Beginning in the mid-1980s, the "excellence movement" was launched. Although the reform movement is now more than a decade old, effective schools that produce high achievement for all students are still uncommon occurrences. The fact that some students master academic content whereas many others do not still cannot be accounted for. This paper examines the challenges and difficulties in implementing standards effectively in whole school systems. The analysis is developed in four parts, starting with a few ideas about why school improvement is so problematic. The case is made for the incompatibility between the structure of schools and the demands for school improvement. Two frameworks are used in the argument: Parsons's level of organization and Weick's loose coupling. A new leadership framework is then introduced, the purpose of which is to rebuild a new school structure, which may better accommodate the demands for school improvement. Finally, one state's successful experience with school improvement is discussed, which is compatible with the proposed new leadership structure. (Contains 115 references and 6 tables.) (RT)
Making Standards Work:
What School Administrators Can Do

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Beginning in the mid-1980s, the “excellence movement” was launched, which challenged educators to improve the academic performance of America’s schools. The reform movement is now more than a decade old. There are numerous reports that demonstrate that it is possible to find effective public schools where administrators, teachers, and parents collaborate to produce high achievement for all students. But these successes occur in only a small number of schools. We still cannot account for the fact that some students master academic content and many others do not.

High academic standards hold the greatest hope for significantly improving the achievement of all students (Lunenburg, in press). A result of public and political demands for increased accountability in schools, standards provide a way to establish what all students need to know and be able to do in different subject areas. But standards have not yet been well implemented in most schools. Efforts to systematically enforce or implement standards have been fraught with difficulties. Most schools and school systems are not organized to effectively support and encourage learning.

The answer to this problem is to determine how to improve teaching and learning in whole school systems instead of merely in isolated schools (Elmore, 2000; Fullan, 2000a). The mantra the “school is the unit of improvement” was based on the misguided belief that individual teacher professionalism would produce excellent schools. The most recent literature suggests that we need to modify that belief (Elmore, 1995, 2000; Fullan, 1999, 2000a, 2000b; Louis, Toole, & Hargreaves, 1999). The school will always be the
primary unit of intervention, but without a supportive policy environment and resources outside the school, the chances of enduring change and improvement are limited. Similarly, research suggests that unless improvement efforts penetrate the classroom and affect individual teachers and students directly, we will continue to find far more variance within and between schools (Elmore, 1997; Elmore and Burney, 1999; Louis and Kruse, 1995; Louis, Toole, and Hargreaves, 1999; Tye, 1987).

My purpose in this paper is to examine the challenges and difficulties in implementing standards effectively in whole school systems. I develop this analysis in four parts. I begin with a few ideas about why school improvement is so problematic. Then I make a case for the incompatibility between the structure of schools and the demands for school improvement. Two frameworks are useful here: Parsons' levels of organization and Weick's loose coupling. Next, I introduce a new leadership framework, the purpose of which is to rebuild a new school structure, which may better accommodate the demands for school improvement. Finally, I discuss one state's successful experience with school improvement, which I believe is compatible with the new leadership structure I propose.

The Problem of School Improvement

School improvement has been well studied over the past decade. But change in schools has been problematic for several reasons. First, successful change occurs in only a small number of schools; that is, these reform efforts have not been widely replicated from one school context to another. Second, there is no guarantee that the change will last. Put another way, there has been strong adoption and implementation of change and improvement, but
not strong institutionalization; that is, the innovation did not become integrated into the school system's mission and organizational structure.

Third, and equally problematic, is the impact of the change. Has the change reached the classroom? Have students been positively and significantly affected by the change?

Of these problems, one of the most perplexing continues to be how to make changes in the "substantive core of teaching and learning"—what it is teachers actually do in their classrooms and what it is that students learn (Elmore, 1995; Fullan, 1997; Louis, Toole, & Hargreaves, 1999; Tyack & Cuban, 1995). There is a great deal of school improvement activity that is ultimately unconnected to any improvement in student learning (Lunenburg & Ornstein, 2000).

The main reason for the failure of these reforms to endure and penetrate the classroom is that many of the principal structures and roles of schooling remain remarkably stable over time, despite repeated efforts to change them (Ogawa, Crowson, & Goldring, 1999). Reform is more likely to be altered to "fit" existing structures than to result in major organizational restructuring. That is, many changes remain at the organizational periphery rather than penetrate to the "deep" structure of schooling (Cuban, 1988, 1992; Tye, 1987). Both local school development and a supporting infrastructure surrounding the school are critical for lasting success and penetration into the technical core of teaching and learning.

If school improvement efforts are bent to fit comfortably into schools as they are currently structured—and this has been the typical pattern of every major reform in the 20th century—improvement efforts will be
weakened and unrecognizable by the time they reach the classroom. In this case, a strong basic education for all students will be diminished. But it is also possible that public schools will find a way to initiate and sustain a major organizational restructuring. If successful, the organizations that emerge will probably not look anything like the current ones, but a strong basic education system is more likely to endure and flourish (Elmore, 2000, 2001).

