are involved in change, there is a good chance that women are in informal power positions. In these cases, women are likely to turn to collective action with others to accomplish change (Price & Priest, 1996). Hubbard and Datnow (2000) in their case studies of school change found that when too many women advocated for reform, there was a backlash of negative effects from male teachers, particularly if the males defined the change

as a “female” effort. Women teachers are much more likely to be able to change organization practices at the elementary level, where there are few males, than at the secondary level, where there are many. Hubbard and Datnow argue that school reform efforts are significantly affected by gender identity:

Gender politics contributes to who supports some school reform efforts, who advocates for a reform, whether a reform is adopted, and ultimately, whether a reform is successful. In sum, educational reform can best be understood as the result of a reflexive iteration between the attitudes and actions of educators and policy makers and the institutional practice within the school, each of which is informed by the structural and cultural arrangements that exist in a society where male power is privileged (p. 118).

Datnow (1998) is one of a handful of authors who explores a deep definition of gender in her research. Her study of a change effort in “Central High School” documented the use of sexist remarks as “defensive strategies for their positions on reform” (p. 125). She found that change ideas were attacked along gender lines:

Women teachers were attacked by men for their decisions to take time off for childbearing, for their personal relationships, and for their supposed ability to rely on their husbands’ income. Women at Central even experienced more blatant forms of sexual harassment. Alternately, men teachers were attacked by women for their macho and loud behavior in the faculty room, for their immaturity, and for discriminating against women. Men and women also criticized each other’s motivations and philosophies, frequently by attributing a gender base to these actions and ideologies (p. 125).

Gender is particularly relevant to secondary school reform, where teacher gender is a powerful social organizer. Support for reform by the teachers in the Hubbard and Datnow study was arranged around gender lines: Men were more likely to support academic reform and less likely to back change that asked them to “extend their teaching role from subject specialist to nurturing caretaker of students” (p. 128). Because women’s work is devalued, change that is connected with femaleness, is more likely to be blocked within an organization that has a critical mass of males.

Gender and the Sustainability of Change

Hargreaves and Goodson (2006) note that “Although waves of reform exert the greatest and most immediate pressures on whole systems, it is change of leaders and leadership that most directly and dramatically provoke change in individual schools” (p. 18). The result of constant and poorly implemented succession is that changes are rarely sustained. Hargreaves and Goodson found that most new principals initiated and imposed change rather than “looking back and consolidating existing ones” (p. 19). They argue, as does Wenger (1998), that three types of knowledge are necessary to sustain change: inbound knowledge, insider knowledge, and outbound knowledge.

Because of the conditions that surround the movement of women into the principalship, it is more likely that they will be able to sustain change. Women, like men, bring inbound knowledge, “the knowledge of leadership or a particular school that is needed to change” (p. 19). Three contextual conditions for women principals

result in the probability that they will be more successful at using all three kinds of knowledge than will men: Women move into the principalship with more years of teaching than do men; women, more so than men, are appointed to a principalship in the same school in which they have taught for many years; and women have longer tenure in the principalship within a single school than do men (Shakeshaft et al., 2007). What this means is that women bring inbound knowledge of how the school works and where the stress points exist, and knowledge of strengths. Further, they are likely to have insider knowledge because they are “known, trusted, and accepted” by the school community. Finally, because women stay longer in the principalship, they are likely to see change through ups and downs, providing outbound knowledge. Because women stress internal relationships, there is likely to be substantial distributed leadership and a staff that has embraced the changes and can carry them on.

Summary

Work that examines the full spectrum of gender and its relationship to change is not abundant. Where there is an examination of change and gender, it is most often in relation to women. Within the literature on women’s leadership, at least three components are salient to change: focus on social justice, centrality of relationships, and instructional commitment. Societal gender values inform the success of change, depending on its gender identification and the gender balance in the organization. Finally, women’s career paths as they currently exist, provide more of the necessary factors that sustain change.

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Class, Race, and Educational Achievement

Brenda X. Mejia-Smith and Edmund W. Gordon

The relationship between class, race, and educational achievement has been a focus of considerable research attention and debate concerning educational policy and practice for most of the past century. The literature, however, has generally neglected to discuss how race, class, and educational achievement are intertwined. The related issues have been difficult to untwine and understand because of their embeddedness in the political economy; that is because of the classism and racism that are ubiquitous in the social order and, in part, because the issues themselves require multilevel analyses where unilateral analysis is more customary. In this chapter we focus on the “isms” that have come to be associated with these constructs – classism and racism – and discuss how these forms of oppression are at the root of the problem of providing opportunities for human development and educational achievement.

Among the several social divisions recognized by social scientists, three provide points of relevance in this chapter. When we refer to class, we are talking about social-economic status which typically references one’s level of education, occupation, and social position. Race and ethnicity are frequently used social divisions that have caused considerable disagreement. Race was originally thought to refer to one of three biological groups to which humans were assigned: Negroid, Caucasoid, and Mongoloid. Modern science has called into question the validity and utility of the three categories. Ethnicity is used to refer to smaller groups identified with particular cultures, languages, and national origins. A third division which may overlap with class and race is caste, which refers to a fixed status within a society from which movement is difficult, if not impossible.

Political–Economic Embeddedness

In order to understand educational achievement in the context of class and race, we must examine the embedded political and economic issues. In an advanced capitalist

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economy, as is the economic system in the United States, there are winners and losers. Wealth and income distribution are grossly skewed with wealth extremely concentrated in the hands of a few.

Economists define wealth as a substantial available supply of resources that have been accumulated over a lifetime and can be accessed at any time (Nembhard & Chiteji, 2006). Specifically, wealth is the net worth or the value of one's assets minus liabilities such as real estate and/or credit card debt. Because individuals possess a variety of forms of wealth such as money, stocks, business assets, trusts, jewelry, and real estate, wealth can have considerable implications. Financial security for life, increased political power, and an elite education are examples of the many privileges that accompany the possession of wealth. However, it may not be access, power, and education that are the most important attributes of wealth or the factors that best explain differences between the impact of income and wealth.

Income, on the other hand, while related to wealth, is the money or wages earned from one's occupation, business, investments, or assistance such as disability. Unlike wealth, an individual's income can significantly vary depending on expenses and debt. Consider, for instance, two individuals who have the same occupation and receive the same salary but one person is from a wealthy background. Despite their similar occupations and salary, the wealthier person is more likely to own a home and have savings which means that he or she is better off than the other person who earns the same but has mortgage debt.

Many of us live in a country that perpetuates a structural and systemic economic inequality in which an elite few control the wealth, power, and the resources of the nation while the masses must compete for the remaining scarce resources usually distributed as income. Data on wealth distribution indicate that only 1% of families in the United States hold 33.4% of the nation's net worth (Wolff, 2002). When disaggregated, the data on household net worth show that, on average, White household net worth is \$278,000, whereas the net worth held by Black or Latino household is one-third of that amount (Elmelech, 2006). Clearly, groups that benefit from privileges afforded to them have an interest in maintaining the status quo or may even be unaware of how they benefit from these oppressive structural practices.

More disturbing is the reality that the wealth gap remains wide and it is growing. The disparity in wealth can be traced back to the country's history. That is, Whites have had a head start in accumulating and passing assets down to family members. Given that most of wealth is inherited, White families are more likely to receive inheritances than are Black families (Wolff, 2002). Blacks, for instance, must depend on their personal income and savings to qualify for a home mortgage. Whites, in contrast, are likely to benefit from their parents' wealth by receiving substantial financial assistance when the time comes to buy a home. Also because of their economic affluence, they are more likely to pay lower rates and build more equity over time. Consequently, with each consecutive generation that inherits assets and financial assistance, wealth is systematically kept in their hands. Also, with each consecutive generation, political and social power is maintained while also

increasing the wealth gap in our society. The wealthy have access to political leaders and have an influence on policies that benefit them.

The unequal distribution of wealth inevitably results in differential educational opportunities and outcomes. We know, for example, that children born into wealthy families have many advantages over those who are not born into affluent families (Gordon, Bridglall, & Meroe, 2005; Lareau, 1987; Sexton, 1961; Wolf, 1995). These children begin school with a marked advantage because they have been socialized to participate in intellectual conversations where the exchange of ideas is a part of everyday life. Because they have grown up surrounded by stimulating human and material resources, these children enter school ready to excel. Conley (1999) has found that having wealthy parents has considerable impact among Black and White students' chances for graduating from high school and attending college. Not surprisingly, it is also the children of the wealthy class who are given preference in college applications. These children, for instance, are more likely to enroll in elite universities (e.g. Harvard Law School, Yale School of Medicine) where they receive the credentials that position them to earn six-figure salaries. Furthermore, through a social network, privileged families will protect and secure job positions for their children who are likely to enter similar fields.

Wealth disparities result in groups who are unprivileged and who will have to contend with the destructive impact of poverty. The economically oppressed are more likely to attend segregated schools with unprepared and poorly paid teachers and poorly funded after-school programs. Students in these schools are often deprived of or discouraged from opportunities to cultivate their intellect; others do not graduate because they internalize the negative stereotypes about their abilities (Fine, 1986). The underclass members are likely to inherit their family's poor social class and acquire the skills for manual job occupations (e.g. managers of fast food restaurants). Moreover, the media and other socializing institutions induct the economically oppressed to internalize stereotypes of inferiority that are maintained by oppressive structural practices. It is obvious that the economically oppressed are not only deprived of the financial resources but must also contend with the deprivation of essential human resources such as health and social capital which places populations at risk of educational failure. Some, however, find the strength and determination to defy their predictions of failure. They achieve success against the odds through deliberate and fortuitous orchestrations of many personal, environmental, and situational factors (Gordon & Song, 1994).

Clearly, in a society where income and wealth are unequally distributed, educational opportunities tend to be open or closed in accordance with social class position, with higher social class status having more opportunities available. Those who do not benefit from wealth or privileges afforded by social class, namely African Americans, Latinos, and other communities of color, struggle not only with the realities of a lower income, but also live in under-resourced communities. It is due to policies implemented to sustain patterns of economic inequality, racial residential segregation, and poverty that we find under-resourced and ineffective schools mis-educating our minority students.

Ubiquitous Racial and Class Bias

While the construct of race began as a way to classify humans into groups (e.g. Negroid, Caucasoid, and Mongoloid), its use has shifted in American society. According to Thompson and Carter (1997), race can be defined as a social construction created to benefit the White race and justify the oppression of non-White groups believed to be “inferior in intelligence, physicality, morality and culture” (p. 3). Thus, race is not only used to classify people but also to discriminate against groups. A person’s race often determines how he or she will be treated, where he or she will live, what schools he or she will attend, the health-care services that he or she will be able to receive, and what job and salary he or she will be offered. While there are greater differences within than between groups, race continues to be the main basis for categorizing and oppressing people in the United States.

In his book *Race Matters*, West (1993) cogently writes about the “racist degradation, exploitation, and oppression in America” (p. 25). In particular, he describes how being Black in America means “living in White dominated society,” in which “degraded and oppressed people” are subject to “supremacist abuse” (pp. 18, 25). While we know that race is a social construct, it negatively affects people’s everyday life. Indisputable also is the fact that social class is just as powerful, if not more powerful, than race.

Racism and classism are ubiquitous and manifest in numerous ways in our society. We find evidence in our nation’s schools, neighborhoods, and in the way household income is distributed. In schools, discriminatory policies and practices put minority students at risk of educational failure. In residential neighborhoods, segregation practices put some children at an advantage and others at a disadvantage. Similarly, household income is unequally distributed with racial minorities earning less than Whites.

The Problem of Classism and Racism in Schools

Tracking and standardized testing are ways in which school policies have negatively impacted students of color. Numerous studies have shown that students are often tracked or placed into groups based on their racial and/or economic background with White students placed in high-ability courses and minority students placed in low-ability courses (Oakes, 1995; Oakes, Wells, Jones, & Datnow, 1997). Researchers have argued that tracking is founded in ideologies that perpetuate race and social class privilege. Oakes and her colleagues (1997) contended that tracking is beneficial to White students because they are commonly placed in advanced and honors courses. Thus, White parents are less likely to resist changing current tracking practices because they put their children at an advantage. Conversely, racial and ethnic minority students are sometimes inappropriately placed in special education courses, due to factors such as language and socioeconomic status. (SES) For example, a major problem is the disproportionate representation of male Black and Latino

students in special education and underrepresentation in programs for gifted and talented (Berlak, 2001; Donovan & Cross, 2002). Donovan and Cross (2002) found a high incidence of placing minority students in the mild mental retardation and emotional disturbance categories of special education.

Standardized testing is another school practice that can put many students at a disadvantage. Intelligence tests, in particular, historically have been used to separate and place minority students into special education classes (Terman, 1916). Because they have traditionally been standardized according to White middle-class norms, standardized tests are thought by some to be culturally biased and put minority students at a disadvantage. More recently, the use of “high stakes” testing has raised major concerns. Implemented to raise the standards for all students, they are having the opposite effect, particularly for students of color, because their efficacy is uncertain (Orfield & Kornhaber, 2001). Findings from a study across eighteen states showed that student learning remained the same or deteriorated when high states testing policies were implemented (Amrein & Berliner, 2002). Although much of the discussion of testing and social division has been critical of testing for its alleged antidemocratic influence, it must be remembered that testing was once used to guard against selection bias. In a meritocratic society, if a person can demonstrate his or her ability on an “objective” test, it is more difficult to discriminate against him or her.

Researchers have documented the prevalence of discrimination in our schools. In a study of students’ experiences with forms of discrimination and racism, Donaldson (1996) found that 80% of the students she surveyed had experienced or witnessed racism in the schools. The data indicated that students coped differently with the experiences of racism. White students, for instance, felt embarrassed when they learned about their peer’s experiences with racism. Students of color, on the other hand, experienced a decrease in self-esteem as a result of discriminatory experiences and felt that they needed to work harder to prove that they were equal to their White peers.

One of the manifestations of institutional racism is the overprediction of subsequent performance of low-status students who score high on standardized tests or have a high GPA. When placed in challenging academic situations, however, their scores overpredict their performance. The overprediction phenomenon provides evidence of the assumption that institutional factors interfere with academic productivity of minority students. It is also possible that schools are not doing what they need to do to have these students realize their full potential. Racial and ethnic minority children do not have the benefits of the social networks that are available to elite children. In many ways, they are deprived of the privileges and benefits that many White individuals are afforded. They also have been indoctrinated and socialized within a specific social class and culture that may put them at a disadvantage for successfully navigating the halls of the middle-class schools in the United States.

In addition, some research findings have suggested that teacher expectations are related to race and social class and can lead to discriminatory treatment. Clark (1965) argued that a major factor leading to the academic underachievement of African American students was the fact that their teachers did not expect them to

learn. Other studies on the impact of teacher expectations have shown that teachers tend to react more favorably to higher SES children, to females, to high achievers, to attractive children, to conforming children, as well as to children who do not belong to minority groups (Baron, Tom, & Cooper, 1985; Good, 1981; Proctor, 1984). In their study of high schools around the country, McLaughlin and Talbert (2001) found that teachers tended to lower their expectations of students of color by making their curriculum less challenging. These same teachers tended to blame students for low academic performance, particularly students in the low-track classrooms.

