

center on reinventing public education





# **Quality Improvement and Performance Management in Schools:**

Lessons From Abroad

Ashley E. Jochim and Katharine Destler

ncsrp working paper # 2008-6



# Quality Improvement and Performance Management in Schools:

Lessons from Abroad

**DRAFT** 

Ashley E. Jochim and Katharine Destler

April 2008

NCSRP Working Paper #2008-6 Working Paper Series on Portfolio Management

Managing School Performance: A Working Paper Series from the National Charter School Research Project and the Doing School Choice Right Project

This paper is part of a collection of nine working papers that provides research-based practical guidance to authorizers across the whole range of authorizer practices, from building supply and selecting applicants, through oversight and support, to intervening in and closing failing schools. Developed through CRPE's "Providing Public Oversight" research initiative in partnership with Public Impact.

The views expressed herein are those of the author(s) and do not necessarily represent those of the Center on Reinventing Public Education, the National Charter School Research Project (NCSRP), the University of Washington, or project funders. NCSRP Working Papers have not been subject to the Center's Quality Assurance Process.

#### Introduction

Fifteen years of charter school growth and the more recent "No Child Left Behind" law (NCLB) have directed public attention to the challenges of educational quality and school accountability. The charter movement was borne out of a desire to relax the bureaucratic systems governing education while increasing accountability for academic achievement, values that form the basis of many NCLB provisions as well. Since the first charter school was established in Minnesota in 1993, the reform has diffused steadily if slowly; more than 3,800 charter schools serve almost four percent of the nation's school children (Lake, 2007). In the years since their birth, we have witnessed both the opportunities and challenges surrounding these semi-autonomous schools. As charter schools grow, questions remain about the ability of market mechanisms to ensure high performance and the relative success of charter and district-run schools (Betts & Hill, 2006; Hill & Finn, 2006; Dodenhoff, 2007).

Along the way, the quality crisis in education has only become more acute as public and charter schools alike struggle to meet performance standards. In the 2005-2006 school year, the National Education Association (NEA) reported over twenty-five percent of all schools failed to meet the adequate yearly progress (AYP) requirements of the No Child Left Behind Act (NEA, 2006). The consequences for such performance are not trivial, as district, state, and federal policymakers dole out sanctions to failing schools. In today's policy context of high-stakes accountability, performance management is the central issue facing school districts and charter authorizers.

Despite the heightened attention to the performance problems in schools, the vast majority of policymakers continue to rely on a limited set of tools for managing performance and improving school quality. Traditionally, school overseers have sought to improve quality by managing the classroom directly, centralizing control over school functions such as curriculum and teacher assignment. More recent standards-based reforms have moved beyond the management of educational inputs and instead have sought to re-align and deepen schools' incentives for performance. Two types of incentive structures have been emphasized in education. School accountability proponents advocate top-down standards, testing, and clear sanctions and rewards to shift attention from educational processes to specific learning outcomes. A second group has promoted market-based reforms, including charter schools, to improve performance through parental choice and competitive pressures. Neither of these strategies has proved very effective at improving school quality in either the aggregate or at the school level (Chubb & Moe, 1990; Peterson, 1999; Dodenhoff, 2007). There is little evidence these reforms on their own have improved school quality and some research suggests that they have perverse unintended consequences (Kowal and Hassel 2008; Booher-Jennings, 2005; Jacob, 2004).

To date, charter school authorizers have adopted few explicit quality improvement strategies at the system level, choosing to rely instead on market pressures and reforms at the school level to boost student achievement. Yet the experience of accountability and

market reformers suggests that performance measurement and incentives are not enough. Districts that are serious about school improvement may need to work with schools strategically and directly to help them manage their performance. Quality improvement systems are the set of tools district overseers use to improve school-level performance and educational outcomes. They require both *prospective* and *retrospective* efforts to assess, develop, and implement initiatives aimed explicitly at meeting and exceeding performance standards.

Despite decades of school reform in the United States, evidence of performance management in education is thin and portfolio districts underdeveloped. America's charter schools are too young, and educate too few of our students, to provide a full picture of performance accountability in action. To find an example of performance accountability working in a sustainable fashion on a large scale, one must look abroad. We identified the three public school systems considered in this paper: England, New Zealand, and the region of Victoria, Australia. Each of these school systems developed explicit quality improvement systems grounded in site-based autonomy, performance incentives and institutional mechanisms by which schools could evaluate their own quality and learn new approaches. England, New Zealand and Victoria reorganized their education systems by devolving decision-making authority to the school level, increasing accountability for school performance, and developing novel quality improvement tools. While none of the systems in our study is perfect, each came close to developing a performance-based oversight system.

Quality improvement requires three levels of organizational knowledge. First, schools must understand where they are—their current level of performance. Next, schools must know where they are going—what level of student achievable is desirable and feasible. Finally, schools must have some sense of how to get there—what strategies they can employ to improve student achievement and school performance. The literature on performance management and the experiences of the three countries we surveyed point to three promising strategies for school improvement: internal reflection and evaluation, collaborative planning between school and district staff, and benchmarking and information sharing networks. To some extent, these strategies have been tried in the U.S. For example, NCLB's requirement of public school report cards can serve as a basic benchmarking tool. However, few or no quality improvement strategies have been adopted at a large scale in the U.S. Ladd (2008) has suggested that standards-based reform to date has focused on measurement and paid inadequate attention to the question of whether schools (or districts, for that matter) have the knowledge or capacity to improve. What makes England, New Zealand and Victoria, unique is the scale and scope of their quality improvement systems, including not only incentives and mandates, but also the provision of human and financial resources to support quality improvement.

Two lessons are apparent from our study. First, neither hierarchical nor market-based strategies alone are enough to ensure quality improvement in schools. Districts and other school overseers must develop the capacity of each school to engage in quality improvement activities and they can do so, not by managing school processes and inputs, but instead by developing organizational structures that facilitate school-based learning.

Second, districts need to develop organizational structures to facilitate new relationships between districts and schools. Demonstrating poor performance is not enough; districts need to develop tools to diagnose the source of performance problems by assessing the effectiveness of governance and management systems in addition to the technical core of teaching. Without such data, schools are left scrambling to respond to signals (e.g., low test scores) that contain limited information.

# **Our Approach**

To better understand the alternative quality improvement strategies implemented by England, New Zealand, and the state of Victoria, Australia, we first reviewed the literature on performance management and quality improvement in the public and private sectors. We then engaged in a detailed study of the context of school reform in these three nations and the development of alternative strategies for quality improvement. As described later in this paper, these three school systems underwent significant reforms from the late 1980s through the early 1990s. To understand their experiences, we reviewed policy documents, consulted the research literature, and conducted semi-structured interviews with program managers and policymakers. In the course of this research, we asked the following questions:

- What barriers do school districts face in improving school quality?
- Why have so many reforms failed to overcome these barriers?
- What are alternative strategies for managing performance and improving school quality?

# **Traditional Approaches to Quality Improvement**

In the face of persistent low student achievement, school districts and states have traditionally sought to improve school performance by managing the classroom directly. Policymakers regulate teacher certification standards, length of the school day, class size and other educational "inputs." Curriculum is standardized and "reform packages" are purchased and implemented wholesale across multiple schools. The result of such reforms has been mixed, as gains in student achievement have been modest and many schools, particularly those in urban centers, continue to falter (Rowan, 1990).

In response to these stagnant educational outcomes, state and federal policymakers have adopted a range of tools under the umbrella of standards-based reforms, of which No Child Left Behind is the most prominent example. Standards-based reforms use external evaluation (with accompanying rewards and sanctions) to refocus attention on student achievement and change the behavior of students, teachers, and school administrators. The underlying assumption is that poor school performance results from a misalignment of incentives between those who set policy at the top of the organization and those who implement it (Hanushek, 1989). In other words, teachers, administrators and students simply lack clear motivation to improve.