The Theory of Loose Coupling

Talcott Parsons (1960) delineated a framework that describes three fundamental levels of an organization – technical, managerial, and institutional. In education, the technical level is concerned with the teaching–learning process. The managerial level refers to the administration and organization of schooling. The institutional level is concerned with the relations between the school and its external environment – both close relations, such as those with school boards and their representative functions in the local community, and more distal relations, such as those with the state and other economic, political, and social dimensions of society.

The belief that educational systems may be designed to articulate efficiently and effectively across these organizational levels is questionable. Decisions made at the state or school board may have little impact on the "real work" of school administrators (superintendents and principals), much less in the classroom (teachers and students). For example, the relations between state policy making toward school reform and instructional improvement practices in schools "rarely make broad or close contact with instruction" (Cohen & Spillane, 1992, p.11). Two kinds of structural fragmentation typically occur. First, state–district–school articulation is not
will connected. Second, the articulation across levels of organization is complex: the responsibility for organizational implementation is fragmented and given to a variety of individuals, each of whom has little interaction with the others (Spillane, 1998).

Organizational analysts who study the structure of organizations have coined a term for the way our schools are organized: "loose coupling" (Weick, 1967; Rowan, 1990; Meyer & Rowan, 1992). Derived from organizational sociology, this view, in brief, suggests that the "technical core" of education—detailed decisions about what should be taught, how it should be taught, what students should be expected to learn, how students should be grouped for instruction, how they should be required to demonstrate their knowledge, and how their learning should be evaluated—resides in individual classrooms, not in the organizational infrastructure that surrounds them.

To reinforce this view, a "grammar of schooling" has been well institutionalized in our schools composed of subjects, specialized subjects, grades, grade levels, and individual teachers in their classrooms forming a foundation of organizational stability. The combination of these characteristics can balkanize schools into isolated units that only sporadically communicate between and among classrooms, schools, and levels of organization. Thus, many structural innovations have not affected substantive changes in the core of teaching and learning (Elmore, 1995, 2000, 2001).

The administrators who manage our schools do not manage the way its basic functions are carried out. Put another way, school administrators
have little to do with the technical core of education – teaching and learning. Teachers’ work is guided more by inherited practices than by any clear and common view as to what is to be taught, how it is to be taught, why it is to be taught, and how learning is to be evaluated (Cohen & Spillane, 1992; Lunenburg, 1995). And in many cases there is no support from the organizational infrastructure that surrounds them. Furthermore, the knowledge base that guides the teachers’ classroom decisions is not formalized or even agreed upon. Moreover, there is a lack of clearly defined success criteria. Social myths of teacher professionalism and teacher autonomy help to “buffer” the classroom and its instructional activities from the uncertainties of close evaluation and inspection by the external environment (Elmore, 2000, 2001)

School administrators, then, do not manage instruction. They manage the infrastructure surrounding the technical core of teaching and learning. They “buffer” to protect their core technologies. Superintendents and principals hold strong organizational allegiances and seek distancing from their clients to protect their autonomy. They perform ritualistic tasks, such as planning, organizing, budgeting, and dealing with disruptions inside and outside of the system. These rituals help to maintain the legitimacy of the organization as a social reality to their constituents, what organizational theorists call a “logic of confidence”, and furthermore help the organization to persist by “decoupling” the technical core from environmental uncertainty.

Ignoring student achievement indicators is possible and is, in fact, standard operating procedure in many school districts, because the assessment of a “good” superintendent is made primarily based on his or her
political shrewdness and skill on managerial-type indicators, such as financial stability, clean buildings, and well-behaved students. Rowan and Miskel (1999), referencing Meyer and Rowan's study (1977), described this type of judgment of superintendent ability as being based on how close the superintendent is able to bring the school district to widely shared organizational norms of "good schooling." Rowan and Miskel further assert that adherence to these norms was actually more important for the survival of school districts, during pre-accountability times, than was fulfilling the "technical core" mission of the school district—educating students—and that this allowed school leaders to ignore information that showed that the "technical core" mission was not being fulfilled:

A logic of confidence and good faith develops in organizations as administrators deliberately ignore and discount information about technical activities and outcomes [such as teaching and learning] in order to maintain the appearance that things are working as they should be, even if they aren't. In this way, organizations continue to mobilize support and resources simply by conforming to externally-defined rules, even when such rules do not promote technical efficiency....The legitimacy of schooling as an enterprise depend[s] crucially on maintaining the public's confidence...and this require[s] educators (and the public) to ignore obvious variations in classroom activities and student outcomes that occur within standardized forms of schooling. (p. 363)
Teachers work in isolated classrooms and manage the technical core. This school system hierarchy has continued relatively unchanged throughout most of the 20th century (Elmore, 2000).

Elmore (2000, 2001) suggests that the theory of loose coupling explains much about the strengths and weaknesses of public schools. According to Elmore, it explains why most innovations in schools occur in the structures that surround teaching and learning, and only peripherally in the actual process of teaching and learning. Most innovation is about maintaining the logic of confidence between the public and the schools. The theory of loose coupling explains why schools continue to promote structures that are not productive for learning. They include extraordinarily large high schools that are impersonal and alien to many students; rigid tracking systems that stereotype students according to academic ability; athletic programs that limit participation to only a few students; grouping practices in elementary schools that provide less stimulating curriculum to some students; special programs that remove students from regular instruction; and site-based governance structures that engage in decision making about everything but the conditions of teaching and learning.