Moreover, Carter (2003) explains that teachers tend to make judgments on students' abilities based on their style of dressing. Baggy pants and backward hats, for example, can be translated to unintelligence simply because they do not conform to the dominant style of dressing or with the behavioral repertoire that teachers stereotypically associate with intelligence. These prejudiced and discriminatory perspectives mean that some groups will be treated with preference while others will be disliked and not accepted.

The Effects of Family Background

Additionally, differences in household income have been implicated in the educational opportunities and academic preparedness to which children are exposed. The data from these studies has shown that family background and class are significant predictors of academic achievement (Coleman, Campbell, Hobson, McPartland, Mood, Weinfield et al., 1966; Gordon & Meroe, 1989; Heath, 1995; Sexton, 1961). In a detailed ethnographic study, for instance, Lareau (2003) revealed how the social class of parents has profound implications for life experiences and outcomes. From discussions to instilling a sense of entitlement and looking adults in the eyes when shaking hands, middle-class parents intentionally raise their children within a cultural repertoire. The findings from her study suggested that middle-class parents engage in practices of "concerted cultivation" of children's talents and skills or what Gordon and Bridglall (2007) refer to as "affirmative development." Working class and poor parents, on the other hand, view children's development as a natural process that unfolds organically. In this process, children experience long periods of leisure time, child play, and clear boundaries between children and adults. Lareau (2003) concluded that while it can be argued that both approaches to raising children have advantages, children raised in middle-class families are likely to have an advantage in institutional settings where middle-class children relate to adults as equals. Clearly, well-resourced families are better able to provide the "supplementary educational" opportunities that have been associated with academic success (Gordon et al., 2005).

Family background is significantly related to providing the social interactions and intellectual stimulation important for school success. For example, the advantages for children of middle and upper middle households have also been associated with Scholastic Assessment Test (SAT) scores. Various researchers have shown that

higher family income in all racial groups translates into higher scores on the SAT (Berlinger, 2006). Because children from economically advantaged homes tend to participate in more supplementary educational activities (e.g. music lessons, art clubs, sports, and other academic activities), they are also better prepared to perform on standard tests such as the SAT (Everson, 2005).

Further, studies have suggested that parent occupations influence important aspects of child-rearing practices. Heath (1995), for instance, suggests that because middle-class parents occupy positions that require ambition, autonomy, and self-control, these parents, in turn, expect their children to be autonomous, motivated, and to have internalized control. Children in these families are permitted to verbalize their opinions, negotiate alternatives, and solicit elaborate answers to their questions. In contrast, working-class parents tend to occupy positions that demand obedience to rules, respect for authority, and dependability. Consequently, these parents socialize their children to conform, adhere to rules, and respect authority. Peters (1981) contends that the socialization practices of the working class may put these children at a disadvantage in schools because they have not experienced the “social capital” that is expected in middle-class contexts. According to Peters, since the majority of schools are operated by middle-class teachers and administrators, the school environment may be more encouraging of children who exhibit similar middle-class behaviors. Children from middle-class families have acquired the social capital that is expected and rewarded in the classroom.

Additionally, Bourdieu (1986) contends that schools represent society unevenly because their standards and practices are charged with the social and cultural experiences of the more affluent classes. Thus, children from higher social classes enter school already familiar with these practices because they have benefited from what Bourdieu (1986, 1996) refers to as “cultural and social capital.” That is, these children and their parents possess the “habitus” or knowledge, beliefs, social etiquette, dispositions, and human resources or networks that facilitate their adjustment in school and academic achievement (Gordon & Bridglall, 2001). In this way, class and class culture can facilitate or impede children’s opportunities for succeeding in school. For their parents, class can also affect how they negotiate the school system and their involvement. For instance, parents’ social class impact their participation in school activities because of the resources needed to comply with teachers requests (Lareau, 1987). Specifically, working-class parents are more likely to have limited educational background compared to the teachers and less-disposable income to provide the necessary supplementary educational activities that teachers recommend. Middle-class parents, by contrast, are likely to have an educational background that either matches or surpasses the teachers’ and the dispensable income to carry out the educational recommendations that teachers make.

Because school norms are also biased in favor of American cultural standards, they create unequal opportunities for learning and exclude many racially and ethnically diverse students. For example, schools in the United States operate under highly individualistic learning and teaching styles. Yet, cooperative teaching strategies have been found to be effective and to enhance the learning opportunities

of students (Slavin, 1995). However, because of the stress on individualism and individuality, children in American culture are socialized from early on to make their own decisions, advance their own opinions, have their own possessions, and view the world from the point of the self (Stewart & Bennett, 1991). For students that come from collective or group-oriented cultures, the individualistic norm can hinder their learning because they have to negotiate a new style of learning.

Classism and racism have a long history in our society and our schools. Unfortunately, many school practices and policies continue to put students of color at an educational disadvantage. The problem is compounded by the fact that many students of color also live in distressed and segregated neighborhoods where resources are lacking. As we have found from the preponderance of research, classism and racism play a central role in students' educational outcomes even though they are only two of a number of reference groups (e.g. religion, ability, sexual orientation etc). A student's race and ethnicity can significantly influence his or her chances of being misclassified and placed in special education. Further, teachers' low expectations for some students due to their class or racial group have also been found to be an obstacle to improving the educational outcomes of some students. Instead, teachers can begin to improve the educational outcomes of students of color by examining their own biases and helping to change the institutional biases that prevent all students from learning.

Lastly, Ogbu (1978) problematized the class and race social divisions even more with his introduction of "caste-like" status. He argued that the unique physical characteristics of some humans lend themselves to the assignment of caste or caste-like status. For example, when race renders one easily identifiable, it becomes caste-like in that it is viewed as a status group from which one cannot move. Blacks in the United States, as in all parts of the world where racism is the mode, may continue to be penalized by their caste-like status as persons of color even when they significantly improve their financial and political positions. In other words, educational, employment, and social opportunities are constrained by their caste-like status. Not surprisingly, Ogbu indicates that this pattern holds for caste-like groups in the United States, Canada, New Zealand, and Japan. In each of these situations, academic achievement is correlated with caste-like group status.

Cultural Identification, Preference, and Experience

We contend that since class and race are such important ways of identifying human beings, school achievement may be influenced by the cultural practices and identities that are associated with the two constructs. Yet ignoring students' cultural styles and identities may result in a cultural clash, causing academic difficulties for some children and youth. For instance, when there is cultural discontinuity between the cultures of poor and ethnic minority students and the culture of schooling, many students are not academically successful (Boykin & Allen, 1992).

Culture has been often treated as a concept encompassing patterns of behavior and customs. Anthropologists have advanced the definition of culture as a set of symbols and meanings. Geertz (1973) defines culture as “historically transmitted pattern of meanings embodied in symbolic form by means of which men communicate, perpetuate and develop their knowledge about and attitudes toward life” (p. 89). Hence, depending on where people are born and what they have learned, cultures have ideals, beliefs, behavioral styles, languages and dialects, nonverbal styles, worldviews, and different ways of interpreting reality.

Culture can also be viewed as having three components: identity, preference, and experience. When we identify with a specific culture, inevitably, we also identify with specific values, behavioral styles, languages, and so on. But, our identity is made up of several reference groups, all of which interact to shape our behavior and the way we view and interpret the world.

Because culture encompasses identity and ethnicity, it has been confused with the construct of race. While there is overlap among the two constructs, race has been used to identify people on the basis of physical characteristics and features, with skin color and physical characteristics as the major markers commonly used to define race. Racial and cultural identification have implications for the way people are treated because of their association to stereotypes.

When we are born, all that we initially learn is out of our control. We learn to speak a specific language or languages, and learn specific behaviors and beliefs. Thus, socialization occurs within a specific cultural and racial context in which behaviors are modeled, shaped, reinforced, and later internalized. Consider a person who identifies as Black, American, male, but also as the only child, and Christian. All of these identities, and others, influence his behavior depending on the context or situation. Nonetheless, these identities imply shared common cultural, historical, and traditional characteristics with members of the same groups. We might even try to predict how a person from the same cultural group is likely to behave because we are likely to use cultural information to describe and identify them. However, we must remember that diversity also exists within racial and ethnic groups. For example, while there are many Black individuals who identify with their African ancestry not everyone identifies with the African Diaspora. Individuals also have preferences with regards to the cultural labels they use to self-identify. For instance, many people prefer to use the term “African American” whereas others find the label insulting and instead use “Black American.” Thus, groups may share cultural experiences but racial identity and preference may vary. Failure to recognize diversity can result in the trap of stereotyping racial groups and thinking that all of its members are alike. Meaningful classification of individuals is made even more complex because individuals are often difficult to identify and may be assigned different races by different individuals. We must also remember that individuals are assigned race according to perception and social purpose.

When discussing culture and identity, it is important to distinguish the difference between cultural experience and cultural identity and understand their relationships to multicultural education. That is, individuals may have cultural experiences that differ from their cultural identity. Increases in intermarriage and mixtures of

people have led to increasing diversity and heterogeneity of many racial and ethnic groups. Identification with groups is an ongoing process and individuals may identify with multiple groups or as multiracial. However, all of these identities are not equally strong. It appears that most persons come to have a dominating identity that is expressed in many situations, despite the fact that identity is often situation-specific. For example, in work situations such as a college setting, two persons may identify as professors, but one as African American male and the other as Black male.

Educators cannot ignore that most students come to school with primary ethnic and race identification(s) that may be either conscious or unconscious. Differences in communication styles, language, and worldview are present when today's diverse students enter American classrooms. Consequently, teachers are faced with the task of creating equal learning opportunities for all students in schools that continue to be monocultural.

Proponents of multicultural education propose that schools should affirm the cultural pluralism and diversity of all students in order to foster their development to fullest potential. In addition, Banks (1988, 2001) states that schools ought to help students to develop a "global identification" so that they can become effective world citizens. As effective citizens of the world, people are able to exercise multiple identities and to accommodate multiple perspectives without challenge or threat to one's primary identity. After all, we live in an interdependent global society that demands global competence including awareness of different cultures, knowledge of different languages, and the ability to work in international contexts. These demands require new skills and new approaches to the way we educate and prepare students.

The Need for Multilevel Analysis

We can see that the relationship between race, class, and educational achievement is complex and understanding such complexity requires different levels of analysis. We propose that such analysis may be associated with such characteristic as ethnicity, class, and caste; or it may also be directed at group and individual differences. A frequently encountered source of confusion arises when attention is called to individual variation in the context of group variation. Despite the tendency to think of the characteristics of groups of persons, the research literature is rich with references to individuals whose characteristics differ from those thought to be typical of the group. Thus it is with respect to race and social class that Gordon (1992) has asserted that the differences between these two categories of human beings are smaller than the differences within either of the groups with respect to specific variables. Further complexity is encountered in levels of analyses specific to a single group. For example, an ethnic analysis is likely to have some similarities with an analysis of class. However, because of the pervasive effects of racism, there are ethnic effects that are not captured by an analysis of social class.

In another instance, Ogbu (1978) reminds us that the persistent effect of caste status renders the impact of caste more deleterious than is the impact of class. Because social class is impacted by income, level of education, and conditions of life, in most societies there is room for mobility between classes. Conversely, in a caste system restrictions maintain members of a society in separate social divisions. It is only in recent years that lower-caste members have experienced any opportunity for social movement; but even this recent movement has been limited.

Race Analysis

The first level of analysis we propose is the relationship between ethnicity and race. In the United States, analysis of race is primarily an analysis based on skin color and other physiognomic indicators associated with race. It is interesting that there is a long tradition in demographic research of identification of people by race. However, since there are few reliable biological criteria, other than these, to base such classifications, the assignment of an individual to a group or to a racial category is typically based on obvious social designation or personal choice. In the so-called scientific research on race, this is obviously problematic. If the assumption is that there is something in the biology of persons that defines race, then what one thinks is irrelevant. In the sociological research, if psychological effects are the dependent variable of concern, then what I think I am and what other thinks I am is of crucial importance. Yet, such distinctions are usually not made in the voluminous research on race.

Additionally, the literature does not report consistent findings with respect to the relationship between race and the impact of social intervention. There is no question that extant research supports the conclusion that as the degree of melanin or darkness of skin increases, indicators of social pathology, such as illness, school failure, unemployment, and social disorganization increase. There have been some suggestions that these negative indicators can be associated with the high correlation between ethnicity and social class status as reflected in the higher proportion of people of color who also live in poverty. However, research in school achievement indicates that when academic productivity and economic status are controlled, we continue to find lower levels of productivity among lower-status groups. Miller (1995), for instance, reports that SAT scores for Black children whose parents have earned a college degree is at about the same level of the children of White parents who have earned a high school diploma. Even more problematic is the fact that as one goes up the ladder with respect to both economic status and academic achievement, the achievement gap increases. Yet, one would intuitively expect that with higher access to resources the gap would close. So what is left to conclude is that there is something about specific ethnic or racial status that operates to depress academic achievement.

In an effort to explain these paradoxical findings, several phenomena have been identified. At one level, attention has been given to the probability that some of the cultural practices in the lower-status groups are dysfunctional to the adaptation

to academic environments. Bourdieu (1996), for instance, argues that the “habitus” learned from one’s social class, namely cultural capital, gets transferred from one generation to another. Low-status groups or racial and ethnic minorities bring one type of socially determined habitus to school resulting from fewer resources. Often, their level of achievement is a result of their prevailing lack of access to resources and opportunities. Yet, they are expected to strive in schools where the habitus of the upper classes are favored.

At another level, attention has been called to the fact that efforts at equating social economic status are fallacious in that racism imposes a depressing influence on both societal behavior and usages of financial resources. For example, money plus Blackness afford some privilege but not enough to equate the social opportunities of such financially secured Blacks with those of financially secured Whites. Even money by itself does not buy equity in an economy where prices and even the opportunities to spend money can be distorted by racist attitudes and practices.

Still other explanations use differentials in health status and health care that are related to race. Birch and Gussow (1970) documented the negative impact of race on health maintenance and nutritional status. This study is somewhat dated; however, the findings are still true three decades later. Children who are better nourished not only perform better intellectually but are also less likely to display behavioral, emotional, and academic problems in school (Centers for Disease Control, 1996). Yet, recent findings from the Institute of Medicine’s Report (2003), *Confronting Ethnic and Racial Disparities in Health Care*, showed that health-care access is unevenly distributed across populations with ethnic and racial minorities experiencing the greatest barriers to health care. Children of color and poor children living in rural areas not only have lower access to routine health care but are also more likely to receive lower quality of care. Yet, it is children born into poverty (e.g. children of color) who are in most need of health care and health insurance. We know, for instance, that high exposure to lead among poor children has an irreversible impact on cognitive development and health (Canfield, Henderson, Cory-Slechta, Cox, Jusko, & Lanphear, 2003) and having health care can significantly decrease health disparities, even the likelihood of premature death (Muennig, Franks, & Gold, 2005).

Some investigators report specific factors in the physiology of people of African descent that are associated with chronic illness. Early in the twentieth century, Pasamanick and Knobloch (1958) reported a higher incidence of premature births and the associated increase in mild neurological insults in Black babies in Baltimore, Maryland. Clearly, there are both biological and social factors associated with the developmental challenges faced by people of color.