Standards-based reforms typically realign incentives through two primary channels: hierarchical accountability and market accountability. In a hierarchical system, districts or states may sanction poor performance directly by withholding funding, replacing staff or reconstituting schools altogether. Schools also increasingly face market incentives or competitive pressures to change their practice to support student learning. These dual levers are central to both NCLB and charter school reform. Publication of school "report cards" helps parents to compare school performance, and families have the right under NCLB to exit schools labeled as failing and turn to alternate service providers. As schools of choice, charter schools must compete for students, and their funding depends on the number of students that they enroll. Thus, their survival is directly tied to parental satisfaction with their services. Yet they also face hierarchical accountability. Failure to meet the guidelines set forth in their performance contracts may result in school closure.

There is some evidence that teachers and administrators respond to organizational incentives (Hanushek & Raymond, 2004), but not always in the expected fashion (Booher-Jennings, 2005). Even if we ignore the implementation challenges associated with standards based reforms and assume that incentives systems work in the long-term (e.g., the most egregious failing schools close and are replaced), the short-term consequences may be more than districts are willing to bear, as students stagnate and aggregate test scores are weighed down by substandard schools (Kowal and Hassel 2008). For that reason, incentive-based approaches to quality improvement, like traditional regulation of educational inputs, may prove insufficient to overcome the barriers to substantive school reform.

# **Barriers to Managing Performance in Education**

The nature of schooling presents important challenges to the design and implementation of improvement strategies, whether top-down or incentive-based. The following barriers, while not unique to education, have a significant impact on the success of reform efforts:

- Contested notions of quality
- Team production and service provision
- Limited organizational capacity
- Culture of autonomy
- School heterogeneity

# Contested Notions of Quality:

Perhaps most importantly, educational outcomes are multifaceted and difficult to measure. Data quality is often poor, as a result of underdeveloped data systems, and test scores remain unconnected to long-term measures of student learning such as graduation rates and success in the workplace or college (Hamilton, 2007; Levin, 1998; Vertz, 1995). Thus, incentive systems in education often have perverse unintended consequences. For example, teachers and administrators may seek to improve aggregate test scores by concentrating their attention to the students at the passing threshold rather than those in most need of remedial assistance (Booher-Jennings, 2005). Disputes over the validity of educational measurements also undermine the political feasibility of large-scale reform. Without the cooperation of key participants, including teachers, parents,

and students, incentive systems cannot be effective in the long run. As Kowal and Hassel 2008, shows, school closure is politically risky and unlikely to succeed in the absent of stakeholder support.

Inputs are no less contested than outcomes. Debates continue to rage over the value of popular reforms such as class size reductions and teacher certification programs (e.g., Goldhaber & Hansen, 2007; Goldhaber, 2007; Goldhaber & Brewer, 2000; Darling-Hammond & Youngs, 2002; Hanushek, Kain & Rivkin, 1998; Hoxby, 2000) and it remains unclear what mandates like "a qualified teacher in every classroom" actually mean in practice (e.g., a certified teacher, a teacher with subject area knowledge, or a teacher with years of experience). Even when we know what attributes are related to effective schools, it remains unclear how schools can go from ineffective to effective (Purkey & Smith, 1983). Research on effective schools points to a whole host of school qualities associated with high performance, yet it is unclear whether such qualities cause high performance or are a *consequence* of high performance (Rowan, Bossert, & Dwyer, 1983). Furthermore, the habits of the highest-performing schools may not be easily or appropriately replicated. Managing an organization in decline is very different from managing one that is already high functioning (Quinn & Cameron, 1983). For example, districts often impose restrictions that reduce the autonomy of low-performing schools<sup>1</sup> yet research shows that freedom to act is critical to determining the success of turnaround strategies (Public Impact, 2007; Stecher & Kirby, 2007). In sum, input and process measures are poor proxies for performance measures.

#### Team Production and Service Provision:

An incentive program will only work if it targets those who can have an impact on a desired outcome. To state the obvious, it would make little sense to hold English teachers responsible for students' math performance. One challenge of using incentives in education is that multiple parties are responsible for any student outcome. "Snapshot" portraits of academic achievement mask the fact that a student's performance is the product of many exogenous factors, such as socio-economic status, parent's education, and his or her prior years of schooling (Evans, 2004; Desimone, 1999; Cotton & Savard, 1982; Greene & Winters, 2006). One way to focus incentives is to use "value-added" mechanisms that measure student improvement over a discrete period of time (Meyer, 1998). Doing so controls for a student's prior learning and background. Even so, isolating the discrete influence of a single teacher or even a school is far from simple, given that students receive instruction from multiple teachers with overlapping subjects (i.e., strong history instruction may improve a student's reading and writing performance) and are subject to influences outside the school day. A traditional response to the "team production" problem is to monitor processes rather than pay for outputs (Alchian & Demsetz, 1972). Yet, as we noted above, monitoring processes is infeasible and misguided as well, given the lack of consensus about best practice and measurement.

<sup>&</sup>lt;sup>1</sup> This can happen formally or informally. Oakland's Tiered Intervention framework is one example.

# Insufficient Organizational Capacity:

Measurement is not the only barrier to improve; capacity is also an issue. Even if they recognize the problem, schools may lack the resources, whether human, fiscal or intellectual, to respond to poor performance (Ladd 2007; McDermott, 2006; McLaughlin, 1987). Despite districts' efforts to ensure high quality inputs across schools, many continue to exhibit uneven capacities (e.g., teacher quality). There is a broad consensus that schools' needs differ according to the students they serve; this is one rationale behind the federal government's compensatory funding for schools with disadvantaged students. What's worse, we know now that all too often schools facing the most difficult problem environments receive the least resources including more inexperienced teachers and lower per-pupil expenditures (Roza & Hill, 2004). Thus schools with the greatest capacity needs may be the ones with the weakest capacity at the start.

#### Culture of Autonomy:

Schools are notoriously difficult to change. Historically, schools have operated with wide discretion; this autonomy has been further institutionalized through professional training programs. Thus, district interventions that seek to limit school autonomy have encountered resistance from teachers and school administrators who seek to maintain discretion over educational decisions (Tyack & Cuban, 1997; Elmore 1996).

A culture of autonomy is not necessarily a bad thing. Research on "bottom-up" policymaking by street-level bureaucrats suggests that there are benefits to allowing formal policies to be adapted to local circumstance (Lipsky, 1980; Elmore, 1980). But any policy at the district, state or federal level must take this autonomy into consideration. The current focus on performance has increased the stakes of maintaining semi-autonomous schools. As Hill and Lake (2002) have noted, systems of accountability will only bring results if schools have the freedom of action to experiment and try new approaches. Nowhere is this more clear than in the charter school context, where authorizers increasingly monitor and constrain decisions made at the school level (see Holland & Rainey, forthcoming; Lake & Holland, forthcoming; Kolwal, forthcoming).

#### School Heterogeneity:

The historical record of the ability of school district central offices to support school improvement is mixed (Bidwell & Kasarda, 1975; Chubb & Moe, 1990). One problem with the bureaucratization of school improvement is that not all schools under district oversight require the same changes. Some may need greater flexibility while others require greater oversight. Furthermore, given the lack of consensus about best practice, districts may benefit when heterogeneous schools act as laboratories of innovation. Thus, applying uniform policies across schools may not be as effective as developing more flexible approaches to school improvement.