Proponents of restructuring note that most innovations emphasize changes in governance and management not changes in curriculum and instruction (Murphy, 1991). Others document the limited impact that restructuring has had on the instructional practices of teachers (Elmore, Peterson, & Mc Carthey, 1996). Because teachers and administrators buffer the technical core and because articulation among the levels of organization – technical, managerial, institutional – is complex, innovations are not
connected to any larger goal or mission belonging to the school system. And because teachers work in isolated classrooms, instructional improvement is a matter of individual initiative. This leads to innovations that are highly personal and thus tend to be adopted in only a few classrooms and schools.

Loose coupling explains the unsuccessful quest for school administrators to act as instructional leaders. Theories of leadership in loose coupling structures stress the role of leaders as buffers, coalition-builders and brokers among diverse interests, custodians of organizations, and manipulators of symbols (Elmore, 2000, 2001). None of these theories of leadership captures the imperative for sustained districtwide instructional improvement, because none of them postulates a direct relationship between the work that leaders do and the technical core functions of the school district.

Elmore (2000, 2001) further suggests that the theory of loose coupling explains the unstable conditions of politics and leadership in most large school districts. The governance structure is designed to support the logic of confidence between the public and the schools, not to provide direction to the improvement of student achievement. Since politics is not about the technical core, but about the logic of confidence between the schools and the community, all policy decisions are essentially about consolidating political constituencies. Superintendents come and go based on their capacity to maintain a working majority of an unstable elected board, rather than on their capacity to focus the school district on the technical core – teaching and learning. This leads to frequent turnover of superintendents resulting in an
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unstable environment for sustained districtwide school improvement (Lunenburg & Ornstein, 2000).

It is not difficult to see why school improvement is so hard to institutionalize, maintain, and replicate. It conflicts with the way public schools are currently organized. This incompatibility is not likely to be resolved in the usual way by bending the innovation until it fits into the existing organizational structure. School improvement must penetrate into the instructional core of teaching and learning. This requires the creation of a new framework of instructional improvement and a new leadership to manage it.

The New Framework

Policymakers are sending a clear message to school systems that their main focus should be to improve teaching and learning (Elmore, 2000, 2001). Will they be able to respond to the demand? In an ideal system, school improvement efforts focus educational policy, administration, and practices directly on teaching and learning. This will require districtwide leadership focused directly on learning. School leaders can accomplish this by (1) clarifying purpose, (2) encouraging collective learning, (3) aligning with state standards, (4) providing support, and (5) making data-driven decisions. Taken together, these five dimensions provide a compelling framework for accomplishing sustained districtwide success for all children.

Clarifying Purpose

The school district and the administrators and teachers who work in it are accountable for student learning. This assertion has strong economic, political, and social appeal; its logic is clear. What teachers teach and students
learn is a matter of public inspection and subject to direct measurement (Elmore, 1995, 2000, 2001). Superintendents need to develop a practical rationale for school improvement. Clearly and jointly held purposes help give teachers and administrators an increased sense of certainty, security, coherence, and accountability (Conley, Dunlap, & Goldman, 1992; Hargreaves, Earl, & Ryan, 1996; Louis, Toole, & Hargreaves, 1999; Rosenholtz, 1989). Purposes cannot remain static for all time, however. They must be constantly adapted to changing circumstances and the needs of the system. Few really successful schools lack purpose (Louis and Miles, 1990).

In their studies of “successful school restructuring” in over 1,500 schools, Newmann and Wehlage (1995) found that successful schools focused on “authentic” pedagogy (teaching that requires students to think, to develop an in depth understanding, and to apply academic learning to important realistic problems), and student learning. They achieved this in two ways: greater organizational capacity and greater external support. The most successful schools, according to Newmann and Wehlage, were those that functioned as professional communities. That is, they found a way to channel staff and student efforts toward a clear, commonly shared purpose for learning. Moreover, they found that external agencies helped schools to focus on student learning and to enhance organizational capacity through three strategies: setting standards for learning of high intellectual quality; providing sustained schoolwide professional development; and using deregulation to increase school autonomy. In short, dynamic internal learning communities and their relationships with external networks made the difference. Evidence on the critical combination of internal and external
learning is mounting (see, for example, Elmore & Burney, 1999; Fullan, 2000a; Louis & Kruse, 2000; Spillane, 1998).

There are instructional strategies that can help teachers increase student learning. In research recently completed at the Mid-continent Research for Education and Learning (McREL) Institute, Marzano and others (2001) identified classroom practices that generally increase student achievement: identifying similarities and differences; summarizing and note taking; receiving reinforcement for effort and recognition for achievement; doing homework and practicing; using nonlinguistic representations; learning cooperatively; setting objectives and testing hypotheses; and using cues, questions, and advance organizers. Regardless of whether or not teachers teach to standards, these classroom practices work well.