Social Class Analysis

Much of the negative impact of race on developmental well-being referenced on the previous section can possibly be explained by the overlap between racial category and income categories. Quite apart from the negative impact of race and

ethnicity or some developmental characteristics, abundant research findings reflect the deleterious effect of low income and poverty on human developmental well-being. Coleman and his colleagues (1966), Jaynes and Williams (1989), Pliven and Cloward (1993), and Sexton (1961) all described the high association between family income and school achievement. In their report, *Equality of Educational Opportunity*, Coleman et al., established the powerful influence of family characteristics (including SES) and school achievement. Later, Birch, and Gussow (1970) reported corroborating findings with respect to the correlations between poverty and academic development.

In a limited number of studies Furestein (1980), Mercer (1973), and Wolf (1966, 1995) suggested that the behavior of parents and other adults in economically under-resourced families have the potential to reverse the negative impact of low income. But the extant research overwhelmingly supports the relationship between poverty and resource deprivation and school achievement. There is some speculation that reported intergenerational gain in intelligence test scores and the obvious changes over time in levels of school attainment are reflections of the capacity for improved access to better conditions of life to change the character and quality of human performance. Both of these outcomes are associated with the improved condition of life that we have seen with industrialization and movement of peoples from rural to urban areas. There appears to be, then, considerable evidence that access to resources as reflected in level of income is a positive factor in the facilitation of human development.

Conclusion

In an earlier period, we talked about groups that were incorrectly called “culturally deprived.” Today, we recognize that such theories were pejorative and founded on racist overtones. Obviously, no humans are devoid of culture. Gordon and Thomas (1991) have written about the differences between cultural practices that are appropriate to the achievement of certain ends (e.g. academic achievement) and cultural behaviors that are dysfunctional to that goal. In advanced technological societies, certain human capacities are essential for meaningful adaptation. If the cultural practice is counter-productive to the achievement of such capacity, it is obvious that intervention is needed to change opportunities for the mastery-targeted competence.

In a period of heightened respect for indigenous cultures, the challenge is to provide opportunities for the mastery of an essential competence without demeaning aspects of competence in the indigenous culture. If the concern is for the humane recognition and adaptation of biological characteristics and functions that limit persons from specific groups, Rawls’s (1973) *Theory of Justice* provides a lead. Rawls argues that resources and opportunities of a society in a democracy may be unequally distributed to favor the least advantaged members of society. Where there are such conditions and circumstances that challenge specific groups of the population in ways that are not common to the total group and therefore accommodated for, the society has a responsibility to provide correction or compensation for these

especially challenging factors faced by the least advantaged. After all, if *all* students are to, one day, have an equal opportunity to academically succeed, we must all work to create social change and defend social justice.

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Blindness to Change Within Processes of Spectacular Change? What Do Educational Researchers Learn from Classroom Studies?

Kirsti Klette

The object of this chapter is to address the problem of change within studies of educational change – or more precisely to address the way certain changes are denied or neglected in studies of educational change.

Despite recurring reform efforts and pressure for change in schools and classrooms over the last decades, researchers tend to describe contemporary teaching and schooling in terms of stability and status quo. A vast research literature tell us how huge reform efforts in education aimed at changing teaching and learning designs, teacher–student interaction(s) and teaching materials tend to be swept away and diminish into a well-documented pattern of interaction and instructional format, framed throughout the aphorism “the persistence of recitation” (Hoetker & Ahlbrand, 1969). Status quo in schools is often outlined as a problem and challenge for the schools and their professionals. This inertia is often attributed to elements at a local level: to schools and teachers, to the pupils and their parents. In this contribution I will discuss this as a problem – and a challenge – for researchers and policy makers. How do researchers (and policy makers) continue to reproduce schools, teaching and learning in terms of status quo? Existing literature tells us that irrespective of the huge amount of efforts invested in reforming education, teachers, students and parents continue to reproduce a rather stable and familiar pattern of interaction and repertoires in schools and classrooms which could be summed up by the catch phrase “Classroom business as usual”. This might of course be an empirical fact pointing to institutional forces that keep everything in place. Established patterns of activities, subject matter and patterns of communication and interactions – the so-called “grammar of schooling” (Tyack & Tobin, 1994) – are so strong that they go through with their regime – despite all sorts of reform efforts. But it might also reflect a blindness in the “eye of the beholder”; that is the ability of educational researchers to grasp, analyse, document and envision elements of change within schooling studied as a scientific practice.

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The epistemologist Wallerstein (1991) has been occupied with the denial of change within social sciences, which he links to the absence of critical examinations and analyses of concepts, theories and methodological practices within the social sciences. Wallerstein states, for example, that concepts, theories and analytical framework developed throughout the nineteenth century no longer are adequate for defining and describing political and social changes, movements and activities in today's rapidly changing society. As a consequence social sciences are locked up with "... the denial of change in theories of change" (Wallerstein, 1991). The American educationalist Tom Popkewitz makes similar arguments when he claims that policy studies in education (and he actually uses Norway as an example) tend to reproduce their own common sense understanding because analytical concepts, categories and practices are not critically examined and analysed. This has as one of its consequences the "denial of change within educational change" and where the "knowledge system of policy and research denies change in the process of change" (Popkewitz, 2000, p. 25).

From a very different position in social theory, researchers influenced by actor network theorists claim that boundaries between reforms and their context are continuously subject to negotiation. Contrary to many social scientists who define reforms and policies as "prime mover" or "cause" in a linear relationship, actor network theorists underscore how reforms and contexts *mutually* constitute one another, and how their definitions and understanding shift as they expand through spatial and temporal contexts (Nespor, 2002, p. 365). They argue that contextual elements are part of reforms rather than constraining and supporting variables. Actor network theory is a relational and process-oriented sociology that treats agents, organisations and devices as interactive elements (both causes and effects (Law, 1992)). It is a relational material theory interesting in network *ordering* mechanisms, that is how agents, structures, machines and other artefacts stabilise and reproduce themselves. There are no privileged elements within mechanism of ordering within actor network theory (i.e. structure versus agents) and subsequently "social structure is better treated as a verb than as a noun" (Law, 1992, p. 389). In actor network theory there are many possible modes of ordering, not just one. Paraphrasing one of the strong spokesmen for actor network theory we could argue that educational reforms are "relational contingencies" (Law, 2002, p. 92) and how they grow up (or fade out/decline), and how the relations that produce them stabilise themselves, is primarily an empirical matter.

Larry Cuban introduces the concept of *hybrid* as an analytical tool for studying reform efforts in education. Instead of analysing the fate (success) of the reforms by giving privileged positions to certain anticipated modes of ordering, he argues for an approach that includes studying both how the reforms contribute to order the schools and how the schools order the reforms. Together with his colleague David Tyack, Cuban (1995, p. 64) consequently argues for how reforms should be deliberately designed to be hybridised, to be able to fit a variety of modes of orderings.

In this contribution I will address the denial of change within educational change. Inspired by the above assertions I will discuss the tendency towards what I will describe as "blindness to change within spectacular processes of change". Certain

types of changes are left out of the final accounts. I will engage in this analytical venture by focusing on three distinctive, but closely linked, factors relevant for how we – as educational analysts – frame, approach *and* neglect change in the process of change:

- theoretical and analytical assumptions underlying the different studies;
- types of data and methodological practices that establish the bases for analyses and conclusions;
- conceptual and analytical framework for analysing the situation.

In my analyses I will draw on empirical studies from schools and classrooms in Norway, Sweden and UK to exemplify and illustrate the “denial of change within educational change”. I will lean especially on later classroom studies from elementary and lower secondary schools in Norway. These studies were conducted during a period of large reform efforts in Norway. In the 1990s Norway – as many other Western countries – experienced educational restructuring in education implying new ways of funding and steering the educational sector as well as new professional roles for educational stakeholders (Klette, 2002). A new national curriculum was introduced in 1997 and subsequently in 2006, putting new professional demands on the teachers as well as requiring new forms of classroom practices. The comprehensive school system was extended from 9 to 10 years of schooling during this period, and a quality assessment system based on a combination of performance indicators and the schools’ self-evaluation was introduced (Carlgren & Klette, 2008).

Along with the reform efforts in Norway a large research program was initiated. The Reform 97 Evaluation program tried to grasp some of the effects and impact the reform had on the daily practices of teachers and students in schools. For the first time in Norway, we got an extensive documentation of instructional practices across subjects, sites and classrooms. In my recurrent discussion on educational change I will draw on examples from this rich toolkit of educational practices in combination with other and related studies. I will in particular use instructional practices and repertoires in classrooms and schools as a unit for analysing dimensions of change processes. Practices at classroom level draw together educational policies at the place where they are supposed to operate. The heart of improvement and reform efforts lies in changing teaching and learning practices at the classroom level. Classrooms and their different practices further shed light on how different events, sequences, settings and processes are not neatly and exclusively situated, but are “. . . entangled in multiple, and alternative scale constructions” (Nespor, 2002, p. 313). If we distinguish between micro, meso and macro as three level of timescales for analysing teaching and learning in schools and classrooms, actions taking place at for example micro level (i.e. teacher–student talk), will provide a rich basis for interpretations compared to their representation at a meso and macro level. Jay Lemke (1990, 2000) demonstrates how different levels of scales are candidates for possible interpretations, and where activities, actions and themes take on specific meanings depending on the contexts imposed by different scales. Scales demarcate the sites of a social contest. One of the problems in analyses of educational change is, as I will

argue, the tendency to give privilege to some scales, often the macro scale level, even though no rationale is provided for these analytical preferences.

The Problem of Status Quo in Education

Why does educational research tend to arrive at status quo as a way of describing how reform efforts interplay with educational practices?

A vast research literature seems to sum up the relation between policy (such as educational reforms) and practice (in terms of school practices) as the following research titles suggest:

- The persistence of recitation (Hoetker & Ahlbrand, 1969);
- The more you change, the more it will remain the same (Sarason, 1982);
- Teaching practice: Plus que ça change (Cohen, 1988);
- Reforming again, again and again (Cuban, 1990);
- The grammar of schooling (Tyack & Tobin, 1994);
- The predictable failure of educational change (Sarason, 1991);
- No news on the reform front (Monsen, 1998).

Decades with reforms in curriculum and associated school practices (i.e. such as instructional practices and engagement, patterns of interaction and subject matter involved learning tools and artefacts) showed again and again that the intended changes did not materialise. Research on the impact of the new policies and programs supports this impression even further (Goodlad, 1984; Monsen, 1998; Pollard, Broadfoot, Croll, Osborn, & Abbott, 1994). In a more recent article summarising the existing knowledge on curricula implementation in schools and classrooms, Hopmann (2003, p. 127) claims,

- Most teachers reported that the curriculum guidelines had no or little impact on their lesson planning, teaching, their students' involvement, student achievement, etc.
- The format, size, level of detail, etc. of the guidelines had no or very little impact on how students and teachers cope.
- Higher stakes, added content, etc. led to almost nothing, or rather the opposite.
- The main effect of the external process evaluation tools seemed to be legitimisation and the distribution of new arguments around the curriculum, but neither innovation nor quality enhancement.

The impact of educational reforms, i.e. such as how curricular reforms have impact on educational practices at the classroom level, points to a complicated and multifaceted discussion that I will not go deeply into here. David Cohen, Deborah Ball and their colleagues have for example underpinned how

[S]chools and teachers simply cannot meet the expectations of the center (reforms), because they do not have the fiscal and human resources that are required, teachers do not have the skills that are asked of them, and/or they are not given the training and education required to develop those skills (Cohen, Raudenbusch & Ball, 2002).

In this contribution I will take a slightly different perspective on how educational and curricular reforms have an impact on educational practices in schools and classrooms, and discuss the lack of change – or the denial of change to quote Tom Popkewitz – as a function of the way educational researchers frame their studies and the methodological tools used.

This I will do by getting more deeply into three different – but slightly interrelated – arguments:

- (i) Theoretical perspectives underlying the different studies (reform fidelity vs. reform hybrids/looking for large-scale change)
- (ii) Methodological tools and types of data that establish the bases of analyses and conclusions
- (iii) Analytical framework and established concepts for analyses.

But first I will give a brief description of how educational literature describes educational practices in classrooms.

Classroom Business as Usual? An Overview

What defines/constitutes educational practices in the classrooms? According to a vast research literature there are some routinised patterns of schooling and teaching that seem to continue to define interaction, roles and repertoires in classrooms – the so called “grammar of schooling” (Tyack & Tobin, 1994). The “grammar of schooling” could be linked to the following two features:

The persistence of plenary teaching – plenary teaching dominates. Despite numerous reforms efforts trying to transform classrooms into spaces for enquires, investigations and sites of unfolding learning processes based on the pupils’ individual needs and interests, teachers continue to design and redesign classrooms as sites for recitation¹ and plenary teaching.

Classroom talk – regulated, dominated, evaluated and monitored by the teacher. Teachers dominate, regulate, define and evaluate all communication and activities in the classroom. This communication can be described by the rule of the 2/3, which means that for approximately 75% of the time, teachers talk, regulate and monitor all official classroom conversation. The dominant pattern of interaction follows a predefined IRF(E) pattern of communication where the teacher poses a question or initiative (I) followed by a student’s response (R) for then being followed up

¹The term *recitation* here should be treated as an algorithm rather than a literate expression of what is going on in classrooms.

(F) or evaluated (E) by the teacher. These IRF(E) patterns of communication point to prevalence across different studies and periods (Bellack, Kliebard, Hyman, & Smith, 1966; Cazden, 1988; Dysthe, 1995; Edwards & Mercer, 1987). The pupils are left with small possibilities for participation and influence within these patterns of communication according to the researchers.

If we examine the impact of reform and curriculum innovations in schools and classrooms, the picture becomes even grimmer, or as stated earlier, from different studies, teachers' report that the curriculum guidelines had little or only limited impact on their lesson planning, teaching repertoires, their students' involvement, etc. The bottom line could be summed up by one the titles quoted earlier: "Reforming Again, Again and Again" or "The Predictable Failure of Educational Change".

The different studies identify different mechanisms for explaining this situation such as:

- School structure and school organisation;
- Epistemological traditions of schooling and teaching;
- Teachers' and students' competences and repertoires;
- Power relations;
- Schools as certificates for social reproduction.

I will not go deep into the different explanations here. My point is that in spite of reform efforts during different periods, researchers continue to report that principal modes of instruction (lecturing, recitation, demonstration, seat work) continue to dominate despite the increasing range of options that is being constructed.

In my further argumentation I will penetrate these findings and conclusions by carefully examining how our theoretical, conceptual and methodological framework might lead us to scrutiny of conservatism and status quo.

Theoretical Assumptions Underlying the Different Studies

As acknowledged in the introduction there has been a strong tendency to separate innovations from their contexts. Many discussions on school change focus subsequently on the intention and kernels of the reform such as principles, organisational forms, knowledge organisation, instructional formats, etc. Reform intentions and reform kernels are studied from one standpoint – that of the authors, facilitators or the researcher(s) studying the reform. The success of the reform, in this view, is verified/ascertained by the "... kernel's subsequent encounters with spatially and temporally discrete 'contexts'" (Nespor, 2002, p. 365). Structural conditions, implementation tools and legitimacy processes are in this approach recognised respectively as facilitators and constraints of the reform. In the field of education a fidelity to the kernel of the innovation (a structural–instrumental tradition – a fidelity

approach – if you like) persists. Within a structural/instrumental approach to educational change, the focus is shifted from the strategic apex to rational and cognitive structures surrounding the reform, and tools and implementation processes facilitating and supporting the reform: Who was involved in the process, central means and resources surrounding the innovation, types of implementation processes, etc. Stephen Ball's policy cycle model (1994, p. 26–28) and Lidensjö and Lundgren's (2000) distinction between the level of policy formulation versus the level of policy realisation can stand out as two distinguishing examples of this tradition within research on educational reforms and their impact at local levels.