#### **Alternative Tools for Managing Performance in Schools**

Given the limitations of most strategies to date, what tools can districts use to improve the capacities of individual schools to improve and to manage overall organizational

performance? The literature on learning organizations in other sectors suggests several ways of developing learning capability: knowledge acquisition and process improvement, experimentation and strategic planning, and learning through others (Rheem, 1995; Garvin, 1993). The first wave of research on learning organizations emphasized knowledge acquisition and process improvement. Tools such as total quality management (TQM), process (re)engineering, and professional development were developed to help businesses and public sector providers improve their competitive edge through investments in quality initiatives (Lawler, Morham, & Ledford, 1992). However, knowledge acquisition and process improvement proved to be insufficient in the long run (Panza, 1993; Pilkington, 1998). Rather than doing the same things better, sometimes the organization needed to do things differently. This required strategic planning, investments in new technologies and products, and more attention to innovation (Duck, 1993; Porter, 1996).

To identify promising strategies, we reviewed the public and private sector research literature on complex problems such as health care and human services. This review revealed three promising strategies for managing performance and facilitating quality improvement in education: (1) internal reflection and self-evaluation, (2) collaborative planning between school and district staff, and (3) benchmarking and information sharing between schools. Each redirects reform bottom up from the school to the district, and increases strategic planning and oversight flexibility at each level. These strategies tap into what Mark Moore has defined as the key managerial functions—managing upward, downward, and outward (Moore, 1995; see also O'Toole, Meier, & Nicholson-Crotty, 2005).

# Internal Reflection and Evaluation

Internal reflection and evaluation are key components of quality improvement in a performance-based oversight system. The capacity to learn from past performance is a critical determinant of future improvement. Learning improves adaptation and the ability to manage changing environments. Without self-assessment of key capacities, processes, and their relationship to performance indicators, organizations will find it difficult, if not impossible, to engage in quality improvement.

The current wave of standards-based reforms speaks of "data-driven decision making" and "evidence-based practice." Yet despite the increased accessibility of performance data (e.g., test scores, drop-out rates, etc.), school-level analysis remains impoverished (Marsh, Pane, & Hamilton, 2006). Schools are inherently complex organizations, involving the participation of many individuals including teachers, administrators, students, parents, and community members. Despite this, administrators often limit their attention to just one or two indicators. Nontraditional indicators of performance such as staff morale and community satisfaction may be critical components of school success, but these indicators are rarely part of school or district improvement efforts.

By focusing on both the processes *and* outcomes of management, districts and schools can better identify and address performance problems (Marsh, Pane and Hamilton 2006). As Marsh et al. argue, data alone is not enough. "Rather, once collected, raw data must be

organized and combined with an understanding of the situation (i.e., insights regarding explanations of the observed data) through a process of analysis and summarization to yield *information*...[or] *actionable knowledge*" (p. 3). *Outcome data is best understood in the context of the process mechanisms that brought those outcomes about.* 

# Collaborative Planning Between School & District Staff

Researchers in education and other sectors have long recognized the importance of alignment between oversight agencies and the organizations that they oversee (Pratt and Zeckhauser; Tyack and Cuban, 1997). Collaborative planning and oversight is one way to align strategic goals and practice at the district and school level.

This strategy is emphasized by research on supply chain management and multilevel organizations. As organizations have grown in size and complexity, it becomes infeasible to monitor inputs and processes. Corporate headquarters and other hierarchically oriented organizations can add value to their services by investing in 'knowledge-direction' activities and flexibly exploiting the constraints, opportunities and knowledge that exist across the organization (Foss, 1997) Recent literature has found that organizations that work collaboratively with their providers are more competitive in the market. (Slone, Mentzer, & Dittmann, 2007; Womack, Jones, & Roos, 1990). The success of Toyota and Honda, among other firms, highlights the value of developing strategic partnerships with providers rather than exclusively focusing on cost control or process oversight (Liker and Choi 2004; Womack, Jones and Roos 1990).

When reforms are mandated from the state and district level, they often fail to address the constraints (and opportunities) that exist at the school level. For example, blanket definitions of a "highly qualified teacher" may not account for the fact that some schools have employed highly effective teachers with nontraditional backgrounds. Collaborative planning can result in policy that is more easily implemented at the school level. Furthermore, because schools operate with a culture of autonomy, bottom-up strategies like collaborative planning may fit better with schools' existing organizational cultures. Furthermore, by engaging school level staff in performance management, district overseers may be able to build more support and legitimacy for reform efforts.

#### Benchmarking and Information Sharing Between Schools

The final strategy identified in the performance management literature in other sectors is benchmarking and information sharing within networks of organizations. David Garvin (1993) defines a learning organization as, "an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights." Knowledge acquisition requires the ability to look towards other organizations. This can help organizations overcome "paradigm blindness," or the inability to see beyond current practice to develop new strategies for improvement. Benchmarking, along with strategic partnerships and other and information sharing tools help an organization to evaluate its practice (including inputs, processes, and outcomes) in relation to its peers. (Helper, MacDuffie, & Sabel, 2000; Uzzi, 1996; see also Sabel 2004).

Benchmarking and information sharing between schools facilitates the spread of innovations and best practice by establishing horizontal connections among schools. Rather than waiting for directives from a district authority, schools with strong horizontal ties and the proper incentives can directly seek out successful practices from schools that it knows well and trusts. Some early studies in education suggest that networks can facilitate growth in school-level capacity (Kahne, O'Brien, Brown, & Quinn, 2001; Wohlstetter, Malloy, Smith, & Hentschke, 2003), but more research is needed to understand the benefits of such approaches.

These concerns suggest that alternative approaches to performance management may offer more traction for overcoming the barriers to improving school quality, particularly with the movement towards decentralized networks of schools gaining ground. What can we learn from examples of school districts that have experimented with these approaches?

# Reform Movements in England, New Zealand, & Australia

The three school systems considered here underwent reforms that significantly altered the governance of education. Like many public sectors around the world, England, New Zealand and Australia have embraced a model for public education that focuses on flexibility, innovation, and customer service. While important differences exist between the three cases, all emphasize the following guiding principles:

- Devolution of managerial authority to the school level
- Increased accountability for educational outcomes
- School choice and competition for student enrollment

None of these principles is foreign to education reformers in the United States. Part of what makes these cases unique is the sheer size of their reform efforts. Unlike the U.S., with its loosely federated system, these nations have highly centralized policymaking authority over education. As a result, policymakers were able to implement a wide variety of reforms simultaneously, unconstrained by the constellation of political forces that operate in more decentralized governments like the U.S (Barber, 2007).

As reformers in the U.S. are beginning to discover, policymakers in the three case countries found that autonomy, high stakes accountability, and school choice were not, on their own, sufficient for substantive improvement (Fiske & Ladd, 2000). These nations sought out new strategies to improve the quality of struggling schools: evaluation, collaborative planning, and information sharing networks. The following section provides a background on the reforms and the context for which these alternative quality improvement strategies were developed. Table 1 provides an overview of the reforms in each nation.

Sable 1. Education Reforms in England, New Zealand, and Victoria						
	England	New Zealand	Victoria			
Devolution	X	X	X			
National Standards	X	X	X			
National Assessment	X		X			
School Choice	X	X	X			
<b>External Oversight</b>	X	X	X			
Sanctions	X	X				
Pay-for-Performance	X	X	X			
Self-Review	X	X	X			
School Networks	X	X				

Source: Author collected.

# England

The Department for Children, Families and Schools (formerly the Department for Education and Skills) is responsible for training teachers, overseeing a national curriculum and maintaining standards. Traditionally this role was shared with local education authorities (LEAs), which were responsible for funding and running schools. Starting in the late 1980s, however, England began to shift authority from the locality level to the school level, laying the groundwork for a system of performance-based oversight.

The 1988 Education Reform Act (ERA) dramatically altered managerial responsibilities in education. Key elements of this reform included:

- Devolution of hiring and budgetary authority to individual schools;
- Installation of a national curriculum:
- Market-based accountability through the publication of "league tables" and limited parental choice.

