Schools of Promise: Rural Schools with High Performance in Mathematics Cross-Case Analysis Ohio University

Executive Summary

This report describes school improvement activities in six rural *Schools of Promise*, identified because of students' high performance in mathematics in 2003-2004. It also evaluates these activities against those taking place at two comparison schools – schools with similar demographics but less notable performance in mathematics. Researchers used data from interviews with school participants and classroom observations to identify emergent categories and the most salient improvement activities.

In general, the research showed that all of the schools took Ohio's accountability mandates seriously, and in doing so they devoted attention to academic content standards, alignment of curriculum, and a certain amount of "teaching to the test." Overall, their efforts to improve performance involved activities relating to five domains:

- *Leadership.* Strong leadership and a clear purpose were evident across the *Schools of Promise*. There was, however, considerable variety in the way leadership was provided. In four schools, leaders used top-down approaches to stimulate reform, gradually introducing more democratic processes as time went on. Democratic leadership had a longer history and greater cultural resonance at two of the schools. Leadership also was important at the comparison schools, where it confronted greater challenges and had not evolved quite so fully as at the *Schools of Promise*.

- *Relationships.* Relationships between educators and students, and among educators themselves, formed an important part of improvement initiatives across the schools. In all of the *Schools of Promise*, educators worked to establish respectful behavior among students, seeing increased attention to student discipline as a precursor to high academic performance. While discipline also was important in the comparison schools, educators at these schools did not regard improved behavior as a step along the way to academic improvement. Similarly, *Schools of Promise* and comparison schools differed in how much collaborative efforts among teachers served as the catalyst for reform. Although there was considerable variability in how teachers' participation was elicited and sustained at the six *Schools of Promise*, in all cases professional collaboration turned out to produce schoolwide reform. By contrast, improvement efforts at comparison schools tended to reflect the initiative of individual teachers and so were more piecemeal.

- *Professional Development.* In the *Schools of Promise* (and to a somewhat lesser extent in the comparison schools), professional development represented a way to foster school improvement. Procedures for planning and implementing professional development differed in significant ways across the schools, as did the content of professional development activities. At some schools, professional development was planned at the district level and focused on district priorities; at others it was primarily a school-based initiative. In most cases, professional development encompassed

activities that teachers selected themselves, as well as those chosen for them by professional development committees or administrators. Professional development was an important part of school improvement efforts at the comparison schools, but seemed less well-integrated there.

- *Academic Focus.* At *Schools of Promise* and comparison schools, accountability testing increased educators' focus on academics. In all schools, academic focus primarily involved curriculum alignment, a practice designed to align instructional sequences to sequentially organized state standards. Since student achievement on particular tests was the ultimate justification for these efforts, the educators at these schools also thought it was necessary to "teach to the test" in explicit ways. Despite these commonalities with regard to academic reform in general, there was considerable variety in the approaches to mathematics pedagogy that teachers were using across the schools. Intentional work on mathematics pedagogy seemed to be taking place to some extent in all of the schools except the comparison elementary school. This work, however, did not lead the schools in the same direction. Instead, several schools seemed to be adopting constructivist practices to a considerable degree, while several others seemed to be strengthening traditional practices and augmenting them with some constructivist techniques.

- *Community Engagement.* In all of the schools, educators believed that strong school-community relations represented an important resource for school improvement. Nevertheless, efforts to promote such engagement confronted considerable challenges in many of the schools because, in the past, educators had acted in ways that tended to alienate parents and community members. At the time of the study, educators in most of the schools were trying to reverse the trend. Some schools were developing new initiatives, such as "Family Reading Night" and parent-volunteer programs, to cultivate increased involvement. Other schools were just beginning to consider ways to connect in positive ways with parents and community members. At one school, the community's concerns about students' test scores coupled with efforts to create an independent district contributed to increased levels of engagement.

Overall, the research showed that there was general agreement across the schools about the conditions, resources, and activities that were likely to contribute to school improvement. Educators at all of the schools saw the value of strong leadership, respectful relationships, collegiality, an explicit focus on academics, and community engagement. Common across the schools was the belief that curriculum alignment and explicit test preparation were necessary to increase student achievement.

Beyond these two practices, schools differed considerably in the approaches they favored. Whereas some of the schools used practices that tend to be seen as traditional, such as top-down leadership and direct instruction, others used practices that tend to be associated with school reform, such as distributed leadership and inquiry-based instruction. The analysis did not offer any evidence that one set of practices yielded better results than another. In fact, the evidence suggested that the coherence of the practices that were adopted and how well those practices aligned with community values increased the likelihood that they would be successful.

The research also showed that *Schools of Promise* and comparison schools did not differ systematically with respect to the practices that were considered useful for fostering

improvement. What seemed to differentiate the two groups of schools were: the longevity of the improvement initiative; the coherence of the reforms adopted; and, the severity of the challenges that the schools confronted.

Purpose

The Ohio Department of Education (ODE) sought detailed information about the school improvement efforts taking place in its *Schools of Promise*. These schools were selected for their high performance from among schools in which 40 percent or more of the students are economically disadvantaged.[1] The Ohio University research team collected information from six rural schools with high mathematics achievement and from two comparison schools where mathematics achievement was more modest. The report provided here compares school improvement activities in the eight schools.