This way of thinking about reforms makes it difficult, however, to ask and understand how reforms and contexts mutually constitute each other and how contextual elements are a part of the reform process rather than constraints and supports for them. Instead of treating contextual elements as barriers (or supports) of the reforms, contexts define, negotiate and materialise the reforms across spaces and spheres, sites and settings. In a contextual approach (cultural–institutional approach, if you like), the focus is neither on the programmatic or the intentional part of the reform nor on how the institutions neglect and counteract the reform efforts, but rather on how institutions and agents selectively negotiate, ignore, redesign and adapt to the reform. As emphasised earlier, a contextual approach (i.e. cultural–institutional approach) gives no preference to one privileged order or one privileged practice but is concerned with how different reforms efforts interact and are negotiated at different levels. Since the world, and the contexts of reforms, might produce a diversity of effects, their mechanisms of orderings do not come in “big epistemic blocks” (Law, 2002, p. 92). Consequently, rather than be interested in how the reforms change the schools, analysts should be interested in how the schools change the reforms.

Let me illustrate with the following example:

Project work and cross-disciplinary work have been introduced and reintroduced as favourable ways of classroom instruction over the last century. In Norway cross-disciplinary teaching and learning has been an element in all national curricula reforms since the 1970s. With the reform 1997 curriculum, though, project work became an obligatory part of teachers' repertoires in classrooms. In their evaluation of project-organised ways of working in Norwegian classrooms, the scholars Rønning and Solstad (2004) reported that teachers and student struggled with implementing cross-disciplinary (i.e. project work and topic work) ways of working. They portrayed how the teachers felt unconfident and anxious in how to understand, define, implement and assess project work (2004, pp. 33–34). They further emphasised how existing repertoires and dispositions among the students (and teachers) were hindrances and barriers to the possible fulfilments of project work as a learning device (p. 44). Contrary to seeing curriculum plans as devices to be negotiated, renegotiated and acted upon, they concluded that the teachers became trapped within traditional teaching methods versus cross-disciplinary ways of working:

Manglende disiplin og manglende modenhet medfører i følge lærerne at elever mislykkes. (...) Skolen har altså ikke noen klar plan og progresjon for arbeidet, og lærerne finner seg ofte i en situasjon der de opplever at de gir elevene frie, åpne oppgaver som eleven ikke har

de nødvendige forutsetninger for å kunne beherske. Resultatet blir my uro og en følelse av at verdifull tid kastes bort (*To be translated*).

Cuban (1993) is among the spokesmen for the value of contextual definitions of reform effectiveness on schools and teaching and learning. Rather than looking for what he describes as a fidelity and efficiency approach to the impact of reforms, he advocates perspectives that reverse the causal chains of mainstream research – by allowing schools to change reforms. He introduces popularity perspectives and diffusion perspectives as alternate criteria for evaluating the impact of the reform. Such perspectives enable us to describe how educational practitioners reconstruct innovations at the operative level – that is, in classroom instruction, Cuban argues. Cuban finds it useful viewing reform plans “. . . not as clearly mandated policies but as concepts to be evaluated on their practical effects, positive or negative, and then reframed accordingly” (Cuban, 2002). Together with his colleague Tyack (1995, p. 64), he claims that reforms should be deliberately designed to be hybridised, to be able to fit local circumstances.

In his overview on how reforms impact teachers, instruction and learning (based on American experiences), Cuban (2002) states that over time teachers ignore, combine and adapt different reform strategies. Educational reforms do affect educational practices if they

- are built on and reflect teachers’ expertise;
- acknowledge the realities of the school as a workplace;
- accept the wisdom of those teacher adaptations that improve the intended policy.

Let me illustrate his point with an example from the Reform 97 evaluation program in Norway. One of the projects identifying a fairly high degree of reform success in relation to the new national curriculum reform is within writing skills in language arts in lower secondary school in Norway. Contrary to other findings on students’ performance among Norwegian youngsters (see for example PISA, 2000, 2003), Evensen and his co-scholars (2004, 2005) describe writing skills among 16 years students as robust, vital and fairly good.

The scholars base their analyses on depth analyses of National examination tests in written language arts. Evensen & Wagle (2004) describe writing skills in lower secondary schools in Norway in terms of vitality and pluralism and with a high correlation between the criteria for how the students design their texts and the criteria external evaluators use in reviewing the same texts. They link this correlation in vitality and standards to the way the students write their texts (the use of textual approaches, textual tools, etc.) as well as established norms for good writing among the evaluators. Textual pluralism, trust and confidence impregnate both the students’ way of writing and the established norms for good writing within the evaluators’ corpus, tied to established norms in process writing. Evensen et al. emphasise how this situation reflects *sensus communis* in first language writing skills between literacy teachers’ established norms for good writing in upper secondary classes, the way the national curriculum defines textual competence *and* established instructional

practices in language arts classrooms. Process writing has become a national standard for good writing, recognised by teachers, students, evaluators and curriculum designers. Process writing has been spread and made popular through a systematic and deliberate use of developmental teachers' pioneer work in this respect (supported with robust tools and recipes) and is today recognised as the good way of writing among professionals, students and national evaluators as well as within curriculum texts. Process writing is a vivid illustration of an innovation designed for being hybridised, able to fit multiple local circumstances. Process writing as an innovation further recognises and acknowledges the variability of contexts and hosts for producing possible effects. The innovation is designed for being able to fit this variability of contextual circumstances. Instructional devices in process writing (tools, recipes and instructional formats) are designed for local adaptation and multiple contingencies. Its success is not relying on one "epistemic block" or one privileged topos of change.

Methodological Tools – How Methodological Tools Interplay with Conclusions

Another way to understand the denial of change within educational change is linked to methods of measurements and design used in the different studies.

If we look to recent studies of teaching and learning – and especially the studies identifying some aspects or traces of change – they are rely on some sort of *in-depth studies* and *how data* (see for example Alexander, 2000; Klette, 2004; Pollard et al. 1994; Sahlström, 1999).

If we use the Norwegian Reform 97 evaluation as an example, the studies identifying new forms of practices are all based on some sort of qualitative data or a combination of survey data and qualitative data. To put it another way, studies leaning solely on survey information tend to be valid at mapping educational routines in terms of the *what* aspect, but seem to be less able to identify ongoing changes, emergent patterns and especially changes related to the *how* aspect. Survey studies enable us to see patterns of distribution and variation across groups, individuals and contexts on a large scale. Survey studies are however less valid when identifying substantial and detailed variances. Perhaps ongoing changes in educational practices are related to substantial rather than structural elements and are better envisaged by *in depth* and *how* related data.

I do not mean to mandate a specific methodological program – in terms of advocating ethnographic methods or discourse analysis – by putting emphasis on this argument. What I do want to address is how our methodological tools define the universe of conclusions that we select. Paraphrasing Lemke's (2000) notion of scales, methodologies tend to privilege some level of change (like time and space) in favour of others (like matter and information transfer). As a consequence, methodological designs and accompanying indicators often tend to reproduce their own "common sense" within the existing knowledge systems of research.

Let me again illustrate with an example. Although frontal teaching and teacher-centred instructions – and especially the IRF pattern – still define central aspects of classroom interaction in Norwegian classrooms, these patterns of interaction are differently played out today than those identified by Mehan (1979), Cazden (1988) and Dysthe (1995) and other well-recommended studies. One of the big differences in the teacher–student interaction of today, compared to earlier studies, is the role of the students and their possibility for participation and contribution. In that sense the IRF patterns in Norwegian classrooms of today are much more “student centred” in terms of the students’ possibilities for initiation, negotiation and involvement. *What data* then might bring you to the wrong conclusions concerning classroom interaction in this respect. The persistence of an activity over time does not mean that we are describing identical phenomena. If we use *how data* we see that teacher-centred questions – recitation patterns of today to paraphrase Hoetker and Ahlbrand – give much more room for student participation and student latitude. Question–answer sequences of today further allow the students the possibility of exposing questions and their misunderstandings (and misconceptions) without the sense of authoritarian regulations and repression from the teacher described in earlier studies.

The following example from a recitation sequence in a math classroom at the ninth grade can illustrate:

The teacher uses the blackboard to give instruction in geometry – (the class is working on Pythagoras). He draws several triangles on the blackboard – and where they are given information about one angle and one side of the triangle. “What can we know on the bases of this information?” the teacher asks the class. One of the students offers an answer that is obviously not correct, and where to the teacher responds (totally without irony): “I am so glad you produced this response Peter, because it demonstrates for us what we actually do *not* know”. He uses this opportunity to unveil unsolved mathematical problems within this area of geometry (...). The teacher then continues to write on the blackboard guided by the students’ responses and suggestions and asks: “Who is able to solve this problem; and this one?” Based on the students’ initiatives, questions and suggestions, the teacher and the students allocate probable solutions together on the blackboard. The teacher is open and sensitive to the students’ suggestions, encouraging them with comments and questions like “That’s an interesting proposal – why do you think that is a good solution?” He supplementary challenges the other students to come up with adjoining or competing proposals (Klette, 2003, p. 62).

From a structural activity point of view, the above quotation points to a very familiar pattern of classroom interaction which could be described within the frames of teacher-centred instruction and an IRF(E) patterns of interaction. A closer look shows that despite structural familiarity with established forms of classroom interaction, students of today are encouraged to suggest possible solutions and expose their preferred alternatives regardless of whether the proposed solution is wrong or not. The teacher actively embraces Peter’s proposed wrong response because it gives him – as a teacher – the possibility to demarcate the boundaries for existing knowledge within this area of geometry. The quotation further highlights how whole-class instruction, carefully supported with the teachers’ use of question–answer sequences and IRF patterns of interaction, provides scaffolding structures that enables collective problem solving within the frames of whole-class instruction. Drawing on

comparative classroom studies from Asia, Europe and North America, Alexander (2000) puts emphasis on the teachers' deliberate and systemic *use* of different learning activities rather than the activity in itself, as decisive for determining the quality of a teaching-learning sequence. The above quotation suggests extended possibilities for learning *beyond* the recognised conceptual activity (i.e. teacher-centred instruction) and pattern of interaction (i.e. IRF pattern). Teacher-initiated recitation patterns of today convey learning opportunities and patterns of dialogic interaction (both between teacher–student and student–student) not recognised in the existing structural and conceptual research design.

The above quotations illustrate that it is not sufficient to only register the *what* aspects of an activity. Substantial *how*-related data are required in addition. The persistence of an activity across studies and periods might lead us to the conclusion that we are describing the same phenomenon. Behavioural frequencies of an activity without more contextual and substantial descriptions of the same activity might mislead us however to believe that we are describing identical phenomenon. Quantitative registrations of teacher-centred instruction in today's classroom do not assume that we are automatically dealing with the same instructional formats as described earlier. Qualitative in-depth investigations reveal, for example, that classroom interactions of today embrace more dialogic and interactive patterns of interaction than identified in earlier studies.

Analytical and Conceptual Language Underlying the Different Studies

A third pathway to understanding “the denial of change within educational change” can be linked to the established analytical and conceptual language available for analysing teaching and learning in educational practices. Within the field of education we have many concepts established for analysing educational practices such as:

- teacher centred vs. student centred;
- traditional vs. progressive;
- mimetic vs. transformative;
- monological vs. dialogical;
- process vs. content;
- control vs. autonomy.

All these concepts and analytical frameworks are developed within the epistemologies of the early versions of social sciences and are more or less adequate and sensitive for describing social life in classrooms today. The dichotomised language, moreover, puts emphasis on *either* teacher centred *or* student centred, or *either* subject centred *or* pupil centred, with little latitude for blurred and transcending ordering mechanisms and effects. A polarised conceptual framework additionally

has the tendency to force the analysts to conclude in terms of either stability and status quo or change and renegotiated practices, regardless of nuanced and mixed descriptions available at hand.

Existing conceptual frameworks in education (and other social sciences) have the tendency to privilege some scale(s) and criteria in relation to all others without making their own criteria and scales for evaluating the degree of change explicit. Consequently some scales (often human scales) are seen as favourable (although implicit), with weak recognition of alternative topologies of change.

Let me once again illustrate with data from the Norwegian curriculum evaluation program. If we look into the qualitative and quantitative data that were collected in Norwegian classrooms after the new Curriculum Reform, hybrid forms of educational practices that cut across established dualistic conceptual descriptions for life in classrooms are prevalent. If we use teachers' style as an example, our teachers combine and merge aspects of teacher-centred methods with student-centred methods in a rich, nuanced and vigorous way. Likewise cross-disciplinary work and project work merge elements of students-centred ordering mechanisms with subject-centred ordering mechanisms. Instructional formats in language arts – like process writing – can serve as a third illustration for how instructional practices of today cut across offered conceptual frameworks. Dualistic concepts such as teacher centred vs. student centred or traditional vs. progressive do not offer an empirical, sensitive and synthesising way of describing the observed classroom practices. In most classrooms the teachers combined aspects of teacher-centred organised activities with more student-centred and activity-organised patterns of organisation. For many classrooms (and especially at the higher levels (grades 6 and 9)) the work plan (*arbeidsplan*) or work schedule seems to be the driving force for organising the school day (Carlgren, Klette, Myrdal, Schnack, & Simola, 2006). Rather than describing the classrooms as teacher vs. student centred, they seem to be activity and work schedule centred. This implies new challenges for the teacher as a classroom supervisor and where the teachers hold a new role as task manager rather than instructor. In their comparison of Swedish classrooms from the 1970s and the 1990s, Lindblad and Sahlström (2002) state that although plenary sessions are less frequent in the classrooms of the 1990s (where seat work at desks dominates), the teacher as a master and conductor of the activities seems to be more central in the classrooms of the 1990s. They state for example,

What we also find when comparing the materials (1970 classrooms and 1990 classrooms – speaker's comment) is that there are substantially longer sequences of instruction of *how to perform* in the 90's material, often with a high level of detail.

And they continue:

The introduction of desk work thus seems not only to have introduced a new way of working, but it also affects the organisations of the seemingly plenary teaching.

Available established concepts and analytical framework might contribute to a prolongation of established practices and an inscription of status quo also during periods impregnated with changes.

Concluding Remarks

There is a saying in English: the devil is in the details. In a sense, educational research should play along with the devil and endeavour to go beyond everyday language and critically examine existing analytical concepts and framework in its search for possible new ordering mechanisms. For those of us interested in how educational practices change, expand, destabilise and stabilise through varied spatial and temporal contexts, there are strong arguments for detailed in-depth studies (alongside survey studies and other more comprehensive studies) in education. Carefully designed and clearly focused in-depth studies enable us to see how classroom activities (events, activities and themes) are designed and redesigned across contexts and scales. Depending on preferred level of scales and analytical framework, events, activities and themes accordingly can be interpreted from multiple understandings. The degree of change – or stability – will then subsequently not automatically follow as one privileged order or one privileged practice.