**Encouraging Collective Learning**

A key task for school administrators is to create a collective expectation among teachers concerning the state's accountability criteria. That is, administrators need to raise the collective sense of teachers about state standards. Then administrators must work to ensure that teacher expectations are aligned with the state's accountability criteria (Adams & Kirst, 1999). Furthermore, administrators need to eliminate teacher isolation, so that discussions about state standards become a collective mission of the school and school district.

"The key to student growth is educator growth" (Joyce and Showers, 1995, p. XV). In a collective learning environment, teachers become generators of professional knowledge rather than simply consumers of innovations (Hopkins, 1993; Louis & Kruse, 1995, 2000; Schon, 1984). Innovations are built
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around the system rather than using prepackaged school improvement models (McLaughlin, 1990). Changing mental models replaces training educators in new behaviors (Senge, 1990). Continuous instruction-embedded staff development replaces one-shot non-instruction specific professional development events (Hall & Hord, 2001; Sparks & Hirsch, 1997). Single-loop, linear learning that monitors whether a system is reaching its goals is replaced by double-loop learning where systems are able to revisit whether goals are still appropriate and then re-cycle as needed (Argyris, 1990).

School administrators must develop and sustain school structures and cultures that foster individual and group learning. That is, administrators must stimulate an environment in which new information and practices are eagerly incorporated into the system. Teachers are more likely to pursue their group and individual learning when there are supportive conditions in the school and school district, such as particularly effective leadership (Leithwood, 1994; Leithwood & Jantzi, 1997; Leithwood & Louis, 2000). Schools where teachers collaborate in discussing issues related to their school improvement efforts are more likely to be able to take advantage of internally and externally generated information (Louis & Kruse, 2000; Murphy, 1992). Teachers can become willing recipients of research information if they are embedded in a setting where meaningful and sustained interaction with researchers occurs in an egalitarian context (Huberman, 1993).

**Aligning with State Standards**

Some critics believe that the emphasis on high-stakes testing narrows the curriculum and prevents teachers from using good teaching practices (see, for example, Gordon, 2000; McNeil, 2000; Orfield & Wald, 2000; Panta,
Teaching a common body of essential knowledge and skills need not narrow the curriculum or inhibit good teaching practice (Lunenburg, 1995).

When they are well constructed and implemented, state standards and tests can change the nature of teaching and learning. They can lead to a richer, more challenging curriculum. They can foster discussion and collaboration among teachers within and across schools. They can create more productive conversations among teachers and parents. And they can help focus stakeholders' attention on increasing student achievement (Lunenburg & Ornstein, 2000).

For standards to have an impact on what happens in classrooms, they must be clear. A few years ago, standards were left vague in deference to local control of the curriculum. The state set broad goals and left the curriculum to local schools and educators (Lunenburg & Irby, 1999). But this is a mistake. When school districts, administrators, and students are held accountable for results, more specificity is needed in implementing the standards. In a high-stakes accountability environment, teachers require that the standards contain enough detail and precision to allow them to know what the students need to learn.

Most states are attempting to align their tests with their standards. Gandal and Vranek (2001) encourage states to consider three principles in this endeavor. First, tests not based on the standards are neither fair nor helpful to parents or students. States that have developed their own tests have done a good job of ensuring that the content of the test can be found in the standards. That is, children will not be tested on knowledge and skills they have not been taught. This is what Fenwick English and Betty Steffy (2001)
refer to as “the doctrine of no surprises.” However, the same is not true when states use generic, off-the-shelf standardized tests. Such tests cannot measure the breadth and depth of each state’s standards. Second, when the standards are rich and rigorous, the tests must be as well. Tests must tap both the breadth and depth of the content and skills in the standards. Third, tests must become more challenging in each successive grade. The solid foundation of knowledge and skills developed in the early grades should evolve into more complex skills in the later grades.

If one accepts the premise that tests drive curriculum and instruction, perhaps the easiest way to improve instruction and increase student achievement is to construct better tests. Critics argue that many state-mandated tests require students to recall obscure factual knowledge, which limits the time teachers have available to focus on critical thinking skills (Ad Hoc Committee on MCAS, 1998; McNeil, 2000; Panta, 2001; Smith, 1991; Smith & Rottenberg, 1991; Yeh, 2001).

According to Yeh (2001), it is possible to design force-choice items (multiple-choice test items) that test reasoning and critical thinking. Such tests could require students to use facts, rather than recall them. And test questions could elicit content knowledge that is worth learning.

To prepare students to think critically, teachers could teach children to identify what is significant. Teachers could model the critical thinking process in the classroom, during instruction, through assignments, in preparing for tests, and in the content of the test itself. By aligning test content with worthwhile questions in core subject areas, it may be possible to rescue testing and instruction from the current focus on the recall of trivial information.
factual knowledge. Test items could be created for a range of subjects and levels of difficulty. Then there would be little incentive for teachers to drill students on factual knowledge.