Methods

In consultation with ODE staff, the research team selected six schools from among the 2003-2004 *Schools of Promise*. Site selection focused on four criteria: (1) rurality, (2) high mathematics achievement, (3) variety in school levels (e.g., K-6, 9-12), and (4) availability of the site.[2] The schools chosen in this way were: Fredericksburg Elementary School (K-8), Peebles High School (7-12), Western High School (7-12), Felicity Franklin Elementary School (K-4), Felicity Franklin Middle School (5-8), and Felicity Franklin High School (9-12). The team saw the inclusion of Felicity Franklin's three schools as an opportunity for studying systemwide improvement efforts.

The research team then selected two comparison schools -- one elementary and one high school – with demographics similar to those of the six *Schools of Promise*. The team used achievement data from ODE to develop simple regression equations that identified schools in which mathematics achievement was about what one would expect, given the socioeconomic circumstances of the communities where the schools were located.[3]

Once schools were selected, Dr. Susan Zelman, state superintendent of public instruction, mailed letters to their district superintendents, asking permission for the study team to collect data. All superintendents granted permission and study team members made arrangements to visit the schools. Visits ranged in length from five to eight days, depending on the ease with which interviews and classroom observations could be arranged.

At each school, project researchers conducted individual semi-structured interviews with teachers, administrators, parents, and non-parent community members. In addition, they conducted focus-group interviews with students. Approximately 24 interviews (lasting from 30 to 90 minutes each) were conducted at each site. The researchers also conducted classroom observations (approximately 10 in each school) and reviewed relevant documents, such as teacher-made tests, lesson plans, school handbooks, worksheets and Continuous Improvement Plans. On occasion, the researchers prepared

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[1] Specific guidelines for selection are provided in Ohio Department of Education news releases (e.g., http://webapp1.ode.state.oh.us/cncs/view.asp?id=619731295771215191)
[2] Some schools met all three of the other criteria but had already been selected by another research team.
[3] We refer to the comparison schools as Comparison Elementary School and Comparison High School to assure that they remain anonymous.

field notes to describe what they observed in the schools and to comment on relevant informal encounters.

Researchers transcribed all interviews, with transcripts collected in an electronic data base. The research team also added information from observation protocols and field notes to the data base. Finally, scanned copies of the documents collected at each school were added. Data coding and analysis were accomplished through the use of the software program Atlas-TI.

Initial coding of data involved classifying the data in relationship to 48 *a priori* codes that identified a wide range of school policies and practices (see Yin, 2003). One code, "school improvement events," was applied frequently, and data classified with that code were pulled together as the basis for the cross-case analysis. A second level of coding was performed with this subset of data in an effort to identify salient categories for making sense of the school improvement events. These categories reflected practices and experiences that were widely represented in the data. Once the researchers agreed on the salient categories, the data were reviewed again to: explore the conditions that motivated schools to make improvements; examine the extent to which improvement processes were shared across schools; and, identify experiences and practices that differed across the schools.

The researchers paid particular attention to experiences and practices that were shared by *Schools of Promise*. These represented emergent themes. Although these themes constituted common improvement principles and events, they were manifested and interpreted differently in each school. For that reason, analysis focused first on commonalities and differences across *Schools of Promise* and then on commonalities and differences between *Schools of Promise* and comparison schools.

The Context for School Improvement

All of the schools included in the study –*Schools of Promise* and comparison schools – were taking Ohio's accountability mandate seriously. Teachers and principals in these schools were particularly attentive to the tests used to measure school performance, and many saw "standards-based instruction" and "curriculum alignment" as the approaches most likely to foster improved test scores. Most saw low test scores as a motive to improve and regarded increases in test scores as evidence of substantive improvement.

At the same time, educators in some schools saw the changes in Ohio's requirements – proficiency tests, standards, achievement and graduation tests – as confusing. For these educators, meeting accountability requirements involved a process of second-guessing the state. This stance seemed to work against long-range efforts to enrich curriculum and improve pedagogy. In all of the schools, teachers engaged to some extent in the practice of "teaching to the test." And many of those we interviewed justified the practice by explaining that the Ohio Department of Education released old versions of the tests to enable teachers to drill students on items similar to those that would be on tests the students eventually would take.

The practice of "teaching to the test" was not the only condition that seemed to interfere with deep structural reforms of curriculum and pedagogy. Another distraction was the barrage of pedagogical remedies offered to schools from a variety of sources. In fact, only one of the schools seemed able to keep teachers from adopting remedies that were

clearly incompatible with one another and sometimes even with the school's long-term improvement aims. For example, in schools where educators were making efforts to involve all parents in meaningful ways, Ruby Payne-style "poverty" training was being offered.[4] In some schools, teachers were simultaneously experimenting with thematic units and discipline-based "short-cycle" assessments.

Despite the efforts these schools were making, their teachers and administrators had concerns about the political environment in which reform was taking place. In particular, they worried about future changes in the requirements that their improvement efforts were designed to address – for example, possible changes in content standards, formulations of "best practice," and methods of demonstrating accountability. Furthermore, the schools were threatened, to greater or lesser degrees, by destabilizing forces such as changes in leadership, teacher turnover and demographic shifts. Leaders of the *Schools of Promise* were aware that the improvements acknowledged by the award might be eroded or overturned sooner or later by contextual conditions that were largely beyond their control.[5]

Results

Analysis of the data relating to school improvement events revealed five salient categories: (1) leadership, (2) relationships, (3) professional development, (4) academic focus, and (5) community engagement. Although all of the *Schools of Promise* deployed effective practices related to these features, their specific practices often differed. Practices at comparison schools were consistent with – though usually less fully elaborated than – those taking place in the *Schools of Promise*.

Leadership

In each of the *Schools of Promise*, certain individuals provided strong leadership, particularly during the implementation of an improvement plan. Leadership entailed conscious development of a shared vision and encouragement of teachers' ownership of and accountability for particular improvement practices. Within this general framework, however, there was considerable variability across schools.