To be able to grasp ongoing changes in educational practices further requires that educational researchers make their own criteria for evaluating the degree of change explicit, and stop privileging one level of change or one topos of change in relation to all others. There is a strong tendency to see human exchange scales as the only scales in our field of research and subsequently weak recognition of different topologies of scales like tools and material products, information transfer, etc. In order to take into account these complexities, I propose to cross over a step by making explicit the time scales of investigations, whatever they are.

Wallerstein (1991) underpinned how concepts and analytical framework (and we could add methodological tools and theoretical perspectives) need critical examination and analyses so they can fulfil their potential as tools for describing social changes, movements and activities. Without examining the common sense of its own analytical understanding, research can preserve the very systems that are to be interpreted and engaged in critical conversations.

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School-Based Social and Emotional Learning (SEL) Programming: Current Perspectives

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Collaborative for Academic, Social, and Emotional Learning (CASEL)

In 1994, the Fetzer Institute hosted a conference to address concerns about the various, disjointed school-based efforts that had surfaced over the years. In attendance were a range of researchers, educators, and advocates with diverse interests related to meeting the developmental, psychological, educational, and general health needs of children. These issues were discussed, and the term *social and emotional learning* (SEL) was introduced. SEL described a framework for providing opportunities for young people to acquire the skills necessary for attaining and maintaining personal well-being and positive relationships across the lifespan. Out of this 1994 meeting, the Collaborative for Academic, Social, and Emotional Learning (CASEL) was formed with the goal of “establishing high-quality, evidence-based SEL as an essential part of preschool through high school education” (Elias et al., 1997; Greenberg et al., 2003; Kress & Elias, 2006).

Since its conception, CASEL has defined SEL more specifically and has served as a guide to school-based SEL programming (CASEL, 2003). According to CASEL, SEL describes the acquisition of skills including self- and social awareness and regulation, responsible decision making and problem solving, and relationship management. The first of CASEL’s 39 Guidelines for Educators delineates four primary domains of SEL: “(1) life skills and social competencies, (2) health promotion and problem-prevention skills, (3) coping skills and social support for transitions and crises, and (4) positive, contributory service” (Elias et al., 1997; Kress & Elias, 2006). These skills are critical at all levels of development but vary in their application over the life course. Underlying SEL programming is a theoretical foundation based on the ideas that essential learning takes place in the context of relationships and that similar risk factors are responsible for various maladaptive outcomes

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(Payton et al., 2000). Research on various school-based interventions confirms that SEL is central to development in terms of physical and mental health, moral judgment, citizenship, academics, and achievement motivation (Durlak, Weissberg, Taylor, Dymnicki, & Schellinger, 2008).

Until recently, the traditional emphasis in schools has not been on SEL but on academic instruction alone. Nevertheless, the last few decades have seen growing efforts toward a more holistic approach. The competencies associated with SEL have been identified as factors that impact significantly academic performance and lifelong effectiveness (Zins, Weissberg, Wang, & Walberg, 2004). Over time, it has become more and more apparent that children who engage in positive social interactions with their teachers, peers, and families and who participate actively and cooperatively in the learning process are more successful in and out of school. Accordingly, research has shown that emotional skills are prerequisite to the thinking and learning skills that comprise the time-honored academic focus of education (Brendtro, Brokenleg, & Van Bockern, 1990; Elias et al., 1997). For instance, “we know emotion is very important to the educative process because it drives attention, which drives learning and memory” (Elias et al., 1997). Moreover, emotions impact perception, motivation, critical thinking, and behavior (Izard, 2002; Lazarus, 1991; Mayer & Salovey, 1997).

The social aspects of the learning environment also contribute significantly to learning. As the level of attachment, communication, and respect shared between a child and teacher is enhanced, the child’s attention, learning, and brain development follow (Kusché & Greenberg, 2006). Students who report warm, supportive, positive, and respectful interactions with their teachers also tend to display academic motivation and engagement (Ryan & Patrick, 2001). When students feel connected emotionally to peers and teachers with high values of learning and expectations of academic success, they adopt these positive values and achievement orientations (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2002; Blum & Rinehart, 2004). Similarly, students perform better academically when they experience a sense of belonging at school and learn in environments characterized by positive relationships (Osterman, 2000). In one study investigating the impact on learning of 30 categories of educational, psychological, and social influences, social and emotional variables had the most profound effect on academic performance (Wang, Haertel, & Walberg, 1997).

More than ever, educators and parents alike are recognizing the social and emotional influences on academics and are holding schools responsible for preparing students for life, not just for standardized tests or high school graduation. In 1999, the US Department of Labor issued two reports to identify various skills and traits necessary for a successful workforce. In these reports, many of the skills identified related to SEL, including interpersonal and communication skills; decision making and problem solving skills; the abilities to influence and negotiate; personal responsibility; self-esteem; listening; self-management; and integrity (Devaney, O’Brien, Resnik, Keister, & Weissberg, 2006; Stuart & Dahm, 1999, US Department of Education, 1999).

To live and learn in a social world . . . we need a social decision-making and problem-solving strategy that includes . . . understanding signs of one's own and others' feelings, accurately labeling and expressing feelings, identifying one's goals, thinking of alternative ways to solve a problem, especially when planning a solution and making a final check for possible obstacles, thinking about long- and short-term consequences for oneself and others, reflecting on what happens when carrying out one's strategies, and learning for the future. (Elias et al., 1997, p. 27)

Children from a variety of gene pools and upbringings enter school with a range of these crucial social and emotional competencies, and until recently, there has been no systematic approach for developing these life skills.

How Has SEL Emerged Over Time?

As schools have begun to acknowledge students' social and emotional needs, they have found that these skills can be taught and learned in a similar fashion to conventional academic subjects. In response to this idea, educators' questions have progressed from "What is SEL?" and "Is SEL important?" to "What is the best way to incorporate SEL into our schools?" Initial attempts to address the latter have been met with mixed results. While some strong and effective SEL programming emerged during this time, more scattered attempts to address single components of SEL also arose. Miscellaneous school-based programs focusing on a single aspect of SEL, such as preventing bullying, substance abuse, unhealthy sexual practices, delinquency, and violence or promoting character development, career preparation, family life, community service, and physical and mental health have been popping up in school districts nationwide. Even with the 2002 No Child Left Behind (NCLB) legislation that channeled funds and energy away from these programs and toward an emphasis on test scores, new school-based programs aimed at prevention, promotion, and SEL continued to surface (Kress & Elias, 2006).

Many school-based prevention and promotion efforts made in the last decade are compatible with and could be coordinated with school-wide SEL programming (Devaney et al., 2006). Unfortunately, they are often introduced in schools in a piecemeal fashion focusing on a limited breadth of outcomes, and the potential for integration and synergy with SEL is lost. For example, character education programming – which is introduced to build respect, responsibility, integrity, and other values into the student body through teacher modeling and the emphasis of these attributes in the school's curriculum and culture – can be coordinated with SEL (Elias, Parker, Kash, Weissberg, & O'Brien, 2008). Similar integration is possible with servicelearning, which incorporates community service into the classroom (Fredericks, 2003), and Positive Behavior Supports, a program that highlights the maintenance of consistent expectations and reinforcement from teachers (Osher et al., 2008). Cooperative learning and differentiated instruction are two other approaches that focus on the use of small groups and diverse teaching strategies to enhance children's social, emotional, and academic growth (CASEL, 2003).

These and other prevention and promotion programs share many commonalities with SEL and could be integrated as part of school-wide programming since SEL programming offers a framework for unifying and coordinating narrowly focused efforts to target a broader spectrum of positive youth outcomes that extend into lifelong success (Devaney et al., 2006).

A number of effective SEL programs have become available in the recent years (CASEL, 2003; Durlak et al., in press). These programs incorporate efforts between the classroom, the student's home, the school, and sometimes the entire district to provide students with ample structured and unstructured opportunities to learn and apply skills to promote their social, emotional, and academic success. Moreover, they offer professional development for educators and work to establish safer and more productive learning environments. Several of these SEL programs exist and have demonstrated success in promoting mental health, self-efficacy, sense of community, academic performance, attitude toward school, coping, and overall positive youth development as well as in preventing substance abuse, absenteeism, and aggression (e.g., Catalano et al., 2002; Durlak & Wells, 1997; Durlak et al., in press; Gottfredson & Wilson, 2003; Tobler et al., 2006; Zins et al., 2004).

A few examples of model SEL programs are Promoting Alternative Thinking Strategies (PATHS) (Greenberg, Kusché, & Mihalic, 1998), the Developmental Studies Center's Child Development Project (CDP) (Battistich, Watson, Solomon, Schaps, & Solomon, 1991), and Emotional Literacy in the Classroom (ELC) (Brackett et al., 2008). These programs, among others, are evidence-based SEL curricula that meet CASEL guidelines and have been effective in various school systems. For example, PATHS is an elementary-school program that emphasizes conflict resolution, stopping to think before acting, and managing and expressing emotions effectively. It is designed to promote social and emotional competence in students and teachers and to reduce aggression and behavior problems while enhancing classroom productivity and the overall quality of the learning environment. PATHS has been shown to decrease aggression and enhance emotion-related vocabulary and cognitive test scores in students and to increase self-control in teachers (Greenberg et al., 1998; Greenberg et al., 2003).

CDP represents another model SEL program. In its focus on creating "communities of learners," CDP provides training to the entire school on social, ethical, and academic development for enhancing relationships among students, teachers, and administrative staff while simultaneously improving student reading skills through guided, group, and individual instruction with literary materials that emphasize prosocial values (Battistich et al., 1991). CDP's approach holds children accountable for setting and upholding class rules and pairs older and younger children in a buddy program. "CDP rests on the assumption that children will engage better in, and profit more from the school experience if it is intrinsically interesting and if they have genuine shaping inputs in what they do" (Cowen, 1997, p. 110). Data collected from school records and student and teacher reports indicate that CDP increases school-related attitudes and motivation, reduces problem behaviors, and enhances school connectedness, test scores, grades, and school conduct (Battistich, 2001).

A third SEL program (with which the first two authors of this chapter are most familiar, as coauthors of program) that has been met with success in various districts in the United States and the United Kingdom is the ELC program. ELC is rooted in emotional literacy (Brackett & Rivers, 2008), which is derived from work on emotional intelligence (Mayer & Salovey, 1997) and includes five skills identified by researchers as important for successful functioning and adaptation: recognizing, understanding, labeling, expressing, and regulating emotion. ELC includes continuous training to provide teachers and administrators with tools and techniques to enhance their own professional relationships, and the educational, social, and personal lives of their students. The classroom program involves a series of lessons or “steps” that focuses on an emotion-related concept or “feeling” word. The steps ask students to recall personal associations with each feeling word, use the word in writing assignments pertaining to academic lessons and current events, teach and discuss the word with their families, engage in creative tasks such as artistic representations of the word, and with participate in strategy-building sessions to learn techniques for problem solving and regulating emotions. Students in classrooms integrating ELC have demonstrated higher social and emotional competence (e.g., leadership, social skills, and study skills) and better academic performance compared to students who do not receive the program (Brackett, Rivers, & Salovey, 2007).

What Makes an SEL Program Effective?

According to CASEL, effective SEL programs are those that lead indirectly and directly to improved academic performance and other positive outcomes. By establishing safe, nurturing, and productive learning environments, they promote greater student attachment to school, which is associated with a reduction in risky behavior and an increase in academic success (CASEL, 2003). These improvements of the school and classroom climate transform the way students experience and perceive their school lives, which enhances their academic, psychological, and social development as well as their school adjustment and performance. Through education of social and emotional competencies, effective SEL programs support academic achievement and positive development directly (CASEL, 2003). Moreover, children develop intrinsic motivation when classroom topics relate to their own needs, emotions, and lives (Ormrod, 1999), a strategy generally employed in SEL interventions (Zins, Payton, Weissberg, & Utne-O’Brien, 2007).

The effectiveness of an SEL program also depends on its continuity from an early age through high school and its coordination of teacher, administrator, parent, and student participation and support in the planning, implementation, and evaluation (Devaney et al., 2006; Greenberg et al., 2003). For effective programming to take place and to last, a school-wide commitment, across all classrooms, teachers, and administration, should be embraced (Bencivenga & Elias, 2003). The following model shown in Fig. 1, developed by CASEL (Devaney et al., 2006), classifies this



Fig. 1 SEL implementation and sustainability process (©, Collaborative for Academic, Social, and Emotional Learning (CASEL))

commitment from principals and other stakeholders as the first two in a sequence of ten steps necessary for programmatic success.

According to this model, SEL implementation should occur in three phases. After phase 1 or the readiness phase, during which a commitment from the principal and other stakeholders is secured, begins a planning phase, including a shared vision, an assessment of school needs and resources, an action plan for program implementation, and the selection of a program. Finally, in the implementation phase, training and professional development activities are conducted, SEL instruction is introduced in classrooms and expanded school-wide, and programming is evaluated and fine-tuned. CASEL suggests that throughout these three phases of implementation, several ongoing activities can serve to enrich and sustain SEL programming: professional development of school staff, evaluation and modification of the program, development of an infrastructure to support the program over time, integration of SEL practices school-wide, involvement of family and community, and widespread communication about the program.

As shown in Fig. 2 below, ELC (Brackett et al., 2008) follows an implementation plan that relates closely to CASEL's model.

In accordance with CASEL, the ELC model begins with a vision and a plan for program execution, continues with ongoing professional development, and

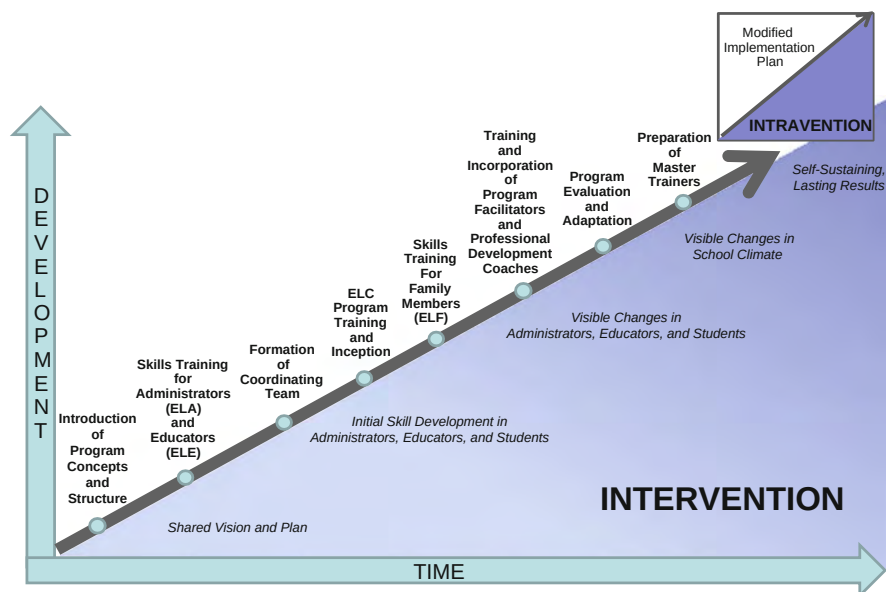


Fig. 2 Creating emotionally literate schools: Implementation plan

is sustained through adapting the program over time to fit with school culture. Specifically, ELC includes continuous training of teachers that focuses expressly on developing their social and emotional skills separate from training on the instruction of the classroom program for students. Additionally, ELC encourages the formation of a coordinating team of school staff to lead in the integration of the program into the school and community. One aspect of this integration is training on emotional literacy for family members of students. Teacher skills and command of the program are further enhanced through periodic coaching sessions during which teachers meet one-on-one with program facilitators and coaches who observe lessons, provide critical feedback, address questions or concerns, and work to enhance the social and emotional competencies of the teacher. Over time, ELC program developers work with the coordinating team of the school or district to train selected staff to be “master trainers.” These master trainers, usually teachers or counselors in the school system, become the experts who keep the program alive so the role of the program developers can be phased out. Gradually, the *intervention* transitions into an *intravention*, such that the school or district can sustain the program independent of the program developer team. As the school or district goes through this process, positive changes are expected to occur in administrators, teachers, students, and eventually school climate.