**Providing Support**

One of the biggest challenges in advancing state standards and tests, and the accountability provisions tied to them, is providing teachers with the training, teaching tools, and support they need to help all students reach high standards. Specifically, teachers need access to curriculum guides, textbooks, or specific training connected to state standards. They need access to lessons or teaching units that match state standards. They need training on using state test results to diagnose learning gaps. Teachers must know how each student performed on every multiple-choice item and other questions on the state test. And training must be in the teachers' subject areas. Only then can teachers be prepared to help students achieve at high levels on state-mandated tests.

In addition to professional development for teachers, all schools need an intervention and support system for students who lag behind in learning the curriculum. Some states require schools to provide additional help to students who lag behind in core subjects, either in school, after school, on weekends, or during the summer. Some states supply the financial resources to fulfill this mandate.

School administrators need to broker the resources required to improve teachers' abilities to teach the state standards. This involves acquiring materials, information, or technology; manipulating schedules or release time to create opportunities for teachers to learn; facilitating
professional networks; or creating an environment that supports school improvement efforts.

Higher state standards usually mean changes in curriculum, instruction, and assessment – that is, changes in teaching and learning. The history of school reform indicates that innovations in teaching and learning seldom penetrate more than a few schools and seldom endure when they do (Elmore, 1996, 2000, 2001; Fullan, 2000). Innovations frequently fail because the individuals who make it happen, those closest to the firing line – classroom teachers, may not be committed to the effort or may not have the skills to grapple with the basic challenge being posed (Adams & Kirst, 1999; McLaughlin, 1987). Teachers are motivated to change when their personal goals are aligned with change, when they are confident in their ability to change, and when they feel supported in attempting the change (Lunenburg, 1995; Lunenburg and Ornstein, 2000). To gain commitment of teachers and students to pursue school improvement efforts, school administrators must promote school cultures that reward achievement.

Making Data-Driven Decisions

How can school districts gauge their progress in achieving high state standards? Three factors can increase a school district’s progress in meeting state standards (Sclafani, 2001). The primary factor is the availability of performance data connected to each student, broken down by specific objectives and target levels in the state standards. Then schools across the district and across the state are able to connect what is taught to what is learned. The state standards should be clear enough to specify what each teacher should teach. And a state-mandated test, aligned with state
standards, will indicate what students have learned. Also, teachers need access to longitudinal data on each student in their classroom. With such data, teachers are able to develop individual and small-group education plans to ensure mastery of areas of weakness from previous years while also moving students forward in the state-mandated curriculum.

The second factor is the public nature of the measurement system. Assuming the school district has a system of rating schools, annually the district should publish a matrix of schools and honor those schools that have performed at high levels. This provides an impetus for low-performing schools to improve their performance. It also provides role models for other schools to emulate. At the school and classroom levels, it provides a blueprint of those areas where teachers should focus their individual education plans and where grade levels or schools should focus the school’s professional development plans. The public nature of the data from the accountability system makes clear where schools are. Assuming the state disaggregates its data by race/ethnicity and socioeconomic status, performance of each subgroup of students on state-mandated tests makes the school community aware of which students are well served and which students are not well served by the school district’s curriculum and instruction.

The third factor in gauging progress toward meeting state standards is the specifically targeted assistance provided to schools that are performing at low levels. Before the advent of state accountability systems, it was not evident which schools needed help. The first step is to target the schools in need of help based on student performance data. Each targeted school is
paired with a team of principals, curriculum specialists/instructional coaches, and researchers to observe current practices, discuss student performance data with the staff, and assist in the development and implementation of an improvement plan. The targeted schools learn how to align their program of professional development to the weaknesses identified by the data. They learn how to develop an improvement plan to guide their activities and monitor the outcomes of the activities, all of which are designed to raise student performance levels.

**Doing the Right Things**

Considering the magnitude of the task posed by high-stakes accountability for school districts and schools, there is little research on organizational design and practice in exceptionally high-performing school districts (Elmore, 2000, 2001; Rowan, 1990). The available documentation does point to some common themes that high-performing school districts possess. But the knowledge base on which to offer advice to school districts and administrators on the design of sustained districtwide improvement processes is limited.

Within the past five years, however, a few examples of sustained districtwide academic success of children have begun to emerge in the research literature. These examples have appeared in states that have highly developed, stable accountability systems, such as New York, North Carolina, and Texas (see, for example, Elmore & Burney, 1999; North Carolina Department of Public Instruction, 2000; Ragland, Asera, & Johnson, 1999; Skrla & Scheurich, 2001). Preliminary research in some of these districts found evidence of common strategic elements in the way these districts...
managed themselves. Superintendents in high-performing school districts exhibited a much greater clarity of purpose, a much greater willingness to exercise tighter controls over decisions about what would be taught and what would be monitored as evidence of performance. They used data on student performance to focus attention on problems and successes; they built district accountability systems that complemented the states' system; and they forged strong relationships with their school boards around improvement goals. They created a climate in which teachers and principals were collectively responsible for student learning and in which the improvement of instruction was the central task. Incentive structures in these districts focused on the performance of all students, not just on average school performance. Superintendents realigned district offices in these school districts to focus on direct relationships with schools around instructional issues; and they focused more energy and resources on content-specific professional development (Elmore, 2001; Koschoreck, 2001; Ragland, Asera, & Johnson, 1999; Skrla & Scheurich, 2001).