The leader with the greatest influence over improvement in the three Felicity Franklin schools was the curriculum director, whose leadership seemed to be both top-down and transformational. He was described as implementing, over a five-year period, a systematic plan across all three schools and embedding high levels of teacher accountability into the plan. According to one Felicity Franklin educator,

[4] For several years, Ruby Payne and her associates have been delivering workshops in Ohio as well as other states. The perspective taken in the workshops is that a culture of poverty develops among families that remain poor for several generations. Critics fault this approach for its view of poverty as a cultural deficit rather than as an economic disadvantage. Because this perspective tends to "blame the victim," it interferes with educators' ability to partner productively with families in high-poverty communities.

[5] Although educators working in the *Schools of Promise* believed that they could improve the performance of low-income students, they still saw poverty as a major influence on students' achievement. Therefore, they worried about changes in their communities that might bring larger numbers of disadvantaged children into the schools.

> He has done a great job in marshalling the resources and the attention of the school district along the lines of the Continuous Improvement Plan. That's my observation generally over time in education that there needs to be somebody who has to have a vision of what we're trying to do. It doesn't necessarily have to be the greatest idea in the world. But somebody's got a vision, and we're all driving toward that vision.

In many ways, the leadership provided by the curriculum director represented a constant in an otherwise changing scenario. The elementary and high school principals and the dean of students were all new to the district in 2004-2005, and the middle school principal and superintendent were in new positions. The new leadership team was attempting to use more democratic leadership practices than those used in the past.

At Western High School, improvement began in the 1990s under the leadership of a principal who has since left the system. Development of a mission statement served as a catalyst, encouraging teachers' engagement with the improvement process. Immediately after development of the mission statement, the principal organized the teachers into committees to work on issues such as curriculum alignment, technology, and attendance, and so on. Teachers assumed leadership of the committees, which continue to serve as the crucible for continuous improvement. One particular teacher-leader, a long-time mathematics teacher, has perhaps had the greatest influence. Pride in his own work as an educator and in the reputation of the school motivated this educator to take reform seriously. As a colleague recalled,

> He has a newspaper clipping hanging in his room that has been hanging there since 1999 or something that has proficiency scores on it. And there is a heading about how poor we are doing in academics…. And he used to use that for motivation.

The charisma of a former principal, rather than explicit development of a mission statement, typified leadership at Peebles High School. Under the somewhat vague banner of "success," the principal motivated teachers and students to excel. As one Peebles educator explained,

> Our former principal brought that kind of attitude in our building: "We want to…we will succeed. We are going to do it." A positive attitude creates a positive environment. And now students put pressure on themselves and other students to try to [succeed].

With the departure of this dynamic leader, the superintendent has taken over as the administrator with the most direct role in overseeing reform. His primary goal seems to be to unify reforms across the district. Aware of the benefits of sharing leadership, he has created a districtwide planning team, which is charged with linking professional development to districtwide improvement priorities.

Shared leadership is most fully realized at Fredericksburg Elementary School, reflecting the district's commitment to this approach. Teachers at Fredericksburg work collaboratively to identify strategies that will enable them to achieve the school's goals for improvement, According to the principal, "I'm not the expert; they're the experts." Distributed leadership at Fredericksburg succeeds in communicating both encouragement and high expectations. And it fosters a spirit of cooperation and mutual respect. As one

teacher noted, “We’re all pretty good at stating our opinion and questioning things that need questioning. We’re good at suggesting ideas.”

The Fredericksburg principal views her role as supportive, calling herself a “cheerleader.” Nevertheless, she also provides structure, by organizing discussions that enable teachers to bring ideas to the table, and providing the resources teachers need to implement reforms. In addition to teachers, the principal is highly attentive to the needs and concerns of parents and community members. As the principal explained, “It goes back to that learning community… trying to get everyone in.”

Leadership at the comparison schools. Leadership was also considered to be an important part of school improvement at the comparison schools, but the leadership priorities at the two schools differed. At the comparison high school, the principal focused on teachers’ collective involvement with curriculum alignment and was attentive to community engagement. By contrast, the focus at the comparison elementary school was on individual development. Concern for each child’s individual progress seemed to characterize the school’s vision, and attentiveness to teachers’ individual competence and accountability was far more pronounced than a focus on their collective work to engage reform.

Leadership at the two comparison schools also seemed less coherent than leadership at the *Schools of Promise*, and two conditions might contribute to the difference. First, reform seemed like a more recent priority in the comparison schools, so the effects of leadership were less evident. Second, both comparison schools confronted challenges that the *Schools of Promise* were spared. Namely, both were trying to forge school improvement in communities that were suffering from the aftermath of consolidation. Although neither of the comparison schools had experienced a recent consolidation, other consolidations in the two districts were causing communitywide distress.

Summary. Overall, the cross-case analysis revealed strong leadership and clear purpose across the *Schools of Promise*, with considerable variety in the way leadership was provided. In four schools—the three Felicity Franklin schools and Peebles High School—leaders used top-down approaches to stimulate reform, gradually introducing more democratic processes as time went on. Democratic leadership had a longer history and greater cultural resonance at Western High School and Fredericksburg Elementary, where administrators explicitly encouraged teachers to take leadership roles. The presence of a strong teacher-leader at Western enabled this approach to work, even though there was turnover in the principalship. At Fredericksburg, stability of leadership coupled with engagement of all teachers in the improvement process cultivated a highly functional learning community. Leadership was also important at the comparison schools, where it had not evolved quite so fully as at the *Schools of Promise* and confronted greater challenges.