As both the CASEL and ELC models suggest, the key players in a school’s or district’s commitment to change through SEL are school leaders. The selection, implementation, and sustainability of SEL programming depend largely on the support of school administrators (Nataraj Kirby, Berends, & Naftel, 2001). In fact,

reductions in aggression and increases in social and emotional competencies have been over twice as likely in students from inner-city schools with higher levels of principal support, irrespective of high implementation quality (Kam, Greenburg, & Walls, 2003). Likewise, the presence of supportive administration predicted most consistently the ability of 40% of schools to sustain SEL programming successfully (Elias & Kamarinos Galiotos, 2004). In addition to their support, the social and emotional competence of school leaders is important (Lambert, 2003; Patti & Tobin, 2003). Leaders who are effective in these areas can build and maintain positive and trusting relationships among their administrative and teaching staff, and these relationships are essential to school reform (Bryk & Schneider, 2002). It is not surprising that school administrators play such a vital role in the success of SEL programming, as school leadership may be one of the top two factors affecting student learning. This factor is preceded only by teacher instruction (Leithwood & Riehl, 2003).

Inarguably, teachers are instrumental in the execution and impact of SEL programming. Due to the nature of the teacher role, teachers impact student academic, social, and emotional learning. The strategies teachers use to reinforce positive behavior and manage inappropriate behavior predict student conduct and academic performance (Hawkins, 1997), and student-teacher relationships predict student achievement and attachment to school (Baker, 1999). Furthermore, skilled teachers naturally tend to foster social and emotional development and cultivate positive attitudes and values in their students (Elias et al., 1997). Aside from their inherent influence as the head of the classroom, teachers contribute significantly to the success of SEL programming because they are the primary implementers. Not only do teachers need a firm understanding of how to run the program in their classroom, they also should know what competencies it promotes and how it can help them achieve their learning objectives, make their interactions with students more productive, and improve the classroom environment.

Also central to effective SEL program adoption and continuation are the attitudes and beliefs teachers have about SEL in general and their ability to implement the program and model the behavior it intends to change in children. For instance, “teachers who believe that social and emotional skills are part of a student’s immutable genetic makeup will be unlikely to show support for a program based on a social learning model of social and emotional skill development” (Kress & Elias, 2006, p. 600). In the same way, teachers who do not feel SEL is important or that they should be responsible for addressing these skills may lack sufficient motivation to implement the program properly (Kallestad & Olweus, 2003). Even among teachers who believe in the premise and goals of SEL, other attitudes can hinder effective implementation. For instance, a teacher with low confidence in her ability to carry out the program protocol, find time to incorporate it into the classroom, or manage the classroom during the program sessions may be less likely to adhere to the program process and use it regularly (Kress & Elias, 2006). To implement SEL programming well, teachers must understand clearly the program’s goals and structure as well as believe in the program’s ability to achieve these goals through their own execution of the program.

Effective SEL programming provides a continuous flow of information and support to teachers throughout the life of the program. This information and support should take the form of user-friendly teacher manuals with clearly presented lesson plans, pre-implementation training of teachers, ongoing contact between teachers and program personnel (Graczyk et al., 2000), and annual trainings to address turnover of teaching staff and administrators (Elias, Bruene-Butler, Blum, & Schuyler, 2000). For instance PATHS provides training workshops and a manual, and CDP includes a 1-day workshop for teachers on program implementation in addition to classroom visits for lesson planning, modeling, and co-teaching. Similarly, ELC provides a preliminary 1-day professional development workshop that focuses on the social and emotional skills of the teacher and the importance of these skills. Then, teachers attend a second full-day workshop on how the ELC program is implemented in the classroom. Throughout the ELC program, teachers attend onsite modeling of program lessons by program staff, “booster” trainings to review key elements of the pre-program training, and one-on-one meetings with coaches who observe lessons, provide feedback, and address any questions teachers may have.

Integral to the trainings and other contact between teachers and program staff is their capacity to influence teacher attitudes and beliefs about SEL in general and about the specific program selected by the school or district. Teachers should be made aware of the social and emotional needs of their students and themselves and confident in the effectiveness of the program in meeting these needs. Further, they should feel secure in their own knowledge and skills related to the program (Greenberg, Domitrovich, Graczyk, & Zins, 2005). The degree to which teachers possess information, confidence, and skills related to the program impacts how the program is implemented and also how social and emotional competencies are modeled to students. Accordingly, teacher confidence and animation during delivery have been associated with more adherence to program protocol (Sobol et al., 1989). Moreover, when students notice teachers are not “practicing” what they “preach,” they are more likely to mimic what they see (Mize & Ladd, 1990).

In view of this, effective SEL programming should include specific efforts focusing on the social and emotional skills in teachers in conjunction with training on the details of program presented in a way that builds teacher confidence. These efforts maximize not only the positive impact of the program on students but also on the teachers themselves. Teachers who are part of school- or district-wide SEL efforts and who utilize SEL practices and programs in their classrooms are more satisfied overall and more likely to remain in the teaching profession (CASEL, 2003). This makes sense, given that schools that strive for collaboration, connectedness, collegiality, and support among their employees are better at retaining new teachers (Murray, 2005).

Another key component in the success of SEL programming is the involvement of students’ families (Christenson & Havsy, 2004; Patrikakou & Weissberg, 2007). Research has shown consistently that collaborations between the home and school increase both the number and the length of positive outcomes related to school (for meta-analytic reviews, see Fan & Chen, 2001; Jeynes, 2003). In fact, decades

of research have linked parental/caregiver involvement in schooling to improvements in mental health and academic performance in their children (Gorman-Smith, Tolan, & Henry, 1999). In spite of the clear benefits of their involvement, caregivers become less involved in their children's lives as they reach adolescence (Milgram & Toubiana, 1999). One possible explanation for this is that the number of opportunities that schools offer for caregivers to participate in school-related activities declines in middle school (US Department of Education, 1998). Thus, the need for schools to incorporate caregivers explicitly into their children's school life may be even higher during these adolescent years (Elias, Weissberg, & Patrikakou, 2007). According to a review of 66 studies, the extent to which the family is involved in a child's education from early childhood through high school is the most accurate predictor of student achievement (Henderson & Berla, 1994). Thus, effective SEL programming should include efforts to foster the development of school-family partnerships to support and extend classroom learning and positive impact on students.

The Future of SEL: Strides and Stumbling Blocks

Since its conception in 1994, SEL has come a long way. Programs to address SEL needs have been developed, tweaked, and disseminated, and their effects have been researched and documented (e.g., Greenberg et al., 2003). In some schools, comprehensive and evidence-based SEL programs have been adopted and demonstrated success in benefiting students. In most schools, however, SEL programming has not been adopted effectively (Kress & Elias, 2006). Some districts have ignored SEL needs altogether, and most have made only half-hearted attempts to address these needs. On average, today's schools average 14 simultaneous activities in place to combat problem behavior and enhance the learning environment (Gottfredson & Gottfredson, 2001). In general, it is not that educators are *not attempting* to enhance social and emotional learning; rather, they are not employing well-designed, systematic approaches (Shriver & Weissberg, 1996). With this in mind, we may ask ourselves, "Where is the SEL wagon headed?"

One consistent challenge to the proliferation of SEL is concern from administrators, teachers, and even parents who do not believe in taking any time or energy away from instruction of traditional academic subjects (Elias et al., 2000). With the NCLB legislation, academic demands have become more stringent, and time constraints have tightened further. Educators have become even more preoccupied with devoting adequate attention to core, content areas that are tested in accordance with NCLB standards. Similarly, parents may assume that focusing solely on academic topics is the best way to raise grades and test scores. However, ignoring SEL in order to spend more time on academics has not proven an effective approach to boosting achievement or complying with NCLB. SEL has been shown to play a critical role not only in academic performance but also in attendance records, classroom behavior, and academic engagement (Elias, 1997; Elias et al., 2000). It cannot be expected by any stretch of the imagination that students who live in a world of

myriad influences from the television, the computer, and their own homes and relationships will arrive at school each day with a clear head ready to digest several hours' worth of academic material. Schools can provide a guiding and protective influence by promoting the social and emotional skills necessary to function well in and outside of school (Elias et al., 2000). Efforts are needed to increase these feelings of accountability among educators in schools ignoring SEL needs.

As emphasized previously, active support and involvement of teachers and other educators in leadership roles are crucial to successful implementation. Accordingly, lack of support for SEL can prevent programming from ever entering a school and lack of involvement can pose a problem to the success of SEL programming, if it is adopted. Unfortunately, few teachers or administrators receive sufficient pre-service or in-service training on SEL (Elias et al., 2000). The past few decades have seen tremendous advances in scientific knowledge related to the skills that predict academic and lifelong success and the best ways for developing these skills to yield positive changes. Education in these areas should be incorporated as a central component in teacher preparation and professional development. For SEL programming to succeed, the underlying theory and the implementation strategies must be understood and practiced well by educators.

Even in some schools that choose to employ strong SEL programs, the impact on students may be limited. Insufficient understanding of factors in the school that affect implementation or poor coordination of SEL efforts with other school activities are just two potential causes. Different educators select different methods for adopting, combining, and adapting SEL programming, and these decisions do not always lead to positive outcomes (Greenberg et al., 2003). To further complicate things, few comprehensive SEL curricula exist that extend from preschool through high school. In an attempt to offer a continuum of SEL instruction from one grade level to the next, educators sometimes string together several programs of various content and techniques that may not align well with one another (Zins et al., 2007). Fortunately, many SEL programs are designed to coordinate well with other school activities, by serving as a vehicle for teaching other school subjects, by their ability to link to other content areas, and through their flexibility in being rotated through different parts of traditional academic curricula (CASEL, 2003). Also, some schools are able to coordinate SEL successfully by identifying a committee or team which fits the programs together systematically to optimize implementation and the program impact (Elias et al., 1997). Nevertheless, schools could benefit from a set of standard recommendations or strategies to follow in order to coordinate SEL with other efforts within the school and across grade levels (Zins et al., 2007).

Several factors have been identified as vital to effective implementation and continuation of SEL programming (Elias et al., 2008). This body of research suggests that before a program is selected, schools should assess the needs, resources, policies, and practices of the school and its surrounding community. "SEL interventions are more likely to succeed when they are congruent with the values, beliefs, norms, and histories of the children and families served. Schools select SEL programs that they believe are appropriate culturally, socially, and economically for their students and families" (Zins et al., 2007). These issues are not always easily identified, but

program selection should depend largely on these factors. After the program is selected but before it is adopted, schools should think about what activities and programs are already in place; identify what will have to happen in order for the school to accommodate the program and for the program to accommodate the school; and consult with school personnel about SEL and the selected program. During and after implementation, the program should be monitored to ensure it is being executed properly and the intended outcomes are being achieved (Zins & Elias, 2006). This information should be used to determine the effectiveness of the program and to develop strategies for ensuring positive results as the program is sustained over time (Domitrovich & Greenberg, 2000).

Another factor that determines the fate of SEL in schools is legislation. Although a few state governments (e.g., Illinois, Hawaii, and New York) have incorporated a social and emotional learning component to their standards or laws, the majority of states have not. For instance, in 2003, Illinois State Learning Standards first mandated school districts to integrate SEL into their curricula. The state's Children's Mental Health Act (Public Act 93-0495) maintains that social and emotional development is essential to academic readiness and success. The act calls on all schools in Illinois to incorporate SEL as a central component to their mission, take concrete steps to enhance students' development in these areas, include SEL in school plans, and develop policies for integrating SEL into the district's educational program and for responding to children's social or psychological needs that may impact learning (Zins & Elias, 2006). Ideally, in due time, other state or even federal legislative bodies will follow the lead of Illinois and other SEL-promoting states so that their schools will give greater priority to addressing SEL in their curricula.

Enhancing the social and emotional skills of our society is a major challenge facing our world today. The integration of SEL programming into schools provides a promising means for targeting these skills effectively from an early age through young adulthood. However, widespread and sustained implementation of beneficial programs will require an ongoing commitment from many. Researchers must continue to provide comprehensive, evidence-based SEL programming and assist schools more in adopting, executing, and monitoring these programs effectively. Legislators must commit to establishing educational policies that hold schools accountable for the social and emotional development of students. Above all, educators must champion the SEL cause and the efforts toward enduring SEL programming in their schools.

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To Seek, to Strive, to Find, and Not to Yield: A Look at Current Conceptions of Vision in Education

Karen Hammerness

Why Vision?

What I am describing here is a mode of utopian thinking: thinking that refuses mere compliance, that looks down roads not yet taken, to the shape of a more fulfilling social order, to more vibrant ways of being in the world. . . . When such dialogue is activated in classrooms, even the young are stirred to reach out on their initiatives. Apathy and indifference are likely to give way as images of what might be arise. (Greene, 1995, p. 5)

What do educators *most* hope children will experience, understand, and master in their classrooms and schools, and why? What do educators envision are the most powerful, exciting, and inspiring settings in which that kind of learning can take place; and what activities can foster such experiences? The answers to these questions about what schooling, teaching, and learning might be, or could look like, are at the core of one's educational vision. These "visions of the possible" serve as a source of inspiration and motivation for many teachers and school leaders. Indeed, some have chosen to work in education because of their hopes to enact the educational visions they hold for schooling and children.

Since the 1990s, research has pointed to the critical role of vision in reform efforts: In order to change, school faculty need to have a shared sense of what kind of school they want to be, of what larger educational purposes really matter to them, and why they are important (Day, et al., 2000; Deal & Peterson, 1999; Evans, 1996; Fink, 1999; Fullan, 2007, 2001, 1993; Hargreaves, 1994; Hargreaves & Fink, 2005; Louis & Miles, 1990; Pekarsky, 2007; Stoll & Fink, 1996). This research has also revealed that the nature of the connection between school change efforts and personal vision can determine whether and how teachers – and other key members of the school community – take ownership of reform.

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Excerpt from "Ulysses" (1842) by Alfred Lloyd Tennyson, published in Roberts, A. (2000). Alfred Tennyson, Oxford University Press, New Edition.

At the same time, developing visions and using them productively in the process of reform is not an easy process (Fullan, 1993). The literature reveals two key challenges. First, frequently vision is described as the purview of leaders and principals, while the visions of individual teachers are ignored or receive little emphasis (Fink, 2005; Fullan, 1993; Stoll & Fink, 1996). But at the same time, leaders ignore them at their peril. As Fullan (2007) explains, “Finding intellectual and moral meaning is not just to make teachers feel better. It is fundamentally related to whether teachers are likely to find the considerable energy required to transform the status quo. Meaning fuels motivation” (p. 38).