The particular configuration of the Texas accountability system has changed the fortunes of students, especially minority students, in dramatic ways. As such, the Texas accountability system stands out from among the variety of state accountability systems insofar as it disaggregates data on the basis of race, ethnicity, and economic status. Additionally, it stipulates performance levels for all identified groups at both school district and school levels, and it ensures compliance by legislatively imposing rewards and sanctions.
The Academic Excellence Indicator System (AEIS) in Texas represents an integrated accountability system that includes an exceptional demand for racial and socioeconomic equity by requiring equal levels of performance for all disaggregated groups (including African American, Hispanic, White, and economically disadvantaged). Unlike other accountability systems that measure success against a group norm, the testing used in the accountability system in Texas is criterion referenced; hence, by insisting on equal performance levels for all disaggregated groups, the system has built into it an orientation toward equity. The multiple indicators built into the design of the accountability system are noteworthy. Since 1994, three types of performance indicators have been used: base, additional, and report only (Texas Education Agency, 1996). The base indicators—which include Texas Assessment for Academic Skills (TAAS), dropout rates, and attendance rates—are used to determine school and district performance ratings. Additional indicators, although not employed specifically to assign performance ratings, may determine whether the district or school will receive acknowledgement for exceptional achievement. These additional indicators include average college admissions test performance, percentage at or above criterion on college admissions tests, percentage of students tested on college admissions tests, and percentage of students passing the Texas Academic Skills Program (TASP), a college-readiness test. Finally, report-only indicators include such things as numbers of students exempt from TAAS, percentage of students completing advanced courses, and percentage of students taking and passing end-of-course exams in algebra, biology, U.S. history, and English II.
Some critics claim that accountability systems harm children of color and children from low-income homes (see, for example, Anderson, 2001; Gordon, 2000; Haney, 2000; Klein, Hamilton, McCaffrey, & Stecher, 2000; McNeil, 2000; Orfield & Wald, 2000; Parker, 2001). Others argue that accountability systems drive educational improvements for these students (see, for example, Fuller & Johnson, 2001; Grissmer & Flanagan, 1998; Grissmer, Flanagan, Kawata, & Williamson, 2000; Johnson, Treisman, & Fuller, 2000; Koschoreck, 2001; Reyes, Scribner, & Paredes Scribner, 1998; Scheurich, Skrla, & Johnson, 2000, 2001; Sclafani, 2001; Sebring & Bryk, 2000; Skrla & Scheurich, 2001; Skrla, Scheurich, Johnson, & Koschoreck, in press).

Few state accountability systems have been in place long enough to sort out the negative and positive commentary on accountability policy's equity effects. However, the Texas public school accountability system has been in place for several years, providing a useful case for analyzing the impact of accountability systems on student achievement. Additionally, Texas is a useful case study because of the wealth of disaggregated student achievement data available through the state education agency.

The current accountability system in Texas began in 1994 through a testing program known as the Texas Assessment of Academic Skills (TAAS). The TAAS is currently given in reading and mathematics in Grades 3 through 8 and 10, writing in Grades 4, 8, and 10, and science and social studies in grade 8. Students in regular and bilingual education are included in the testing in either English or Spanish, depending on their language of instruction. As of 2000, students in special education also are included if they are working at grade level. Students in special education who are working...
below grade level are tested on off-level or alternative tests. In addition, recent immigrants who are not literate in English or Spanish are exempted from testing for one year.

In 1997, the state moved to raise the bar on what students know and are able to do. It adopted Texas Essential Knowledge and Skills (TEKS), which specify what the student must know and be able to do at each grade level in each core subject (Texas Education Agency [TEA], 1997). A new, more rigorous test (TAKS) will be implemented in 2003. In addition to more rigorous assessments at Grades 3 through 8, the state has added assessments in Grades 9 and 11 and has changed the 10th-grade assessment to reflect 10th-grade-level work. The exit-level TAKS, given at 11th grade starting in 2003, will require mastery of algebra and geometry, integrated physics and chemistry and biology, American and U.S. history, and 2 years of English. No student will receive a high school diploma unless he or she passes all four sections of the exit-level test.

Improvements in TAAS Performance in Texas Public Schools

Where is Texas now? School districts have made significant progress over the past decade due to the stability of the current Texas accountability system, which began in 1994. Students have made real gains on both TAAS and National Assessment of Educational Progress (NAEP) results. In fact, African American, Hispanic, and economically disadvantaged students in Texas have made the greatest gains.

In 1994, 74% of all students tested (including those in special education) passed the TAAS reading Assessment (see Table 1). Even more
(85%) White students tested passed the assessment, yet only 58% of African American students and 63% of Hispanic students passed the reading assessment. Among students categorized by the state as economically disadvantaged, 61% passed the reading assessment. Among students with limited English proficiency, only 39% passed.

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Insert Table 1 about here

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By 2000, TAAS reading assessment results had improved considerably. In that year, 87% of all students tested passed the reading test. Furthermore, 80% of all African American students and 81% of Hispanic students passed the assessment, compared with 94% of White students, 80% of students from low-income homes, and 60% of students with limited English proficiency. Performance on the writing assessment showed similar gains.