Relationships

In the *Schools of Promise*, teachers saw the character of the relationships they developed with students and with one another as central to the improvement effort. With students, they were particularly concerned with establishing and maintaining relationships that engendered lawful behavior. Among themselves, teachers sought productive collaborations focusing on curriculum alignment and changes in instructional practice.

The influence of discipline. "The biggest difference in our building has been the discipline. If you don't have the discipline, I don't care what kind of content standards you have…you're not going to be successful." This sentiment from an educator at Peebles High School illustrates the significance teachers in the *Schools of Promise* placed on discipline. Although they also believed that caring characterized their relationships with students, they were far more vocal about the need to establish relationships where students accepted and responded to the authority of the adults in charge.

Discipline policies served as the mechanism in all of the schools for cultivating lawful relationships. Teachers wanted such policies to promote uniform expectations, ensure consistent enforcement of rules and elicit support from school administrators. For some teachers in these schools, it was important to know that an administrator would handle the more serious discipline issues, leaving only the enforcement of classroom rules to teachers. Many expressed the opinion that, when administrators took care of discipline, teachers had more time to focus on teaching: developing lesson plans that addressed content standards, providing remediation and experimenting with innovative methods of instruction. The principal at one high school characterized this perspective:

> Correct the behavior and everything else will fall in place. Teachers just want the backing, and they love to teach. If they can't control the kids and no one is backing them, it harms them from being able to teach.

Arrangements in which administrators primarily took charge of discipline were used systematically at the middle and high schools, where discipline problems were perceived to be most serious. In the Felicity Franklin School District, for example, a dean of students handled discipline of students in grades 7 through 12. According to one middle school teacher in the district, 'the dean of students' role is to deal only with discipline. So now the principals don't have [to]."

At the other two secondary schools, principals and assistant principals were the ones who most often administered discipline. Teachers, however, handled minor incidents in their own classrooms. Teachers also had played a role in establishing the schoolwide policies that the administrators enforced. According to a teacher at Western, for example,

> Years ago – eight years maybe – we had committees that pretty much met monthly on discipline, and we tried to come up with a policy. We stated it in the handbook and it got approved by the board.

At Peebles, changes in the behavior policy seemed less important than changes in the degree of consistency with which the policy was enforced. As one teacher explained,

> When I started seven years ago, our administrators at that point were more lenient. Then we got a new assistant principal. He really helped with the discipline, and once we had the discipline, I think the kids knew we were serious.

Educators at the elementary schools saw discipline primarily as a classroom, rather than a school, issue. Consequently, they seemed to feel more comfortable than secondary teachers about playing the role of disciplinarian. They did, however, see value in consistency and collaborated with their colleagues to establish similar rules and discipline procedures.

At Felicity Franklin Elementary School, for example, the teachers at each grade level worked together to develop a code of conduct to be used in all of their classrooms. Across several grade levels, moreover, teachers adopted the same version of assertive discipline. The procedures were so similar across classrooms that even students in the primary grades had a clear understanding of how they worked. One first grader explained the procedures as follows:

> We have these little charts with our names on it, and green means you're being good, yellow means you have a warning, and red means you have to miss half of your recess. And black means you have to call your parents and get after-school detention.

A very similar system was in place at Fredericksburg Elementary, where teachers at all grade levels deployed the same approach to behavior management. There, even more so than at Felicity Franklin Elementary, educators saw a direct connection between improved discipline and improved academic performance. One teacher reported, for example, that when the board had hired the current principal, "They wanted to make sure that they had the discipline under control so that the learning could take place." According to this same teacher, considerable progress has been made.

> You can see the improvement in the discipline as far as how many office referrals … I don't remember the exact numbers, but it was over 100 when she first started, and now it's down to maybe 10 or something like that a year. And so I don't want to say that's the only improvement, but I think that obviously you have to provide that comfortable learning environment, and once you have that, you can go from there.

Discipline at the comparison schools. Although discipline was also a concern at the comparison schools, the educators there did not appear to view improved discipline as a step toward improved academic performance. Several teachers at these schools did, however, see discipline as promoting healthy adult-student relationships. The following comment from a teacher reveals this perspective:

> The principal and assistant principal give the students respect. They treat them with respect and say, "I like you as a person, but we cannot have this behavior." And it works very well. They've taught me. And the kids here in this high school don't like to be yelled at… I don't know if they hear it at home too much, or if they just won't accept it. If you go up quietly to them, they respond much better.

Educators in the comparison schools, just like those in the *Schools of Promise*, used carefully constructed discipline plans as a way to codify rules and set forth consistent consequences for infractions.

There was one significant difference at the elementary level between the comparison school and the two *Schools of Promise*. At the comparison elementary, each teacher developed a behavior management plan for his or her own classroom. The development of a discipline plan to serve each grade level (as was the case at Felicity Franklin) or to serve the school as a whole (as was the case at Fredericksburg) had not taken place.

Professional collaboration. Across the *Schools of Promise*, teachers attributed school improvement in part to the quality of their professional relationships with one another. In some of the schools, notably Felicity Franklin Middle School and Fredericksburg

Elementary School, these relationships also had an important social component. At these schools, most teachers maintained strong friendships with their colleagues, visited one another in the evenings and on weekends, and saw the school as the center of their social life. Whereas this level of involvement clearly added to teachers' enjoyment of their jobs, it did not seem to be a prerequisite for effective professional collaboration. In the four schools in which such close rapport had not been achieved, teachers also worked well together, regarding their professional relationships as a source of meaning and motivation.