ERA also introduced elements of performance-based oversight. The national curriculum was accompanied by a series of grade-level standards in an effort to standardize educational expectations across schools. School performance on exit exams was publicized directly to parents and community members, shining the spotlight on the weakest performers. Additional accountability was introduced in 1992, with the creation of the Office for Standards in Education (Ofsted), an independent school inspectorate agency under the direction of Her Majesty's Chief Inspector. Ofsted inspects schools on a four-year cycle, and thorough reports about schools' curriculum and pedagogical practices are made available to the public.

Finally, ERA opened the door to school choice, giving parents the option to express school placement preferences. While critics have pointed out limitations to parental choice in practice (such as the fact that schools with waiting lists may engage in informal selection according to student ability), the parental choice option did draw attention to disparities in school quality (Whitty & Edwards, 1998).

#### New Zealand

In 1989, New Zealand shifted organizational control over the nation's school system from the Department of Education, a large bureaucratic agency, to a set of locally elected boards of trustees modeled after corporate governance systems. Each board of trustees was charged with managing one school and drafting a charter or contract with the newly created Ministry of Education. The school financing system was reformed so that individual schools received block grants, which they could utilize as they saw fit. The reforms eliminated all layers of governance between the central government authority and actual schools to locate management as close as possible to the point of implementation.

These reforms dramatically changed the nature of education in New Zealand. The new 'self-governing' schools compete for students and are independently managed by their board of trustees. The principal acts as the chief executive officer and manages all the day-to-day activities of the school. Now, 73 percent of all decisions regarding education are now made at the school level. This is higher than any other OECD country except Ireland (Education Review Office [ERO], 1994)

One of the key tenets of the reforms was increased accountability for performance, which was exercised through both the school community (i.e., parental choice) and the newly established Education Review Office (ERO). The National Administration Guidelines and New Zealand Curriculum Framework issued guidance for administration and curriculum and established a broader set of National Education Goals. The impact of the National Education Goals may be limited, however. Despite a national system of curricular standards, no reliable method of tracking student progress at the school level exists.

### Victoria, Australia

Enacted in 1993, the Schools of the Future reforms devolved power from the central government to local schools so that schools would have greater flexibility in the use of educational resources and be more responsive to the community. The reforms paralleled structural changes in New Zealand and England. The major principles articulated by the government included:

- Customer driven provision of public services;
- Accountability for results;
- Devolution of authority and reduction in central bureaucracy; and
- Better management of public agencies.

In practice, these principles led to a substantial restructuring of public education. The role of school councils, which had overseen Victoria's schools for decades, was expanded to include additional policymaking and budgetary authority. In exchange, councils were held accountable to the central government and their communities for student learning

outcomes (although, the implementation of sanctions wasn't practiced). Similar structural changes took place within schools. New contractual arrangements for principals and teachers included regular performance reviews and professional recognition programs to reward high-performing staff. Professional staff were simultaneously empowered and held to new standards. For example, principals gained greater control over their schools' internal dynamics, but they lost lifetime tenure.

Prior to the reforms, schools had undergone periodic inspections by the government appointed inspector in the Ministry of Education. The new review process integrates annual self-reviews, based on the school's charter with comprehensive external reviews. In this way, the new external review process aims to verify data in the self-review and provide strategic advice, rather than act as a compliance process. Every four years, schools report on their progress and present a revised Strategic Plan to an external review group. The self-reviews emphasize learning outcomes measured according to government-developed Curriculum and Standards Frameworks that specify learning goals at all grade levels. The Learning Assessment Program assesses students' attainment of these goals, and student performance is central to schools' self-reviews. External reviews are adjusted to according to schools' past performance and need. Schools undergo one of three types of review: (1) an informal negotiated review, (2) a continuous improvement review, and for schools significantly underperforming, (3) a diagnostic review. Each level of review is distinguished from the next by the intensity of fieldwork conducted by the Ministry and the overall level of scrutiny the schools' self review is given. These external reviews aim both to verify information provided by schools and to provide an outside perspective on the school goals and progress. The reviewer makes recommendations to schools, but these recommendations are non-binding and serve only to assist in school planning.

# **Alternative Tools for Improving School Quality**

As the research about quality improvement system suggests, schools and the bureaucracies that oversaw them had to develop new tools to manage performance and develop school quality. Each school system supplemented more traditional performance management strategies with a common set of alternate tools for quality improvement: self-review/strategic planning and collaborative networks. We discuss the specifics of each tool below.

# Self-Review & Strategic Planning for Quality Improvement

Self-review and strategic planning promotes a more nuanced understanding of school quality. Rather than relying on a one-size-fits-all approach, schools develop their own goals within the regulatory context and in consultation with their communities. These goals are multifaceted and operationalized through a range of instruments including staff opinion, student assessments, and financial audits. Next, goals are connected with broader organizational processes including professional development, curricular programs, and managerial practices.

England, New Zealand and Australia each sought to tap into and enrich school-level capacity by institutionalizing the process of self-review. In the cases of New Zealand and Australia, these systems were introduced as an integral part of the original reform, and then revised to address growing needs of the system. In England, self-review structures have emerged more slowly. Ofsted only recently adapted its inspection process to weigh self-evaluation more heavily in the overall evaluation. Their experiences can provide guidance about both why self-reviews can be valuable and how they can be integrated into a quality improvement system more broadly.

Perhaps the greatest advantage of self-review systems is that they enable (and, when necessary, force!) schools to reconcile national standards with their particular context. In New Zealand, schools submit annual strategic plans to the Ministry of Education, linking their particular challenges and goals to national guidelines and standards. For example, a school serving a significant number of Maori and Pacific Islander students (the predominant minority groups in New Zealand) may adopt goals relating to integrating language and cultural programs into the curriculum. Thus schools are provided the flexibility to create unique curricular programs that fit their communities needs and desires, while agreeing to meet national standards and/or curriculum goals.

At the same time, the experience of these three countries highlights the importance of considering multiple measures and levels of performance. In Victoria, schools are directed to articulate goals in three areas: student learning, student pathways and transition (i.e., movement between grade levels), and student engagement. These are analogous to England's "core systems", described below. In New Zealand, schools must not only consider their teaching but also assess broader governance and managerial systems and consider their impact on each other and ultimately on student learning. New Zealand went beyond assessing academic performance and developed a framework for schools to consider outside environmental factors to determine their need for additional social or health services

As part of that process, self-reviews can (and did, in the case of our three study sites) focus schools' attention on specific performance data. As part of the self-review process, all three systems required schools to survey multiple stakeholders, including parents, teachers and students and to reconcile such qualitative information with more quantitative data such as student performance on national assessments. In Victoria, for example, all schools must submit annual strategic plans that assess both students' educational outcomes and processes related to outcomes (such as staff morale and relationships between school councils and the principal). They assess performance through an analysis of student achievement data, staff opinion, enrollment, parent opinion, and other indicators of general school quality. By focusing school leaders attention of school-specific data, policymakers in each country seek to ensure that the self-review process extends beyond the mere identification of vague educational goals.

Next, self-reviews can facilitate organizational learning at the school level. A New Zealand Ministry document notes, "plans and reports are the visible evidence of the collection and evaluation of information, and the goal-setting, decision-making, and

resource allocation that goes into running an improvement focused school" (ERO, 2007). In other words, the self-review process can help build internal capacity for change, and the documents that each school submits provide potential evidence of a school's organizational learning.