There was even more dramatic improvement in mathematics on TAAS over the same time period. In 1994, only 57% of all students tested passed the mathematics assessment, whereas 87% passed in 2000. The percentage of African America students passing the mathematics assessment increased from 36% in 1994 to 76% in 2000. The percentage of Hispanic students passing increased from 45% in 1994 to 83% in 2000. The percentage of students meeting low-income criteria who passed increased from 43% in 1994 to 81% in 2000. Additionally, the percentage of students with limited English proficiency who passed the mathematics section of TAAS increased from 30% in 1994 to 69% in 2000 (Texas Education Agency [TEA], 1994, 2000, 2001).
For students in Grades 3 through 6, schools may choose to administer a Spanish version of TAAS. To be consistent, I have reported only the TAAS English version results here. All other accountability data reported later in the chapter are offered in English only. Nevertheless, statewide results from both English and Spanish administrations of TAAS show improvements in student achievement (Texas Education Agency [TEA], 1994, 2000, 2001).

**Improvements in NAEP Performance in Texas Public Schools**

The National Assessment of Educational Progress (NAEP), often referred to as the nation’s “report card,” is the only assessment that provides state-by-state comparisons in core subject areas. NAEP is administered at fourth grade and eighth grade at various points in time. Both public and private school students in Grades 4 and 8 are sampled and assessed on a regular basis. The NAEP tests are developed nationally by teachers, curriculum experts, and the public. The NAEP is authorized by Congress and directed by the National Center for Education Statistics of the U.S. Department of Education.

**NAEP Mathematics.** In mathematics, the NAEP was administered to fourth-grade students in 1992, 1996, and 2000 and to eighth-grade students in 1990, 1992, 1996, and 2000. Each student demographic group in each state achieves a scale score that ranges from 0 to 500. Thus, one can use NAEP scale scores to compare the performance of various demographic groups both within and between states.

Based on the rankings of states’ average scale scores (see Table 2),
Texas students have made tremendous progress in their mathematics knowledge and skills as measured by NAEP. This is especially true for Texas fourth-grade students. Indeed, Texas African American, Hispanic, and White fourth graders rank 1st in the nation. In addition, Texas fourth-grade students had the greatest increase in overall mathematics scale scores, whereas African American, Hispanic, and White fourth graders had 2nd, 3rd, and 1st greatest increase in scale scores, respectively (National Center for Education Statistics, 2001a).

Texas eighth-grade mathematics achievement on the NAEP is somewhat less impressive than the fourth-grade mathematics achievement. Texas eighth graders ranked 21st out of 43 participating states on NAEP mathematics achievement. However, when analyzing sub-populations, Texas African American, Hispanic, and White eighth graders rank 9th, 5th, and 7th in the nation. Texas eighth-grade students had the 2nd greatest increase in overall mathematics scale scores, whereas African American, Hispanic, and White eighth graders had the 9th, 10th, and 3rd greatest increase in scale scores respectively (National Center for Education Statistics, 2001b).

Comparing Texas with other large states is illuminating. The test-taking populations of the four most populous states (Texas, California, Florida, and New York) are quite similar. However, the test results are strikingly different (see Tables 3 and 4). Texas fourth and eighth-grade
students perform far better than their peers in other large, diverse states. Texas African American, Hispanic, White, and Title I students rank 1st in the nation on the NAEP fourth grade mathematics test. Texas African American, Hispanic, White, and Title I students rank 9th, 5th, 7th, and 10th on the eighth grade mathematics test (National Center for Education Statistics, 2001).

**NAEP Reading.** Texas reading achievement on the NAEP is less impressive than the mathematics achievement on NAEP. Texas fourth-grade students had an average scale score slightly above the national average and the 13th greatest scale score among all participating states. When the data are disaggregated, however, Texas African American, Hispanic, and White students had average scale scores that ranked 7th, 6th, and 2nd, respectively (see Table 5). In addition, each of these scores was above the national average for their respective demographic groups, especially for African American and Hispanic students. The NAEP reading performance of Texas eighth-grade students ranked 18th in the nation. When the data are disaggregated, however, Texas African American, Hispanic, and White students had scale scores that ranked 11th, 2nd, and 6th, respectively (See Table 5) (National Center for Education Statistics, 1999).
**NAEP Science.** The only administration of the NAEP science assessment was in 1996 for Grade 8 students; thus, no comparable data are available to discern a trend. Unlike mathematics and reading, science achievement in Texas is only about average on the NAEP. Overall, Texas average scale scores in science were slightly below average, although there was no statistical difference between the Texas and the U.S. score. The state ranking in Texas was 26th out of 40 participating states. The disaggregated data, however, provide a slightly more positive picture for Texas students. Specifically, Texas Grade 8 African American, Hispanic, and White students ranked 7th, 19th and 10th, respectively. Texas African American scores were statistically greater than the national average, whereas the Texas scores for Hispanic and White students were not statistically different from the national average (National Center for Education Statistics, 1997).