At all of the *Schools of Promise*, teachers engaged in ongoing collaboration with colleagues, but the nature of the collaboration differed from school to school. In particular, there were differences in teachers' levels of involvement, the extent to which teachers assumed leadership roles, and the structural arrangements that supported teacher collaboration.

In the elementary school at Felicity Franklin, teacher involvement was a matter of pride, but also a more formal arrangement than at the middle school, where, ironically, the committee structure seemed to be more highly organized. Teachers at the elementary school expressed the view that their participation on committees connected them in meaningful ways to the school administration and also to the outside community. The source of this connection seems to have been collaborative work on a districtwide Continuous Improvement Plan, which was initiated about seven years ago. Under the authoritative direction of the district curriculum director and the school principal, teachers continue to participate in committee work to address issues relating to curriculum and instruction.

A similar approach was used at Felicity Franklin High School, where teachers primarily regarded the classroom as the venue for their work. When administrators asked them to become involved with schoolwide planning or special projects, however, they participated willingly. And, even though departments were small, teachers did meet with their department colleagues to talk about curriculum, instructional materials, scheduling and other matters directly related to teaching.

By contrast, teachers at Felicity Franklin Middle School exhibited more self-directed engagement with planning and special projects. For example, nearly all of the teachers at the middle school used the word "we" when discussing their work on committees, indicating a stronger sense of community than was evident in the district's other two schools. In addition, teachers at the middle school seemed confident about their ability to initiate and sustain plans for improved curriculum and instructional practice. The description of one of the changes they instituted illustrates their self-assurance and involvement:

> We realized that the Title room was not teaching proficiency objectives. And we said, "No, we want them in the classroom with us and with the Title teacher in the classroom helping." So that's what we've been doing ever since.

Peebles High School teachers played a part in improvement planning, but primarily at the request of the school administration. Even though they preferred a top-down and centralized approach, the superintendent and principal were open to hearing what teachers had to say. According to one teacher,

> We're involved, as far as asking for our opinion. We are not left out, because they will take our opinion, take some of the things we would like to see, and they will accept that.

A more grass-roots type of involvement was taking place at Western High School, where teachers worked with department colleagues to address school improvement goals. One teacher explained, "I just feel like that we all are like a community, and we all have to do our part; and if some of them don't do their part, then the whole school can go down." At Western, more than at the other *Schools of Promise*, impetus for instructional improvement came from a teacher-leader, a well-respected mathematics teacher with a long-term commitment to the school.

Similar to the type of participation found at Western, teacher engagement at Fredericksburg Elementary School was frequent, but informal. Teachers saw themselves as a community, readily consulting with and providing help to one another. The small size of the school staff also promoted collaboration across grade-level boundaries. At Felicity Franklin Elementary, the relatively large size of the staff made cross-grade-level collaboration more difficult.

Professional collaboration at the comparison schools. Collaboration among teachers was less well established at the comparison schools than at the *Schools of Promise*. For example, at Comparison High School, where planning committees were in place, teacher involvement was variable. While some teachers were highly involved, others seemed not be involved at all. Most saw the individual classroom, and not the planning committee, as the primary site of instructional improvement.

Until recently, struggles over school consolidation at Comparison Elementary School drew teachers' attention away from improvement planning. According to a parent who was a life-long resident of the district,

> It was kind of rocky when they first consolidated and for the last eleven years. I just feel that probably, mostly they've finally got, how do you say, organized, maybe? More organized to where they're all on the same page, to understand what the kids need.

Comments from teachers confirmed this perspective. Although most teachers reported that they now focused on improving instructional practice, this work tended to be autonomous rather than collaborative.

Summary. In all of the *Schools of Promise*, educators viewed increased attention to student discipline as a precursor to high academic performance. Whereas discipline was also important in the comparison schools, educators at these schools did not regard improved behavior as a step along the way to academic improvement.

Similarly, *Schools of Promise* and comparison schools differed in the extent to which collaborative efforts among teachers served as the catalyst for reform. Although there was considerable variability in how teachers' participation was elicited and sustained at the six *Schools of Promise*, in all cases professional collaboration turned out to be productive of schoolwide reform. Improvement efforts at comparison schools tended to reflect the initiative of individual teachers and be more piecemeal.

Professional Development

The *Schools of Promise* made professional development a priority. They used it for improvement planning as well as for developing teachers' capacity to expand and, in some cases, change their repertoire of classroom practices. Each school, however, used professional development somewhat differently. The schools varied, for example, in the topics emphasized and how much they involved teachers in the planning of professional development activities. Furthermore, at some schools the requirement for changed classroom practice was more stringent than at others. At all of the schools, professional development represented a broad domain, encompassing not just the activities sponsored by the district but also the graduate work undertaken by many teachers, the workshops teachers attended voluntarily, and the events associated with grant-supported projects, such as Project REAL .

Professional development at Peebles High School fit into the centralized approach used by the Ohio Valley/Adams County district. Although educators from Peebles High School played a role in helping to determine professional development goals and activities districtwide, they did not engage in extensive school-level planning or capacity building. Teachers did, however, exercise control over the practices used within their own classrooms, and the district made it possible for them to pursue the professional development opportunities that interested them.

Many teachers were pleased that professional development was a districtwide initiative because it enabled them to consider issues related to curriculum and instruction with colleagues who taught the same subject matter. Work on curriculum alignment and later on short-cycle assessments promoted this type of collaboration. Other district-level professional development, such as poverty training, was more generic.