Learning is not a guaranteed outcome of school assessments or self-review. In fact, critics of Early Ofsted inspections (which framed self-evaluation as a way for schools to make sense of their external review) faulted the process for emphasizing accountability at the expense of school development (Plowright, 2007). That is why the particular structure of a self-review process is so important. Self-reviews as implemented in our three cases build organizational capacity by increasing the quality of information available at the school level and developing the expertise of staff to identify solutions. Ministry officials in England note that some school leaders, accustomed to a traditional, top-down managerial system, have found it difficult to adapt to a decentralized system with greater autonomy and accountability. Self-reviews provide a structured means by which school personnel learn to assess their own strengths and weaknesses and seek out potential solutions. In doing so, self-reviews better meet the needs of the heterogeneous problems individual schools face that do standardized top-down reforms. The specific challenges any one school faces may be different from the next. Some may need to reallocate staff to meet instructional priorities while others may need to establish better community relationships. Regardless of the problem, self-reviews provide a clear process by which schools can identify problems and develop strategies to solve them.

Substantive self-review can also enrich the accountability process. In both Victoria and England, the self-review is designed to prepare the school for an outside inspection, and the content of the self-review forms the basis for the external review. In England, for example, schools complete a thorough self-evaluation form (SEF) prior to each external visit from Ofsted. The SEF focuses schools' attention on two "core systems": 1) student achievement and standards and 2) students' personal development. Through the selfreview, schools collect and report on feedback from parents, teachers, students and other stakeholders to assess the quality of educational provision and the capacity of their leadership. The SEF guides external inspections in three ways. First, school inspectors review a school's SEF, along with previous evaluations before they begin their evaluation. Schools can thus influence an inspector's focus of inquiry by the topics introduced in the self-review. Next, the self-review allows inspectors to evaluate not just a school's absolute level of performance, but its *capacity to improve*. Towards that end, inspectors look for alignment between a school's self-review and the practices they view in the site visit. Victoria is similar in its emphasis on using the external review to validate the content of a school's self review.

Importantly, New Zealand's schools must clearly document their current level of performance and articulate a strategy for achieving their goals. Self-reviews assess governance, management, and teaching systems and the linkages between each. Schools collect performance data by surveying parents, teachers, and principals and reviewing student performance (as measured by national assessment and teacher appraisals) and policy documents. These data are then used to identify areas in need of improvement and

specific strategies and goals to work towards. Environmental factors affecting school practice are also assessed to determine the need for social or health services in the school. Once they have established a baseline, school leaders outline their objectives and put forth a process for meeting those objectives, identifying the parties responsible for each step in reform

Likewise, in Victoria, the school strategic plan (a charter-like document drafted by the school) outlines performance goals and an implementation plan that guide the review process. One key feature of the self-review process is the integration of baseline performance, performance targets, and implementation guidelines that indicate the steps to be taken to move the school from the baseline to the target. This is an explicit component of the self-review process, enabling administrators to *assess, develop, and initiate* performance goals.

Victoria has revised it self-review process to emphasize continual quality assessment. Rather than draw off both the school charter and school strategic plan, the school charter *became* strategic plan, providing a single source of documentation for the school's mission, performance, and operational systems. The goal of this reform was to clarify the review process, better engage the school community, and prioritize student outcomes. Rather act as a static document, the school charter became a "living" document updated continually to reflect changing conditions.

During this time, parallel reforms were established in England. In line with the Education Ministry's long-standing belief that external inspection should be a mechanism for school improvement, self-review has always been a part of the school inspection process. Early Ofsted inspections framed self-evaluation as a way for schools to make sense of their external evaluation, rather than as document that carried weight in a school's overall rating. Critics of the original inspection framework faulted the process for emphasizing accountability at the expense of school development (Plowright, 2007).

In 2005, England's independent inspectorate Ofsted substantially changed its inspection procedures to place greater emphasis on self-review. This new inspection framework requires schools to complete a thorough self-evaluation form (SEF) prior to each external visit from Ofsted. The SEF focuses schools' attention on two "core systems": 1) student achievement and standards and 2) students' personal development. Through the self-review, schools collect and report on feedback from parents, teachers, students and other stakeholders to assess the quality of educational provision and the capacity of their leadership. The SEF guides external inspections in three ways. First, school inspectors review a school's SEF, along with previous evaluations before they begin their evaluation. Schools can thus influence an inspector's focus of inquiry by the topics introduced in the self-review. Next, the self-review allows inspectors to evaluate not just a school's absolute level of performance, but its *capacity to improve*. Towards that end, inspectors look for alignment between a school's self-review and the practices they view in the site visit.

Self-reviews address the complexities of service provision in education by explicitly acknowledging the organizational (e.g., management/governance) processes that affect performance. The connection between goals and processes are not mandated from above but rather developed in the context in which they originate. This key step is one that is all too often missed in education reform in the U.S. Policymakers at the federal, state, and local level have chosen to either force one-size-fits all inputs on to all schools in their reach through such programs as teacher certification, professional development, and curriculum standardization *or* left the processes untouched and instead chosen to mandate narrow goals and standards that all schools must meet.

Even with a self-review process in place, some schools in these nations continued to struggle in the face of the problem environment they faced. Our research suggests that self-reviews are an important tool for both the school themselves and their overseers. However, some schools, particularly those serving the most disadvantaged students, continued to face uneven capacities to improve. As a result, these nations were forced to develop other strategies to improve their managerial capacities to identify problems and develop solutions. With this, we turn our attention to the second quality improvement tool that two of our three cases developed, collaboration through inter-school networks.

# Build Capacity for Improvement through Collaboration & Networks

By devolving responsibility for strategic planning, these educational systems helped to develop the diagnostic capabilities of the schools. Yet some schools don't lack diagnostic information but rather strategies for improvement. Both England and New Zealand developed innovative collaborative arrangements to facilitate knowledge sharing among schools.

There are several aspects of collaborative school networks that make them particularly useful for dealing with performance issues. One the one hand, inter-school collaboration enables knowledge sharing activities. Diffusing best practice is an important component of both England and New Zealand's school reform strategy. For example, the Specialist School applicants must include an outreach plan that outlines how they will share their subject matter expertise and additional resources with other high schools and primary schools in the area.

More fundamentally, however, collaboration enables capacity building by helping to build and sustain school development efforts. In England, the Trust, in partnership with the Education Ministry, uses networks to improve lackluster performance in schools. Raising Achievement, Transforming Learning (RATL) is a project funded by the national government and managed by the Trust. The program targets "coasting" schools—those with mediocre student performance that is static over time. These schools are paired with more successful schools that have similar student demographics but are located some distance apart (to minimize schools' competition over students). Paired schools attend conferences together, and school leaders take part in site visits as well as ongoing communication. Participation in the program is voluntary for both struggling and model schools. High uptake rates suggest the success of RATL's monetary and purposive

incentives (the program is provided free of charge for struggling schools, and model schools are given a financial bonus).

The Education Ministry in England has proposed a more dramatic form of network learning for schools that chronically fail to meet expectations. Under "National Leaders in Education/National Support Schools," (NLE) school heads with demonstrated leadership capacity take on additional responsibility for leading reform in a struggling school that has similar demographics. NLEs conduct intensive site visits and consult with the resident heads of the struggling school to evaluate school culture and develop a strategic plan for improvement. Beyond simple mentoring, the NLE program transfers responsibility and accountability for improvement to a new leader who, to some extent, effectively leads two schools at once.

Both the RATL and NLE programs stem from an observation that schools with similar demographics face similar challenges but often achieve strikingly different results. David Crossley, head of the RATL program, noted that the program helps schools "learn to do what they are already doing." Most of the struggling schools are already trying to implement most of the reform strategies suggested by the program; however, they have failed to implement them effectively. The underlying theory of action is that "coasting" or "struggling" schools will benefit from sustained collaboration with more successful partners around a common set of practices.