**NAEP Writing.** As with science, there has only been one state-level NAEP administration at Grade 8 in writing. Thus, again, it is impossible to discern a trend. Overall, Texas average scale scores in writing were 3rd in the nation and statistically greater than the national average. Again, the disaggregated data provide an even more positive picture for Texas students. Specifically, Grade 8 Texas African American, Hispanic, and White students ranked 1st, 2nd, and 2nd, respectively. All of the scores were statistically greater than the national average. Clearly, Texas students excelled in writing compared with their peers from across the country (National Center for Education Statistics, 1999).

In sum, critics claim that accountability systems harm children of color and children from low-income homes. The data set forth above seems to
refute such claims. In Texas there have been substantial increases in the percentage of students from all population groups (African American, Hispanic, White, and economically disadvantaged) who pass the statewide assessment, known as TAAS. In addition, all population groups in Texas have performed well on a national test, the NAEP. Some of the most impressive gains have occurred among African American, Hispanic, and economically disadvantaged groups. Gaps between the performances of different racial/ethnic/socioeconomic groups of students on TAAS and NAEP still remain, but the gaps have diminished over time.

Other Indicators of Improvements in Texas Student Performance

TAAS and NAEP are appropriate indicators of improvements in Texas student performance. Other indicators of academic performance include the number of Texas students taking advanced-placement examinations, the number of African American and Hispanic children taking advanced-placement examinations, the performance of students on college entrance examinations such as the SAT or ACT test.

Some critics of the Texas accountability system contend that minority students are tracked in TAAS remediation classes rather than college preparatory classes. The available data on advanced-placement test taking refutes this contention. The percentage of African American and Hispanic juniors and seniors taking at least one advanced-placement examination has increased dramatically from the year before the adoption of the accountability system (1992-1993) to the year 2000. The percentage of African American students in Texas taking at least one advanced-placement examination has
increased 423.3% since the 1992-1993 year. This is more than four times the rate of increase for all other states. The percentage of Hispanic students taking at least one advanced-placement examination has increased 306.1% since the 1992-1993 year. This is almost twice the rate of increase for all other states (see, for example, College Board and Educational Testing Service, 1993a, 1994a, 1995a, 1996a, 1997a, 1998a, 1999a, 2000a). The data refutes the assertion that high-stakes accountability in Texas has decreased the number of minority students who are accessing more rigorous courses.

Performance on the SAT and ACT are common indicators of the quality of education. Since not every high school graduate takes these college entrance examinations, comparison of schools or states based on SAT/ACT scores is difficult. However, we can analyze the trends in the number of students who take the SAT in Texas as well as the average SAT score in Texas. Most graduating seniors in Texas take the SAT rather than the ACT. According to College Board data, the number of Texas public school seniors who take the SAT increased by 30% from 1993 to 2000 (see, for example, College Board and Educational Testing Service, 1993b, 1993c, 1994b, 1994c, 1995b, 1995c, 1996b, 1996c, 1997b, 1997c, 1998b, 1998c, 1999b, 1999c, 2000b, 2000c). The data are presented in Table 6. Over the same time period,

Insert Table 6 about here

Texas Education Agency (TEA) data show the number of 12th-grade students increased by just 3%. Thus, a far greater percentage of Texas public school
students took the SAT in 2000 than in 1993, the year before the accountability system was implemented. Furthermore, the increase in percentages of students taking the SAT from 1993 to 2000 exceeded the increase in test takers nationally for all demographic groups of students (Texas Education Agency [TEA], 2001).

Conclusion

The new framework for leadership that I have described here provides a powerful and useful model for achieving school success. The framework is indeed compelling. Essentially it serves to lend coherence to an otherwise loosely coupled system incapable of articulating effectively across levels of organization. Sustained districtwide school improvement is not possible without a strong connection across levels of organization and a re-coupling of the system. Internal school development is necessary, but school improvement cannot occur unless each school is supported by a strong external infrastructure, stable political environments, and resources outside the school, including leadership from the superintendent and school board as well as leadership from the state.

What occurs as the three levels of organization coalesce is a fusion of three powerful forces – the technical core, the managerial core, and the institutional core. The purposeful interactions that happen within and across these levels of organization serve to mobilize commitments and energies to pursue school improvement efforts on a scale never before witnessed. Such mobilization is powerful, so as to increase capacity to overcome obstacles that are bound to surface in a school district attempting to “do the right things” – educate all children and to persist in this mission. The Texas accountability
system was used as a model for sustained districtwide academic success of all students. The most impressive gains in student achievement were made by children of color and children from low-income homes on both state and national tests.
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Table 1
Percentages of Students Passing the Texas Assessment of Academic Skills (TAAS)-English Version

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Table 3
Rankings of Four Largest States on 2000 NAEP Grade 4 Mathematics

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Note. AA = African American, H = Hispanic, W = White, TI = Title I Participants.
## Table 4

**Rankings of Four Largest States on 2000 NAEP Grade 8 Mathematics**

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Note. AA = African American, H = Hispanic, W = White, TI = Title I Participants.
Table 5
*Texas Grade 4 and 8 NAEP*

**Reading Rankings**

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Number participating states

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Number participating states

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Table 6

*Increase in Students Taking the SAT*

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