Professional development in the Felicity Franklin schools was also centralized, but in a different way. Because there was just one high school, discipline-based collaboration was not the major thrust. Curriculum alignment was part of the work undertaken at each of the three schools. But ongoing dialogue at the high school among discipline-based teams was not a principal strategy. Rather, district-level work on Continuous Improvement Planning and on effective instructional practices dominated the professional development activities required of teachers. One administrator described this emphasis: "At every staff meeting it's always about improvement; it's about what issues we're facing we can fix, what issues we are facing that we can't fix, and, if we can't fix them, how can we minimize them."

More than at other *Schools of Promise* in the sample, the curriculum work taking place at the Felicity Franklin schools promoted both vertical and horizontal alignment. Two conditions facilitated this approach: the employment of a curriculum director who was responsible for continuous improvement districtwide, and the physical structure of the district, with all three schools located on one campus. Nevertheless, even though conditions favored vertical alignment, discipline-based discussions across the schools represented a relatively new tactic. Earlier curriculum work in the district was based on the assumption that teaching to the standards would automatically assure adequate grade-to-grade articulation. As one administrator's explanation reveals: "You teach what the standards say because if you do that, then the next grade level can build on that."

Capacity building for technology use represented another professional development focus that was more evident in the Felicity Franklin Schools than in the other *Schools of*

Promise. According to several district educators, teachers had equipment available to them that they did not know how to use. Part of the work of the new curriculum director was to improve the technological capacity of the district –its hardware and software, as well as the knowledge and skills of its teachers.

In addition, the Felicity Franklin Local Schools had the only middle school in the sample, and this school deployed the sort of interdisciplinary teaming that advocates of middle-level education endorse. Teachers at the middle school took the initiative to organize team meetings to design and evaluate lessons, and they were just beginning to talk about the development of interdisciplinary, thematic units. As one middle school teacher explained, "I think the middle teachers – if we sat them in a room – they'd all want to go in one direction." Moreover, viewing themselves as an important bridge between elementary and high schools -- a place where pupils begin to learn in more varied ways as they encounter more complex information – the teachers were committed to finding ways to make instruction memorable and accessible to all students.

At Fredericksburg Elementary School, professional development directed toward particular school-level initiatives took place in formal monthly staff meetings that the principal organized, as well as in grade-level meetings that the teachers organized. And the staff selected particular topics of interest each year. During the year when the research team collected data, the staff was working with a new mathematics series, which was quite different from the one used in the past. As a result, teachers decided to devote attention to professional development activities that would help them make effective use of the new mathematics books and materials accompanying them. Fredericksburg teachers' strong commitment to focused professional development was revealed in a comment from the principal: "I do know that there's a big effort by the teachers to implement the instructional programs that we've got in place. And I referred to that sense of ownership—and they do have willingness, they have a mandate, if you will, to continue that."

Professional development featured prominently among the school improvement strategies at Western High School, but some teachers worried that too many initiatives were underway. They noted, for example, that various professional development programs were being used, and that these programs were somewhat incompatible: data-based decision making started under Project REAL, curriculum alignment supported by a 21st Century grant, and, most recently, a countywide project (LCAP) to map curriculum and design short-cycle assessments.

While most teachers acknowledged the benefits of these efforts, some mentioned significant negative consequences. For example, several teachers expressed concern about being out of their classrooms for extended periods of times. Others saw curriculum mapping as a thinly veiled effort to get them to teach to the test. One administrator expressed the opinion that the most recent initiative—LCAP—was the one that teachers resented most: "They just don't like this LCAP and they don't like going to all these meetings. And I realize that every day that the teacher's out of the room at a workshop, then those kids have lost."

An important source of teachers' resentment seemed to be their belief that effective professional development was already taking place at the school, both through informal collaboration among teachers and through more formal committee work associated with school improvement. As a consequence, they saw additional requirements from district administrators as unnecessary and distracting.

Professional development at the comparison schools. In these schools, as in the *Schools of Promise*, professional development –both the planning and implementation of activities – represented a priority. Its connection to schoolwide improvement, however, seemed to be less fully articulated. As was the case at the *Schools of Promise*, administrators at both comparison schools spoke about the importance of professional development for creating a unified and productive school environment where school improvement could thrive. Both schools were working toward more clearly articulated and job-embedded professional development practices to benefit teachers, build district capacity and improve student performance.

Professional development at the elementary school focused mainly on curriculum alignment and instructional "best practice," with the principal and teachers using student performance data to guide decisions about where improvements were needed. In terms of content, the emphasis was mostly on reading. Curriculum alignment in mathematics, social studies and science was a more recent focus, augmenting rather than supplanting the focus on reading.

Professional development on behalf of school improvement began at Comparison High School about seven years ago, with a particular emphasis on improving all teachers' capacity to make effective use of technology. Quite a few teachers at the school, however, reported that they felt disengaged from the improvement process, and few saw a direct connection between the professional development they received and the school's improvement priorities. According to the principal, the district was so supportive of professional development that these efforts were beginning to detract from teachers' effectiveness. He explained,

> We are bombarded with professional development opportunities daily and are required and highly encouraged for these people to attend, which is nice, but it also takes away from what we're really supposed to be doing. So there has to be a change in structure in this building to allow people to pursue those opportunities without disrupting their regular classroom responsibilities.