In New Zealand, the Ministry of Education established a set of cluster intervention initiatives (CII), which brings together schools with mediocre performance facing similar student populations. Like the NLE program in England, CII targets low-performing schools, many of which have declining enrollments and disadvantaged student populations, including high proportions of minority and low-income students. Management teams in the schools meet to evaluate their common problems. These evaluations inform future collaborative initiatives to improve school performance, such as the design of new professional development programs and/or the establishment of a social service office in the schools. The Ministry of Education allocates budgetary resources to fund the collaborative initiatives and develops the new programs that schools identify to improve quality.

One initiative in this program, Achievement in Multicultural High Schools (AIMH), brought together eight low achieving schools to increase their enrollments, improve student achievement, and expand the capacities of the school to engage in self-governance. At the outset of the project in 1996, the Ministry of Education began collecting data from students, teachers and support staff, trustees, and parents. After extensive analysis of the data, the Ministry issued a report detailing the common problems these eight schools each faced. Based on this information, the eight schools collaboratively developed a strategic plan to address their issues including the development of diagnostic tests in key subjects, improving access to information technology in the schools, and the development of new curricular and assessment programs (AIMH Strategic Plan 2004). Individual schools also had the opportunity to

develop new initiatives such as specialized professional development programs, tutoring centers, and health programs.

In a similar vein, the Ministry targeted seven secondary schools in Christchurch to participate in the Schools Making a Difference (SMAD) cluster intervention. Like AIMH, the Ministry supported data collection and analysis efforts. Each of the schools faced similar problems: declining enrollments, low achievement, and negative public perception (Velde, 1999). The schools then engaged in collaborative planning and development, identifying areas of improvement, setting goals for the future, and developing new initiatives. According to the participants, the collaborative effort was a resounding success. While the additional funding the Ministry provided no doubt aided the endeavor, the peer support was also critical. As one Ministry official noted, "There is greater collegiality between them. Having the support mechanisms and some additional resourcing has enabled schools to have the confidence to try new things" (Velde, 1999).

While each of these programs sought to increase student achievement, they also targeted governance, management, and other structural aspects of school improvement. More recently, the Ministry initiated the Extending High Standards Across Schools (EHSAS) program to improve student achievement through inter-school collaborations. Thirty-one clusters are participating in the program. A key goal of EHSAS is to develop the knowledge base of effective schooling models through the professional networks within and between schools.

Cluster intervention initiatives like AIMH and SMAD in New Zealand and the RATL and NLE initiatives in England were borne out of the implementation challenges schools with limited human resources faced as they became self-governing. These programs' central goal is to improve student performance by developing the capacities of individual schools to self-govern.

The two nations differed in their specific approach to collaborative networks, however. Unlike England's approach to collaborative interventions, New Zealand relied on peer support in conjunction with Ministry support. The Ministry assisted schools with data collection and problem identification and later, after schools identified a strategic plan, provided financial resources to support the collaborative initiatives. Both the peer and mentor collaboration models developed by England and New Zealand show promise to develop the capacities of schools to improve their quality improvement strategies.

# The Potential of Alternative Tools to Improve School Performance

The policy tools that these cases developed—self review and collaborative networks— as well the underlying strategies they rest upon show promise for overcoming traditional barriers to reform. Table 2 documents our comparison of traditional and alternative approaches to quality improvement in relation to the barriers we identified earlier in our review of the research literature.

Table 2. Do varying approaches to QI overcome the barriers?								
	Contested Insufficient							
	Notions of	Team	Organizational	Culture of	School			
	Quality	Production	Capacity	Autonomy	Heterogeneity			
Traditional Approaches								
Regulation	No	Maybe	Maybe	No	No			
Hierarchical Accountability	No	No	No	No	No			
Market Accountability	Yes	No	No	Yes	No			
Alternative Approaches								
Internal Reflection	Yes	Maybe	Maybe	Yes	Yes			
Collaborative Planning	Yes	Maybe	Yes	Yes	Yes			
Info Sharing Networks	Yes	Maybe	Yes	Yes	Yes			

Regulation, hierarchical and market accountability all pose serious limitations for overcoming the barriers to quality improvement. Regulation and hierarchical accountability fail to acknowledge the multifaceted nature of educational quality and the many processes that relate to the achievement of students. Market accountability, on the other hand, is more flexible but ultimately fails to recognize the important limitations on school level capacity development.

Alternative quality improvement approaches develop both the flexibility and resources required to manage school performance. Performance evaluation about the reforms in England, Australia and New Zealand is limited, and beyond the scope of the paper. While we lack explicit performance data on how these reforms impacted school quality, our interviews with program staff and review of the existing literature suggest these approaches show promise for districts struggling to develop performance-based oversight.

Several studies suggest that information-sharing networks can contribute to an increase in school quality and student learning. An independent evaluation of England's RATL program found that schools in each of the first three cohorts improved their pass rates on national exams at levels that exceeded national trends. This evidence was corroborated by qualitative evidence; in interviews, school leader participants credited the program with increased organization capacity as well as heightened student achievement (Hargreaves et al. 2006). A mid-term evaluation of New Zealand's cluster intervention, Achievement in Multicultural High Schools, suggested that student achievement was up significantly,

school enrollment trends had improved, and governance systems were performing more effectively (Hill & Hawk, 1998).

The evidence on self-review processes is more limited. According to the Education Review Office in New Zealand, poor governance and planning systems are highly related to lower student achievement (ERO, 2007: 4). On the other hand, "well-managed and well-led schools will have a clear purpose, use analyzed student achievement information to underpin planning and self-review processes, and direct resources towards the desire goals of improving student achievement" (*ibid*).

Neither of the tools we considered here is a panacea, however. The experience of Victoria shows the risks of relying on "alternative tools" alone. Some students remain stuck in substandard schools with few exit options because alternative providers remain overenrolled or inaccessible to lower-income families. Quality improvement efforts must be coupled with incentives so schools develop both the will and the capacity to learn. And, sometimes, government intervention is the only responsible option (Kolwal, forthcoming).

In isolation, each of these tools can help schools and districts diagnose problems and develop a response. However, none, on its own, is sufficient for systemic reform. We see incentive systems as a core component of a performance-based oversight system, the component which links alternative quality improvement systems with the oversight needs of the district. For example, self-review and networked learning each offer schools an opportunity to improve; however, there is no guarantee that schools will implement needed reforms. Coupled with traditional performance management strategies, these tools represent a comprehensive approach to quality improvement, one that builds upon the capacities of individual schools and enables inter-school collaborations and knowledge-sharing.

#### Conclusion

Two tools—self-reviews and collaborative networks—emerged from our study of England, New Zealand and Victoria, Australia. While self-review and school networks are frequently elements of voluntary school reform efforts, neither has been implemented at scale in U.S. school districts.

The self-reviews implemented by the three nations in this study had elements often left out of analogous "school improvement plans" in the U.S. First, they allowed schools to develop their own goals and performance benchmarks. This stands in stark contrast to school improvement plans in the U.S. where performance standards are forced upon the school. Second, they emphasized multiple measures of school quality, including student achievement, staff morale, community engagement, and others. In doing so, the self-review process explicitly acknowledges the multidimensional nature of school quality. Finally, while the self-review system is a core component of the accountability and oversight system, it also represents these nations' commitment to engage in *collaborative* 

*planning*. In each of the cases, self-reviews were not merely internal school documents but shared tools to inform the practice of local or national authorities.

Similarly, the collaborative school networks developed in these nations were notable undertakings. Partnership models, increasingly popular in the private sector, became a central component of the reforms aimed at schools with the weakest performance records. These efforts facilitated information sharing among schools and were backed by the human and financial resources of school overseers. While evidence is limited, and initial evaluation of collaborative school networks in England suggests that they can be a valuable tool for building organizational capacity and improving school quality.