Second, in many change efforts, educational visions end up mired either in ambiguity or specificity. On the one hand, they can be boiled down to a mission or vision statement that may feel abstract and meaningless. As Deal and Peterson (1999) comment, “In attempts to reach for this deeper . . . level, too often schools produce abstract documents that have little to do with what really matters or what people do on a day to day basis” (p. 24). On the other hand, visions can end up becoming overly particular or technical, losing not only the sense of “reach” but also the power and deep sense of purpose that may be most important to people. Indeed, some have argued that in this era of increasing emphasis upon a set of particular, perhaps narrow, educational outcomes, we may have begun to lose sight of larger purposes for teaching and learning (McNeil, 2001). Compounding the problem, not all reform efforts – particularly those focused heavily upon standardized testing – are consistent with the images and beliefs about good teaching held by many teachers.

Educators need ways of thinking about vision without reducing its complexity to slogans or strategic plans or rendering it static or overly prescriptive. We need to be able to help policy makers and school leaders understand how to make vision meaningful and memorable. In order to overcome these challenges, school leaders need ways to unearth, understand, and include the visions held by the faculty in their organizations – honoring the motivations and aspirations of all teachers while striving to create a common sense of purpose. Yet achieving this is not easy.

To that end, this chapter examines what we now know about vision in order to get beyond thinking about slogans and strategic plans, and move toward a deeper and more nuanced understanding of the concept. Given that conceptions of vision (both literal and metaphorical) have a long history in Western culture (Jay, 1993), I begin by sharing conceptions of vision from philosophy and literature that help illuminate some of the complexity of the idea. I then return to the notion of vision in education in order to clarify how current literature reflects or does not reflect these broader ideas. Looking at the concept of vision in education, what do we see reflected? What don’t we see? I end with some implications for the role of vision in education and in educational change.

Classical Conceptions of Vision

Getting a handle on the concept of vision is not easy. Despite the lack of clarity around vision, in some ways we take our understanding of vision at face value. We

might talk about an influential figure like Martin Luther King Jr. as someone who had a very clear vision, and we might discuss whether or not a particular current politician *has vision*. While in some ways it is hard to define, we also feel in many ways that we know it when we see it or even hear it. Yet even while we can talk about people who have vision, when pressed to elaborate upon what it means, the concept can still feel nebulous and imprecise.

A look at the concept across disciplines can help clarify and concretize the concept, as well as to provide more depth and precision. To that end, in this chapter, I briefly describe conceptualizations of vision in Western philosophy and literature. I then return to the concept of vision in education, using what we know about vision more broadly, to examine the handful of current efforts that have begun to help set our sights upon a more elaborated view of vision.

Philosophy and Psychology: Vision as Insight

In Western philosophy, the concept of vision has played such a dominant role that some scholars have labeled Western culture “ocularcentric” or dominated by vision (Jay, 1993). Jay contends that visual metaphors are not only omnipresent in Western culture, but in fact have been central to its intellectual progress.

The development of western philosophy cannot be understood . . . without attending to its habitual dependence upon visual metaphors of one sort or another. From the shadows playing on the walls of Plato’s cave and Augustine’s praise of the divine light to Descartes’s ideas available to a “steadfast mental gaze” and the enlightenment’s faith in the data of our senses, the ocularcentric underpinnings of our philosophical tradition have been undeniably pervasive. (1993, p. 187)

In this ocularcentric tradition, vision has long been used as a metaphor for developing knowledge and understanding. For instance, in Plato’s “Allegory of the Cave,” the metaphor of sight represents one’s coming to understand the supreme good:

. . . our own account signifies that the soul of every man does possess the power of learning the truth and the organ to see it with; and that, just as one might have to turn the whole body round in order that the eye should see light instead of darkness, so the entire soul must be turned away from this changing world, until its eye can bear to contemplate reality and that supreme splendor which we have called the good. (Plato, trans. 1941, p. 232)

Aristotle argued that vision enables us to distinguish among a variety of types of information that we observe in the external world.

Yet for Aristotle, sight was not simply a mechanism for learning and thinking but also a conduit allowing intimate access to the feelings, thoughts, actions, and experiences of others. He observed, “The soul never thinks without an image.” In fact, Aristotle believed that the ability to see dramatic scenes from plays prompts the experience of catharsis in the viewer – an experience that fosters deeper understanding as well as the resonating of emotions (Aristotle, trans. 1955).

In the seventeenth century, Descartes contended that understanding is the result of a *visual* process; meaning is constructed after the mind inspects images reproduced on the retina. Such internal visual representations, he argued, become the concepts and notions that form the basis of understanding. As Rorty (1979) explains, “in the Cartesian model, the intellect *inspects* entities modeled on retinal images In Descartes’s conception – the one which became modern epistemology – it is *representations* which are in the ‘mind’” (p. 45).

In the twentieth century, scholars of vision contended that vision is an act of constant interpretation – an act of *thinking* – that enables us to organize, represent, and discriminate what we see in the world (Arnheim, 1969; Kosslyn, 1983; Latour, 1986; Messaris, 1994; Snyder, 1980). For instance, Arnheim observed that “the cognitive processes called thinking are not the privilege of mental processes above and beyond perception but the essential ingredients of perception itself” (1969, p. 13). He argued that we should not consider seeing and thinking as separate activities but recognize their intimate relationship – captured by his term “visual thinking.” Arnheim further argued that a definition of vision is too narrow if it only refers to external sense perception. He suggested that vision must necessarily include “the imagery present when a person, with eyes closed or inattentive, thinks of *what is or could be*” (1969, p. 16). For Arnheim, “vision” refers not only to how we think about and understand the outside world, but also to how we create an interior world, one that may not necessarily exist now but could in the future.

Literature: Insight, Foresight, and Emotion

In works of literature, vision has been associated with understanding and insight as well as with emotion. Early Greek playwrights, like the philosophers, often linked vision to wisdom and understanding. For tragic Greek characters such as Oedipus, sight represented spiritual understanding and was equated with an inner equanimity and peacefulness. In *Oedipus at Colonus*, the blind and aged king has developed a profound sense of perception: Oedipus tells a listener, “In all that I speak there shall be sight” (Sophocles, trans. 1938, p. 616).

In other forms of literature, vision has been not only associated with understanding but with emotion as well. In the sixteenth century, Italian poets imbued vision with the power to elicit as well as communicate love and desire. Shakespeare frequently used the metaphor of vision to represent understanding and insight into human nature – both intellectual and emotional wisdom. Concurrently, misunderstanding, madness, and uncontrolled emotions were associated with lack of sight. In *King Lear*, for instance, sightlessness is equated to insanity and to fear and sometimes rage: Lear cannot “see” the love his faithful daughter has for him, and Shakespeare compares his ensuing madness to a storm of “eyeless rage.”

As with philosophy, poets and novelists have also suggested that vision leads not only to wisdom and emotional understanding, but perhaps to a greater intimacy with the spiritual world, even to experiences with the divine. In *La Vita Nuova*,

passionate vision eventually leads to the religious development of the soul. British Romantic poets suggested that through vision one could achieve an intimate communion with nature that in turn could deepen understanding of the internal spiritual world. Wordsworth (1965/1798) described this ability as “see[ing] into the life of things.”

While literature has frequently equated vision with insight, vision has also been hailed as a means of premonition, or “foresight.” The title character in Millhauser’s (1996) prize-winning *Martin Dressler* has the gift of summoning fantasies that capture the imaginations and hearts of hundreds of people. Martin Dressler is an entrepreneur at the turn of the century who builds hotels. Each new hotel he designs is the embodiment of a vision. Indeed, Martin derives each new plan by visualizing the building; he literally sees it in his mind’s eye – he feels as if he is able to walk through it, examine it, sometimes even feels the pulse of the building in his veins. In the passage below, Martin imagines the next hotel he will build. The description helps us understand the vivid power, as well as the sense of substance and concreteness of a vision:

And at once he saw: deep under the earth, in darkness impenetrable, an immense dynamo was humming . . . Martin had less the sense of observing than of inhabiting it at every point: he rose and fell in the many elevators, he strolled through the parlor of an upper room and walked in the underground park or garden—and then it was as if the structure were his own body, his head piercing the clouds, his feet buried deep in the earth, and in his blood the rise and plunge of elevators. (pp. 173–174)

The tale of Martin Dressler also conveys the potential of vision for insulating and protecting one’s dreams, perhaps enabling Martin to pursue his dreams without questioning them. The power of Martin’s visions seems to enable him to ignore the doubts, challenges, and concerns others express, and he is able to build many of the hotels he envisions in spite of the skepticism of others. In this way, the power and strength of his visions spur him on as well as insulate him against criticism.

Other literature suggests the power of visions to sustain and comfort people in times of need. The title character of Isabelle Allende’s (1989) *Eva Luna*, for example, finds that when the external world overwhelms her, she can seek consolation in the creation of rich interior worlds. Eva Luna’s mother, Consuelo, helped Eva develop this power of imagination:

She manufactured the substance of her own dreams, and from those materials constructed a world for me. Words are free, she used to say, and she appropriated them; they were all hers. She sowed in my mind the idea that reality is not only what we see on the surface, it has a magical dimension as well and, if we so desire, it is legitimate to enhance it and color it to make our journey through life less trying. (p. 22)

These writers continue to point to ways in which visions can support and protect visionaries, allowing them not only to be strong in the face of difficulties, but even at times, to make great accomplishments in their communities.

The Dark Side of Vision

At the same time, as these writers also suggest, while vision has been lauded for its powers of insight and foresight, it has not necessarily been viewed as uniformly positive. Throughout time, the same philosophers who have linked vision and thought have also worried about people's potential for self-deception (Jay, 1993; see also Arnheim, 1969). For instance, while Plato lauded the ability of the eye to recognize the truth, at the same time he warned against the eye's potential for deception. In his "cave dwellers" analogy, the people misconstrue the shadows they see on the cave walls as representations of reality.

Even those authors who have celebrated the powers of foresight explored its darker sides as well. For instance, the novel *Eva Luna* reveals a certain wariness about vision; the main character's imaginary worlds sometimes seem so real to her that at times she can no longer distinguish between what is real and what is imaginary. She comments,

I began to wonder whether anything truly existed, whether reality wasn't an unformed and gelatinous substance only half-captured by my senses . . . At times I felt that the universe fabricated from the power of the imagination had stronger and more lasting contours than the blurred realm of the flesh-and-blood creatures around me. (pp. 187–188)

Eva's experience of the liminal world between fantasy and reality raises the question as to whether the same visions that provide strength and endurance can also overshadow the real world, leading to delusions and perhaps even madness. Similarly, Martin Dressler's experience suggests that there may be a limit to the distance between reality and vision that people will accept. Is there a point at which some visions may become too fantastic or too magical to be acceptable to others? Martin's final hotel, the apex of his dreams, is a rich, utterly expansive "living experience" in which one can go from visiting tropical jungles to taking strolls in city parks – all within the confines of the hotel. However, rumors about the hotel begin to develop: "about the many subterranean levels, which were said to house darker and more disturbing entertainments as one descended lower and lower" (p. 271).

Eventually, Martin begins to wonder whether perhaps he has dreamed "the wrong dream, the dream that others didn't wish to enter," yet he also acknowledges that "that was the way of dreams, it was only to be expected, he had no desire to have dreamt otherwise" (p. 288). In fact ultimately, the very insulation which is the source of his strength becomes the cause of his downfall. Visions for the future can also be so grand that they become impossible; and the imagination can captivate the visionary so fully that he or she can ignore critics who may possess important wisdom as well. The possibility of dreaming the "wrong dream" and the overwhelming vividness of Eva's fabrications help us understand the problematic aspects of vision. These works prompt us to remain wary of visions that compete with or even overpower lived experience, and of visions so insulated and protected that they contribute to the rejection of the wisdom of others.

Taken together, this review of vision in philosophy, literature, medicine, and health leads to a conception of vision that is deeply personal and individual, that

encompasses both foresight and insight, that links knowledge with emotions, and that is neither wholly positive nor completely negative.

Vision in Education: What Do We See?

When we turn to research and literature on vision in education, do we see some of the same themes? What can (and can't) we see from these broader conceptions of vision?

Vision as personal. Much of the initial work on vision in education was found in discussions of school or organizational visions. Vision was often represented as a kind of institutional mission or a “statement” that described the goals of a reform which then served as a focus to inspire and guide groups in their efforts (Evans, 1996; Louis & Miles, 1990). While a few educators argued for the central role of individuals’ visions in these change processes, visions tended to be seen as the purview of organizations and institutions or of school and organizational leadership (Fullan, 1993; Hammerness, 2001).

However, nearly a decade later, the growing literature on vision now also reflects an acknowledgment of and emphasis upon the nature, character, and role of teachers’ visions (Darling-Hammond, et al., 2005; Duffy, 1998, 2002; Feiman-Nemser, 2001; Gamoran-Sherin, 2007; Hammerness, 2001, 2003, 2006, 2008; Kennedy, 2006; McElhone, Hebard, Scott, & Juell, 2008; Shulman & Shulman, 2004; Turner, 2006, 2007). In many ways, our understanding of vision in education now does take into account the very personal and individual nature of vision. And as the number of scholars and educators who have written about teachers’ visions grows, some agreement about the role and nature of individuals’ vision is developing while some key differences also characterize the work – in particular regarding the focus and breadth, and distance from reality.

Within current discussions of individuals’ vision, some scholars conceptualize vision as a representation of one’s mission or ideals (Duffy, 2002; Hammerness, 2006). For instance, Duffy has argued that vision is a “conscious sense of self, of one’s work and of one’s mission . . . a personal stance on teaching that arises from deep within” (p. 334). He suggests that vision enables educators to have a sense of instructional control, which guides decision making as well as supports free thinking. I have defined vision as images of ideal classroom practice which represent a kind of “reach” for teachers (Hammerness, 2006). In my research, I have found that these visions are images of good practice, which may guide decision making about curriculum and students, may motivate and inspire them, and can direct their reflection on their practice. Some teachers have very broad visions that encompass goals for an entire community, while others’ visions focused upon an individual classroom.

Pekarsky (2007) has proposed a view of vision that consistently takes into account the impact vision can have for individuals as well as the larger community. What Pekarsky describes as “existential vision” is what he considers “a conception

of the kind of person and community that one hopes to cultivate through the educational process.” Pekarsky points out that while an existential vision may focus upon outcomes at either the individual level or that of the community, they are in fact deeply interrelated: “a conception of the kind of person we hope will emerge from the educational process is intimately connected with a conception of the kind of community that he or she will share in; similarly, the attempt to foster a thriving community of a certain kind necessitates the cultivation of individuals whose qualities of heart and mind are congenial to its requirements” (p. 426). He argues that visions are deeply concerned with the aims and goals of education, but for particular students or a particular community. He contends, “Most generally, then, an existential vision is an answer to the questions, *What is this enterprise all about? What is its raison d’être?*”

For other scholars, vision functions as a kind of “big picture” way of thinking in which educators identify their goals and purposes and design curriculum with such overall aims in mind. This conception of vision focuses closely upon the kind of curricular thinking in which individual teachers or educators might engage (Darling-Hammond et al., 2005; Kennedy, 2006; see also Zumwalt, 1989), yet involves a sense of moving toward and anticipating what is still to come.