Summary. Professional development represented a broad domain, positioned in the *Schools of Promise* (and to a somewhat lesser extent in the comparison schools) to foster school improvement. Procedures for planning and implementing professional development differed in significant ways across the schools as did the content of professional development activities. At some schools, professional development was planned at the district level and focused on district priorities, whereas at others it was primarily a school-based initiative. In most cases, professional development encompassed activities that teachers selected themselves as well as those chosen for them by professional development committees or administrators. At Fredericksburg, in contrast to the other schools, professional development primarily responded to teachers' decisions about the improvement initiatives that the school ought to undertake. Professional development was an important part of school improvement efforts at the comparison schools as well as the *Schools of Promise*, but it seemed less well integrated there.

Academic Focus

Educators at the *Schools of Promise* devoted considerable attention to improving students' achievement, a process that increased their focus on curriculum and instruction. Two important themes characterized their efforts, particularly as these related to achievement in mathematics: the need to prepare for accountability testing, and the need to make changes in mathematics pedagogy.

Test preparation. From the perspective of teachers and principals, academic focus and test preparation were almost synonymous. At each of these schools, the accountability tests fueled a concern for curriculum alignment, whose purpose was to ensure that the content presented to students was matched to state standards and benchmarks. Educators believed that alignment of the curriculum was necessary to increase the likelihood that students would learn the material expected on the state accountability tests. Whereas most of the schools' administrators viewed such alignment positively, most teachers regarded it more circumspectly, typically coming to accept it only after some initial reservations. At some schools, teachers' eventual acceptance of the approach was enthusiastic, but at others it remained skeptical.

In the Felicity Franklin district, the alignment process seemed to be the most systematic, focusing not only on linking curriculum content to the state standards but also on connecting instructional techniques to a set of best practices. Moreover, the district's Continuous Improvement Plan served as a kind of master plan, specifying initiatives needed on a variety of fronts (e.g., curriculum, instruction, and parent involvement). To monitor implementation of this master plan, the curriculum director deployed a multi-faceted and regular system of inspection. This system entailed review of lesson plans (to monitor curriculum alignment), classroom "walk-throughs" (to monitor use of instructional best practices), and critique of evidentiary portfolios submitted by all teachers (to monitor implementation of strategies specified in the Continuous Improvement Plan).

One important part of this comprehensive system entailed explicit "teaching to the test," a practice that the curriculum director endorsed:

> Why wouldn't you each to the test? People say that like it's a bad thing. If you know what the test is like and you know what the questions are going to be like, why wouldn't you want to teach to that test? If you're a classroom teacher, you don't teach for two weeks and then test something else that you didn't teach. What I tell them is, you are mimicking, and you're using released items. Why do you think ODE makes all that stuff available to you if they don't expect you to use it to improve what's going on for kids who take the test? So, I think that's a lot of what we do. And that is a strategy people use to get some immediate results right off the bat.

At Peebles High School, teaching to the test fit into a wider process of data-based planning, and ownership for this process seemed to reside more clearly with the teachers. As a teacher at Peebles High School explained,

> I have always used data in my own classroom, but we haven't always done that as a district. Then we got involved with project REAL, which is totally data driven, and it has made a huge difference in this school.

According to another Peebles' teacher,

> I analyze the statistics from the last testing to see what the kids need to work on for the next year. The kids that just took the test in the seventh grade, I will be studying over the summer to see what I need to do with them next year.

The approach at Western was similar; but like that at Felicity Franklin, it seemed to rely heavily on explicit preparation for the tests. As one teacher explained,

> We gathered as many practice tests as we could and used those in the classroom and again went over it with the kids and let them know if they answered it correctly and if they didn't, why they didn't answer it correctly.

A more organic connection between data analysis and the reform of curriculum and instruction was evident at Fredericksburg Elementary School and seemed also to be emerging at Felicity Franklin Middle School. At Fredericksburg, where teachers were highly engaged in schoolwide decision making, support for curriculum alignment was strong, but teachers also were savvy about the limitations of the data obtained from accountability tests. One teacher explained the perspective in this way,

> I think that each year is different. And sometimes, what comes out on paper—test scores and things—that's not all that goes into improvement. So you're going to be up and down, I think; it just depends on your group of children that are coming through. Sometimes, different classes have different struggles, but I think there's always improvement, every year. I mean, like they may necessarily not be a great group at test scores, but just, sometimes, some breakthrough with an individual child or, with class goals. As you can see, they set goals all the time around here. It's just great.

At Fredericksburg and to a lesser extent at Felicity Franklin Middle School, two features of school culture tended to support a more extensive and, at the same time, circumspect application of data-based improvement. First, the routine use of data to monitor the attainment of short-term goals gave teachers at these schools a broader context for interpreting scores from accountability tests. Second, the collaborative planning that these teachers undertook supported a perspective on improvement that was more open and inquiring than the perspective of teachers at the other schools.

Test preparation at the comparison schools. At both comparison schools, educators seemed highly attuned to state accountability tests, viewing data-based decision making, curriculum alignment and explicit test preparation as critical steps in the improvement process. At the same time, educators at these schools acknowledged that the process was still in its early stages. Their belief in the efficacy of the steps they were taking, however, helped unify faculty at the two schools, encouraging them to work together in a more concerted way.

Changes in mathematics pedagogy. Many teachers of mathematics in the *Schools of Promise* believed that changes in how they taught contributed to improved achievement, but the types of changes adopted at each school were different. Moreover, in some schools there were teachers who resisted the sorts of changes that were endorsed by the majority. Contested views of mathematics pedagogy primarily centered around three issues: (1) how much traditional drill and practice ought to be used, (2) how much a problem-based approach ought to replace a traditional approach, and (3) how much

curriculum and instruction ought to be differentiated for students with different levels of mathematics ability. Comparison of the two elementary schools provides clear evidence of the extent to which the schools differed.