By creating "living" organizations that adapt to their changing environmental conditions, districts can go beyond the "one best system" that has dominated educational governance for decades. The strategies identified here are inherently flexible and make a great deal of sense in decentralized school systems where autonomy is prized and closely guarded. However, they could also easily be utilized by traditional, centralized public schools.

To implement these strategies in more centralized systems, districts would need to forge new relationships with schools, emphasizing partnership models rather than either command-and-control or arms-length relationships. Self-review and networking may only be effective capacity-building activities if schools possess the autonomy to adapt their practice and develop programs that meet their individual needs. Even with information on what strategies are required to improve organizational performance, there is little a school can do in the face of extensive regulatory requirements and other constraints. If districts are serious about increasing the capacity of schools to respond to their organizational problems, they need to ensure that schools have flexibility.

#### References

- Achivement in Multicultural High Schools Initiative. (2004). *AIMHI Strategic Plan*. Retrieved 11/26/07, from <a href="http://www.aimhi.ac.nz/files/initiatives-detail.asp?InitiativeID=16">http://www.aimhi.ac.nz/files/initiatives-detail.asp?InitiativeID=16</a>.
- Alchian, A. A., & Demsetz, H. (1972). Production, information costs, and economic organization. *American Economic Review*, 62, 777-795.
- Barber, M. (2007). *Instruction to Deliver: Tony Blair, Public Services, and the Challenge of Achieving Targets*. London: Politico's Publishing.
- Berends, M., Bodilly S., & Kirby, S.N. (2002). Looking back over a decade of whole-school reform: The experience of new American schools. *Phi Delta Kappan*, 84, 168-175.
- Betts, J., & Hill, P.T. (2006). *Key Issues in Studying Charter Schools and Achievement: A Review and Suggestions for National Guidelines*. The Charter school Achievement Consensus Panel. White Paper. Seattle: National Charter School Research Project.
- Bidwell, C.E., & Kasarda, J.D. (1975). School district organization and student achievement. *American Sociological Review*, 40, 55-70.
- Booher-Jennings, J. (2005). Below the bubble: "Educational triage" and the Texas accountability system. *American Educational Research Journal*, 42, 231-268.
- Chubb, J.E., & Moe, T.M. (1990). *Politics, markets, and America's schools*. Washington: The Brookings Institution.
- Chubb, J.E. & Moe, T.M. (1992). *A lesson in school reform from Great Britain*. Washington: Brookings Institution.
- Cotton, K., & Savard, W.G. (1982). *Parent involvement in instruction, K-12: Research synthesis* (ED 235 397). Portland, OR: Northwest Educational Laboratory.
- Crossley, D. (21 March 2006). Director, Achievement Networks, Specialist Schools and Academies Trust. Personal communication.
- Darling-Hammond, L., & Youngs, P. (2002). Defining "highly qualified teachers": What does "scientifically-based research" actually tell us? *Educational Researcher*, 31, 13-25.
- Desimone, L. (1999). Linking parent involvement with student achievement: Do race and income matter? *Journal of Educational Research*, 93, 11 30.

- Dillon, S. (2007, September 25). Scores show mixed results for Bush education law. *New York Times*. Retrieved September 26, 2007, from <a href="http://www.nytimes.com/2007/09/25/education/25cnd-score.html?hp">http://www.nytimes.com/2007/09/25/education/25cnd-score.html?hp</a>
- Dodenhoff, D. (2007). Fixing the Milwaukee public schools: The limits of parent-driven reform. Thiensville, WI: Wisconsin Policy Research Institute.
- Duck, J.D. (1993). Managing change: The art of balancing. *Harvard Business Review*, *November-December*.
- Education Review Office. (1994). *Effective governance*. Education Review Office. Retrieved November 20, 2007, from <a href="http://www.ero.govt.nz/ero/publishing.nsf/Content/Effective%20Governance">http://www.ero.govt.nz/ero/publishing.nsf/Content/Effective%20Governance</a>
- Education Review Office. (2007). *School governance: An overview*. Retrieved April 4, 2008, from <a href="http://ero.govt.nz/Publications/pubs2007/schl-governance-sep07.pdf">http://ero.govt.nz/Publications/pubs2007/schl-governance-sep07.pdf</a>.
- Elmore, R.F. (1980). Backward mapping: Implementation research and policy decisions. *Political Science Quarterly, 94,* 601-616.
- Evans, R. (2004). Family matters: How schools can cope with the crisis in childrearing. San Francisco: Jossey-bass.
- Fiske, E.B., & Ladd, H.F. (2000). *When schools compete: A cautionary tale.* Washingotn, DC: Brookings Institution Press.
- Foss, N.J. (1997). On rationales for corporate headquarters. *Industrial and Corporate Change*, *6*, 313-338.
- Garvin, D.A. (1993). Building a learning organization. *Harvard Business Review, July-August.*
- Goldhaber, D. (2007). Everyone's doing it, but what does teacher testing tell us about teacher effectiveness? *Journal of Human Resources*, 42, 765-794.
- Goldhaber, D, & Hansen, M. (2007). National board certification and teacher career path: Does NBPTS certification influence how long teachers remain in the profession and where they teach? Seattle, WA: Center on Reinventing Public Education.
- Goldhaber, D, & Brewer, D. (2000). Does teacher certification matter? High school teacher certification status and student achievement. *Educational Evaluation and Policy Analysis*, 22, 129-145.

- Greene, J.P., & Winters, M.A. (2006). *Leaving boys behind: Explaining public school graduation rates* (Report No. 48). New York: Center for Civic Innovation at the Manhattan Institute.
- Hamilton, L.S. (27 March 2007). Think it through on tests. *Philadelphia Inquirer*. Retrieved November 23, 2007, from <a href="http://www.rand.org/commentary/2007/03/27/PI.html">http://www.rand.org/commentary/2007/03/27/PI.html</a>
- Hanushek, E.A. (1989). The impact of differential expenditures on school performance. *Educational Researcher*, *18*, 45-62.
- Hanushek, E.A., Kain, J.F., & Rivkin, S.G. (1998). Teachers, schools, and academic achievement. *NBER Working Paper Series*. Cambridge, MA: National Bureau of Economic Research.
- Hanushek, E.A., Raymond, M.E. (2004). The effect of school accountability systems on the level and distribution of student achievement. *Journal of the European Economic Association*, *2*, 406-415.
- Hargreaves, A., Shirley, D., Evans, M, Stone-Johnson, C. & Riseman, D. (2006) The long and the short of school improvement: Summary of the evaluation report on the Raising Achievement Transforming Learning Project of the Specialist Schools and Academies Trust, London, SSAT.
- Helper, S., MacDuffie, J.P., & Sabel, C. (2000). Pragmatic collaborations: Advancing knowledge while controlling opportunism. *Industrial and Corporate Change*, *9*, 443-488.
- Hertz, K.V. (1995). The mismatch of test results and the workplace. *School Administrator*, 53.
- Hill, J., & Hawk, K. (1998). *Achieving is cooler that it was*. Retrieved April 4, 2008, from <a href="http://www.educationgroup.co.nz/Publications/Achieving%20is%20cooler%20thann%20it%20was.pdf">http://www.educationgroup.co.nz/Publications/Achieving%20is%20cooler%20thann%20it%20was.pdf</a>.
- Hill, P.T., & Finn, C. (2006). "Authorizing: The Missing Link" in P.T. Hill (ed.) *Charter Schools against the Odds*. Stanford, CA: Hoover Institution. (103-126).
- Hill, P.T., & Lake, R. (2002). *Charter Schools and Accountability in Public Education*. Washington, DC: Brookings Institution Press.
- Hoxby, C.M. (2000). The effects of class size on student achievement: New evidence from population variation. *Quarterly Journal of Economics*, 115, 1239-1285.