Gamoran-Sherin has conceived of vision in a way that focuses closely in on the ability of educators to interpret their surroundings (2001, 2007). Her view of vision is based upon Goodwin’s notion of “professional vision” (1994). Rather than a conception of ideals that may aim an educator towards future practice, this framing of vision encompasses the ways in which professionals interpret, or make sense of, their current work. Based on Goodwin’s work, Gamoran-Sherin argues that educators develop a particular kind of perception that grows out of their experience as professionals in the classroom. Just as architects see elements of buildings instead of piles of stones and doctors recognize the relation among symptoms while others may recognize only individual complaints, teachers may interpret classrooms in ways that focus upon what and how students are learning. Her work emphasizes these professional means of examining, understanding, and interpreting the classroom that educators develop over time.

The work on the personal and individual visions has helped expand and further refine our understanding of vision. This growing body of research has pushed conceptions of vision from the organizational realm to a more personal and individual level. In addition, this research has also provided some empirical base for the conception of vision, through studies of the development, role and impact upon the thinking, and careers of teachers (Gamoran-Sherin, 2001, 2007; Hammerness, 2006, 2008; McElhone et al., 2008; Mercado, 2007; Turner, 2006, 2007).

The Foresight and Insight of Vision

Many current conceptions of vision – particularly those at the individual level – address the nature of vision as *both* foresight and insight – capturing the sense that

vision represents both one's understandings in the present and their ability to look towards and imagine future possibilities. For instance, Kennedy (2006) argues that in planning, educators look ahead to imagine their future practice. Teachers, she says:

...envision their lessons before they enact them. People who have studied teacher planning have noted that planning is not a linear process that moves from instructional objectives to instructional strategies but rather, a process of envisioning in which teachers "see" what will happen, where students will sit, what displays will be examined, what questions will be asked, and so forth. (pp. 206–207)

Yet Kennedy also makes clear that these visions are not overly utopian, unrealistic images, but rather, informed by their own deep understandings of practice, consistent with notions of vision as insight:

Although I use the term *vision* to describe teachers' plans, I do not mean this in the religious, idealist, or head-in-the-clouds sense of the term but rather, to mean that teachers have a feet-on-the-ground sense of purpose and direction and of actions that get there from here. They are plans—not plans that are developed in a logical or rational way but scenarios that are envisioned. Teachers may derive their visions from their ideals, but the visions themselves are not idealistic imaginings; instead, they are detailed plays with scenes, episodes, and characters all organized to lead to a particular conclusion. The plays that teachers envision are the teachers' solution to the problem of balancing among six different areas of concern and the problem of balancing among multiple and competing educational goals. (p. 207)

In my own studies, I have found that visions are quite powerful, concrete, and practical. Educators use vision as not only a guide for the future and a motivating image of the possible, but also a means of looking *back* and reflecting upon past work and purposes. These images of practice can function as a means of assessing and evaluating daily work, in light of one's goals and aims. In a way, we might argue that vision looks both ways, looking ahead to future goals and hopes, as well as looking back and reflecting upon successes, challenges, and changes one might make in practice next time.

What Don't We See?

There are also aspects of vision that are clearly represented in works of philosophy and literature but are markedly absent in much of the educational work on vision.

Vision's Darker Side. While many of these conceptions of vision do take into account the personal character of vision, as well as the ways in which vision encompasses current understandings along with future plans, few of these current educational conceptions of vision address the potential negative aspects of vision. *Having vision* is still almost universally assumed to be good. Yet in education, just as in literature and the real world, there is also a dark side to vision. For instance, if individuals develop an overly grand vision of what their classroom should look like that they cannot yet accomplish, the tension between vision and real practice can

cause feelings of deflation and discouragement. Educators may come to doubt their students, their own teaching, or even lose confidence in their visions (Hammerness, 2006).

Visions can also have blind spots, particularly with regards to culturally relevant teaching or working with children with special needs (LePage & Nielson, 2004; Mercado, 2007; Turner, 2007). As Turner (2007) discovered, some individuals' visions – even when supported in reflecting more culturally relevant practices – can remain “culturally neutral” regarding some aspects of teaching. She found that while her students perceived themselves as culturally responsive teachers, they did not envision classroom management practices in ways that were culturally sensitive and they also expressed some naive conceptions of culturally diverse parents. LePage and Nielson (2004) found that the visions of the student-teachers that they were preparing to work with children with special needs revealed some inconsistencies. For instance, while many of the new teachers they worked with imagined developing inclusive classrooms for all children with special needs, they also suggested that disabilities were obstacles to overcome and that the children viewed them that way as well. Their visions for children with special needs also did not emphasize helping the children develop new knowledge, skills, or understandings, but rather emphasized helping the children feel good about themselves (thus also implying that they felt all children with special needs had low self-esteem).

These issues can plague reform efforts as well (Fullan, 1992b, 2007). As Fullan (2007) argues, “. . . a certain amount of vision is required in order to provide the energy and clarity for promoting specific changes, but vision by itself can get in the way if it results in impatience, failure to listen, etc.” (p. 108) In addition, overly utopian organizational visions can discourage school faculty. Often reform efforts can promote ambitious and powerful visions of schooling: These visions can be profoundly motivating and inspiring, and can be central to guiding change efforts. However, if reform efforts fall short, participants can experience a sense of disillusionment and despair that can lead them to become jaded about the possible success of efforts in the future (Little, 1996). In short, vision may inspire, guide, and motivate. However, without the right kind of support (for individuals or organizations) vision can also deplete confidence, perpetuate stereotypes, and suppress alternative possibilities.

The relationship between emotion and understanding in vision. Although attention to the emotions of teaching is growing (Hargreaves, 1998, 2001), the emotional aspects of vision – particularly the more difficult emotions – remain underexplored in current conceptions of vision in education. More commonly, vision is depicted as a cerebral plan developed by rational thinkers (Evans, 1996). A few scholars have focused upon the motivational elements of vision, noting that powerful visions can inspire others to action. However, in relationship to vision, educators often experience emotions that are rarely addressed – care, passion, excitement, and joy. Duffy, for instance, suggests that vision arises from deep within “the inner teacher” and that it is infused with strong emotion (2002). He contends, “visioning is a matter of the heart and the spirit, of personal morality and passion. Outstanding teachers are

not only competent – they are passionate about what they mean by ‘doing good’ as teachers” (p. 334). This kind of passion for accomplishing positive work in schools or making change infuses the essence of many individuals’ visions.

At the same time, some educators may also feel strong *negative* emotions associated with vision – such as doubt, shame, guilt, or even anger; these more complicated emotions in particular receive little attention in research on vision. The vivid images and evocative language used by the teachers in my study of vision reveal the difficult feelings they experienced in relationship to their visions. One new teacher described such a “huge disconnect” between her vision of mathematics teaching and what she was currently able to accomplish that she referred to her vision disparagingly as “dreamland” and “an uneducated ideal” (Hammerness, 2006). Another new teacher’s stirring description of her vision as “trashed” implies the profound disappointment and regret she felt when she could not accomplish what she set out to do with her students. This teacher, Sarah, felt her vision had become an “illusion” and had come to the conclusion that she would simply “give up. There’s no way, it’s physically impossible to do it.” Another teacher, Felicity, described feeling vulnerable and depressed, remarking that, “on an emotional level, it’s really difficult to keep going.”

In sum, while vision may be a powerful cognitive representation of mission and goals, it is also infused with emotions – which can be positive, or negative, or even ambivalent, simple, or complex. Therefore, visions must be understood in relationship to these emotions. Educators may have visions that are intellectually solid and powerfully developed, but at the same time, the way they *feel* about those visions can have a strong impact upon whether or not they believe themselves to be successful in their work with children and in their work in schools.

The relationship between personal and institutional visions. Another area that remains underexamined in both literature and philosophy as well as in educational literature on vision is the relationship between individual and institutional vision. Only a few researchers have begun to explore connections between them and these scholars suggest that the failure to consider that relationship can be problematic. For instance, some researchers found that administrators can have a tendency to develop institutional visions either solely with the school leadership or with a small group of faculty (Evans, 1996; Fullan, 1993; Hargreaves, 1994; Leithwood et al., 1992; Louis & Miles, 1990). They then expect that, in turn, the entire faculty of teachers would buy into the vision – a particularly difficult and perhaps even shortsighted process. These scholars argue that in contrast to a view of vision as being developed at only one level of the system, visions may grow out of the work of teachers as well as administrators (Day, Harris, Hadfield, Tolly, & Beresford, 2000; Fullan, 1993). For instance, Fullan (1993) suggests that teachers’ personal vision – rather than being ignored or supplanted by the vision of a small group of leaders – can be the initial source of change and a broader mission. As he argues, “I cannot stress enough that personal purpose and vision are the starting agenda. It comes from within, it gives meaning to work, and it exists independent of the particular organization or group we happen to be in” (p. 13). In turn, organizational visions can serve to support and guide teachers’ visions. Rosenholtz (1989) found in her study of

effective schools (as opposed to low-performing schools), leaders engaged teachers in developing visions or articulating goals in ways that helped clarify instructional planning and long-term aims for teachers. Those visions helped direct the use of resources as well as guide school efforts towards shared aims.

Hatch (2009) points out that the content of the vision is not the only aspect that matters for school change. Rather, the *activities* in which individuals share their visions and develop common understandings of goals and purposes help to give organizational visions their power. In turn, vision building becomes a process in which the vision is regularly negotiated and examined rather than being a static mantra to which everyone adheres. We need to know much more about how these efforts develop and how school organizations manage this balance.

What Questions Still Persist?

While we pay increasing attention to vision in thinking about education, teaching, and school change, more than a few unanswered questions about vision remain. In this section, I focus upon four of those key questions that seem particularly pressing.

What constitutes a vision? While many might argue that vision is something that encompasses a set of practices or images, a vision may focus upon only one classroom or 1 day, while others may conceive of vision as a broad set of aims and goals which may be less particular. How broad, or how narrow can a vision be, and still be a vision? Relatedly, there are questions about whether individual visions and organizational visions differ in their content and nature. Individual visions may focus more upon practices, while one might imagine that organizational visions might center more upon processes, such as the development of relationships or a school culture. Organizational visions might also have a broader range – encompassing a set of overarching aims for teaching and learning – while individual visions might tend to be more narrowly focused. In addition, questions about the relationship between visions, missions, and goals still persist: In what ways are the nature and function of these three different, and in what ways are they similar?

Is vision static or dynamic? It is possible that an individual's educational vision may be something that is so deep and personally ingrained that the core elements, informed by one's worldview, cultural beliefs, religious ideals, and personal experiences, essentially remain the same. It is also possible that visions are constantly evolving, just as one's understanding of teaching and learning develops. These questions are relevant for institutional vision building as well. Some scholars have argued that the work of vision building and developing is a constant, dynamic process; while others propose a view of vision as something to be identified, shared, and then maintained over time, in order to guide reform efforts. More research needs to be done on the nature of vision in order to determine whether – and how – visions evolve or change over time or remain essentially the same and what impact this might have upon individual development as well as school change.

How is vision developed and sustained? There are questions about the most effective means of developing and sustaining vision. While teacher education seems

to be a potentially powerful site for laying the groundwork for vision, few programs seem to be able to address vision. Kennedy (2006) argues that this is due to the fact that institutions of teacher preparation are well suited for the transmission of knowledge but not for beliefs such as visions of good practice. A key support in sustaining a commitment to one's vision is the recognition of clear steps to take in order to get closer to one's vision. On the other hand, when educators are unable to see any progress or movement in relationship to their own visions of good teaching, they can become discouraged and begin to doubt their visions as well as their own teaching. Kennedy has pointed out that teacher educators do not necessarily have an agreed upon set of tools or repertoire of skills and strategies to teach new teachers, and therefore do not have a means of helping novices gradually build practices that will enable them to get closer to the kinds of practices they envision. While researchers have written about a small number of teacher educators who have addressed vision in their programs, we need to know more about how this is accomplished in more institutions and what practices are most successful.

Questions about sustaining vision become even more complex in this era of increased accountability. Classroom practices are changing in light of nationwide testing, often in ways that may not reflect individuals' beliefs about good teaching. Some studies, for instance, suggest that teachers tend to pay more attention to the content of the tests in their daily lessons and that teachers are also de-emphasizing content not on the test (Jones, et al, 1999; Koretz, Barron, Mitchell, & Stecher, 1996; McMillan, Myran, & Workman, 1999). Abrams, Pedulla and Madaus (2003) who surveyed over 4,000 teachers found that a substantial number of teachers in both high-stakes and low-stakes contexts reported that their statewide testing program had led them to teach in ways that ran counter to their own beliefs about good teaching practices. Given that teachers now prepare for schools in which they have less and less input in curriculum design, and even in aims and goals, educators and policy makers need to understand more about how such teachers can sustain visions of intellectual challenge and of exciting inquiry.

In terms of organizations, while many reformers acknowledge the role vision plays in school change, we need to know more about effective processes organizations use to identify and develop a shared vision among faculty. Fullan has argued that while vision is critical for an organization, "it is never an easy concept to work with largely because its formulation, implementation, shaping and re-shaping in specific organizations is a constant process." (1992, p. 37). How do faculty and individuals develop a vision, invite and support critical scrutiny, and still move forward to a shared organizational vision? Developing a school or organizational vision that leaves room for individual differences also poses challenges. We need to know more about how groups of educators can develop powerful visions that both allow particular teachers a sense of freedom and possibility, yet still have a strong influence upon their work and function as a set of shared aims and goals.

Sustaining an organizational vision also raises challenges: It is one thing to nurture and support an individual vision. Yet at a school level, when people (teachers as well as the population of students and parents) are constantly leaving and moving, maintaining an organizational mission can be particularly challenging (Hatch,

2009). How can schools pursue a mission over time that continues to guide and inspire its faculty when at the same time new teachers may be hired, who bring new ideas and their own visions of good practice? How can school organizations both acknowledge and involve those new participants and maintain a particular mission?

At the institutional level, questions about how to sustain a vision also seem particularly relevant in an era of increased accountability. As the life of more and more schools is evaluated and shaped in light of children's performance upon specific measures like standardized tests, it becomes more difficult to sustain a vision of an education that goes beyond preparing children for such assessments (McNeil, 2001). It may be increasingly hard for school organizations to be able to attend to aims and purposes that are not necessarily captured by curriculum mandates or state and national testing.

What difference can vision make? How important a role does vision play in the development of a teachers' work, in the work of an organizational change effort, or in the life of a school? And, do different kinds of visions (broad, narrow, close, distant) function in different ways or are some more powerful than others, and under what circumstances? Do they vary in their effects upon teachers and organizations? While more researchers have conducted empirical work on vision, we need to know much more about the role and function of vision.

In this period of stronger mandates around curriculum and testing, vision could serve as a means for educators and school faculties to help identify, discuss, and sustain attention to the larger purposes of education. Under these circumstances, it seems particularly difficult to be an educator with vision, and equally challenging to maintain an organization with a strong mission. We need to know more about how best to prepare educators for these challenges, as well as to support such schools, so that visionary educators can continue "to strive, to find, and never yield."

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