- Jacob, B. (2004). Accountability, incentives and behavior: The impact of high-stakes testing in the Chicago public schools. *Journal of Public Economics*, 89, 761–796.
- Kahne, J., O'Brien, J., Brown, A., & Quinn T. (2001). Leveraging social capital and school improvement: The case of a school network and a comprehensive community initiative in Chicago. *Educational Administration Quarterly*, *37*, 429-461.
- Kolwal, J., Hassel, B. (2008). *Closing Troubled Schools*, NCSRP Working Paper #2008-8. Seattle, WA: Center on Reinventing Public Education.
- Ladd, H.F. (2008). Rethinking the way we hold schools accountable. *Education Week*, 27(20), 26-27.
- Lake, R., & Squires, M. (2008). *Tough Calls: How Portfolio Managers can Identify and Address School-Level Problems*. NCSRP Working Paper #2008-7. Seattle, WA: Center on Reinventing Public Education Identifying and Addressing School-Level Problems.
- Lawler, E. (1986). High involvement management. San Francisco, CA: Jossey-Bass.
- Lawler, E., Morham, S.A., & Ledford, G.E. (1992). *Employee Involvement and Total Quality Management: Practices and Results in Fortune 1000 Companies*. San Francisco: Jossey-Bass.
- Levin, H.M. (1998). Educational performance standards and the economy. *Educational Researcher*, 27(4), 4-10.
- Lipsky, M. (1980). Street-level bureaucracy: Dilemmas of the individual in public services. New York: Basic Books.
- Marsh, J.A., Pane, J.F., & Hamilton, S. (2006). *Making Sense of Data-Driven Decision Making in Education: Evidence from Recent RAND Research*. Santa Monica, CA: RAND.
- Massell, D., Kirst, M., & Hoppe, M. (1997). *Persistence and change: Standards-based reform in nine states*. CPRE Report Series. Philadelphia: Consortium for Policy Research in Education.
- McDermott, K.A. (2006). Incentives, capacity, and implementation: Evidence from Massachusetts education. *Journal of Public Administration Research and Theory*, 16, 45-65.
- McLaughlin, M.W. (1987). Learning from experience: Lessons from policy implementation. *Educational Evaluation and Policy Analysis*, *9*, 171-178.

- Meyer, R.H. Value-added indicators of school performance: A primer. *Economics of Education Review*, 16, 283-301.
- Ministry of Education. (2007). *Planning and reporting: Frequently asked questions*. Retrieved on November 26, 2007, from <a href="http://www.minedu.govt.nz/index.cfm?layout=document&documentid=5133&indexid=7847&indexparentid=1012">http://www.minedu.govt.nz/index.cfm?layout=document&documentid=5133&indexid=7847&indexparentid=1012</a>.
- Moore, M.H. (1995). *Creating Public Value: Strategic Management in Government*. Cambridge: Harvard University Press
- National Education Association. (January 1, 2006). More schools are failing NCLB Law's 'adequate yearly progress' requirements. NEA. Retrieved on September 12, 2007, from http://www.nea.org/esea/ayptrends0106.html.
- O'Day, J.A., & Bitter, C. (2003). Evaluation study of the immediate intervention/underperforming schools program and the high achieving/improving schools program of the Public Schools Accountability Act of 1999. Sacramento, CA: California Department of Education, Policy, and Evaluation.
- O'Toole, L., Meier, K.J., & Nicholson-Crotty, S. (2005). Managing upward, downward, and outward: Networks, hierarchical relationships and performance. *Public Management Review*, 7, 45-68.
- Panza, C.M. (1997). Beyond total quality management and business process reengineering. *Performance Management*, *36*, 28-37.
- Peterson, P.E. (1999). Effectiveness of school choice: The Milwaukee experiment. *Education and Urban Society*, *21*, 190-213.
- Pilkington, A. (1998). Manufacturing strategy regained: Evidence for the demise of best-practice. *California Management Review*, 41, 31-42.
- Plowright, D. (2007). Self-evaluation and Ofsted inspection: Developing an integrative model of school improvement. *Educational Management Administration and Leadership*, *35*, 373-393.
- Porter, M.E. (1996). What is strategy? *Harvard Business Review, November-December*.
- Pratt, J.W. and Zeckhauser, R.J. (1985). *Principals and Agents: The Structure of Business*. Boston: Harvard Business School Press.
- Public Impact. (2007). School turnarounds: A review of the cross-sector evidence on dramatic organizational improvement. Lincoln, IL: Center on Innovation and Improvement.

- Purkey, S. C., & Smith, M.S. (1983). Effective schools: A review. *The Elementary School Journal*, 83, 426-452.
- Quinn, R.E., & Cameron, K. (1983). Organizational life cycles and shifting criteria of effectiveness: Some preliminary evidence. *Management Science*, 29, 33-51.
- Peterson, S.A. (1999). School district central office power and student performance. *School Psychology International*, *20*, 376-387.
- Rheem, H. (1995). The learning organization: Building learning capability. *Harvard Business Review, March-April*, 10.
- Rowan, B., Bossert, S.T., & Dwyer, D.C. (1983). Research on effective schools: A cautionary note. *Educational Researcher*, 12(4), 24-31.
- Rowan, B. (1990). Commitment and control: Alternative strategies for the organizational design of schools. *Review of Research in Education*, *16*, 353-389.
- Roza, M., & Hill, P.T. (2004). How within-district spending inequities help some schools fail. In Diane Ravitch (ed.) *Brookings Papers on Education Policy*. Washington: Brookings Institution.
- Sabel, C. (2004). Beyond principal-agent governance: Experimentalist organizations, learning and accountability. In E. Engelen & M.S. Dhian Ho (Eds.), *De statt van de Democratie: Democratie voorbij de statt.* WRR Verkenning 3 Amsterdam: Amsterdam University Press.
- Slone, R.E., Mentzer, J.T., & Dittmann, J.P. (2007). Are you the weakest link in your company's supply chain? *Harvard Business Review, September*, 116-127.
- Stecher, B.M., & Kirby, S.N. (2004). Organizational improvement and accountability: Lessons for education from other sectors. Santa Monica, CA: RAND.
- Squires, M., & Rainey, L. (2008). Finding a Balance: How Application and Authorization Policies Impact School Supply, NCSRP Working Paper #2008-4. Seattle, WA: Center on Reinventing Public Education.
- Tyack, D. & Cuban, L. (1997). *Tinkering toward utopia: A century of public school reform*. Boston: Harvard University Press.
- Uzzi, B. (1996). The source and consequences of embeddedness for the economic performance of organizations: The network effect. *American Sociological Review*, *61*, 674-698.
- Velde, M. (19 April 1999). SMAD reversal of fortune. *Education Gazette*, 86(20). Retrieved on November 28, 2007, from

- http://www.edgazette.govt.nz/articles.php/show articles.php?id=5202.
- Weick, K. (1976). Educational organizations as loosely coupled systems. *Administrative Science Quarterly*, 21, 1-9.
- Whitty, G., & Edwards, T. (1998). School choice policies in England and the United States: An exploration of their origins and significance. *Comparative Education*, *34*, 211-227.
- Wohlstetter, P., Malloy, C.L., Smith, J., & Hentschke, G. (2004). Incentives for charter schools: Building capacity through cross-sectoral alliances. *Educational Administration Quarterly*, 40, 321-365.
- Wohlstetter, P., Malloy, C.L., Chau, D., & Polhemus, J.L. (2003). Improving schools through networks: A new approach to urban school reform. *Educational Policy*, 17, 399-430.
- Wohlstetter, P., Smyer, R., & Mohrman, S.A. (1994). New boundaries for school-based management: The high involvement model. *Educational Evaluation and Policy Analysis*, 16, 268-286.
- Womack, J.P., Jones, D.T., & Roos, D. (1990). *The machine that changed the world: The story of lean production.* New York: Harper-Collins.