At Felicity Franklin Elementary School, teachers used problem-based strategies to augment traditional practices. For example, students encountered a “Problem of the Day,” every time they walked into the classroom. Teachers believed that daily exposure to such problems would communicate the importance of problem-solving and sharpen students’ skills for handling “story problems.” In addition, teachers added manipulatives to lessons to increase the likelihood that students would learn the relevant concepts. Nevertheless, the instructional mainstay at Felicity Franklin Elementary was traditional pedagogy: teacher-directed lessons, drill of mathematics facts, individual completion of worksheets and quizzes.

At Fredericksburg Elementary School, by contrast, teachers had adopted a reform curriculum, *Everyday Math*, and were using it conscientiously. The fundamental premise guiding this curriculum is that mathematics is about solving problems, not about getting right answers. This premise supports instructional methods that differ dramatically from those used in more traditional mathematics lessons. For example, it requires that students work together to solve problems; it encourages students to identify different approaches for framing problems and seeking solutions; and it requires that students explain the processes they use. Like other reform materials, this curriculum seeks to instill an understanding of mathematics as a domain that is full of possibility and open to interpretation, rather than as one governed by rigid and hierarchically sequenced algorithms.

Reform curricula in mathematics differ substantially from traditional approaches, and teachers usually experience a period of adjustment. At Fredericksburg, where *Everyday Math* had just been adopted, teachers and parents were working hard to make it work. Classroom observations revealed that most of the time teachers were using the constructivist practices associated with this approach: group discussion of problems, comparison of various solutions, written reflection about mathematical concepts, and emphasis on reasoning rather than on correct answers. Occasionally, teachers were observed providing more traditional, direct instruction, but this approach seemed to augment the reform curriculum rather than supplant it.

Differences across the three high schools in the study were evident, though less dramatic. At Peebles High School, instruction was traditional and was supported by individualized tutoring. According to one of the mathematics teachers,

> We offer after-school tutoring – we’ve had it all year. Students come in anytime they want. The teachers here on staff will stay after school and work anytime extra with the students.

Moreover, with guidance from the principal, the mathematics teachers at Peebles were beginning to increase all students’ opportunities to learn by reducing reliance on curriculum tracking. The decision to democratize access to algebra and geometry prompted teachers to find methods for presenting concepts that enabled all students to achieve understanding, and as a result they were increasing their use of hands-on instruction.

At Western, one dynamic mathematics teacher had been having a pronounced influence for a number of years. At the time of the study, he was teaching more advanced mathematics classes, but he still seemed to play a role in shaping mathematics pedagogy schoolwide. Teachers at Western, more than those in other schools in the study, were routinely using technology, and they used it in a variety of ways: for modeling concepts, for demonstrating mathematics applications and for providing remediation. Furthermore, through their work with project REAL, mathematics and science teachers were collaborating on interdisciplinary projects that engaged students in hands-on applications of mathematics.

A much more traditional approach seemed to dominate mathematics instruction at Felicity Franklin High School. Observations in mathematics classes suggested that direct instruction was the method of choice: teachers presented material, assigned practice activities in class and for homework, reviewed homework, provided pre-test review sessions and gave tests. One of the mathematics teachers explained: “They do practice in class. I try to encourage them to practice, practice, practice. The more you do, the better you are.” Both the curriculum director and the principal expressed some concern about the approach that the mathematics teachers preferred to use. According to the principal, “I think the high school staff is a little more reticent to adopt some of the reform philosophies and techniques.” This interpretation was shared by the superintendent, who had been the principal of the high school for a number of years: “The resistance was there. It was significant at the high school level.”

At the same time, some innovation seemed to be taking place at Felicity Franklin Middle School. Teachers explained that they were trying to focus on problem-solving and mathematics applications. As one teacher explained,

> We try to do as much hands-on practice and exploratory activities as possible, as opposed to just giving notes and asking them to do it. We want them to get an understanding of what it is, and then be able to apply it.

Observations revealed, however, that teachers were integrating these reform approaches into instructional routines that still relied heavily on direct instruction.

Mathematics pedagogy at the comparison school. At Comparison High School, efforts to improve mathematics instruction began as early as10 years ago, with the addition of manipulatives and increased focus on practical applications of mathematics. One teacher expressed the enthusiasm felt by traditional mathematics teachers when manipulatives proved to be successful with students who were having difficulties. Additionally at Comparison High School, teachers were increasingly finding ways to differentiate instruction. One mathematics teacher explained the procedure she used:

> I have a sequence of problems normally that go from a very basic-type problem to a higher-level problem. I assign them all. The kids that are working at a faster pace will get to those higher level problems. And some of the other kids don’t. But, there’s hardly any assignment I give that doesn’t contain problems that will challenge any of them. Sometimes they can do them, and sometimes they can’t, but those are always in that problem set, to where — I won’t say always — but most cases, there are problems in there I assigned that I don’t expect them all to get through, and we don’t even discuss them all.

By contrast, a concerted focus on teaching reading at Comparison Elementary School seemed to diminish attention to mathematics instruction. Several teachers explained, however, that the focus was beginning to shift. Because they had been using the Saxon approach, which is quite traditional, the teachers were anticipating a serious debate around the issue of textbook adoption. According to one teacher,

> We have a group of people who believe that Saxon is the right thing. We have another group who believe that there are some gaps that Saxon, even though it has its strengths in terms of reinforcement and continuity of program, that maybe it's not as correlated, if you would, to the standards as it needs to be. So, there's going to be a real debate there.

Summary. At *Schools of Promise* and comparison schools, accountability testing increased educators' focus on academics. Although the schools' approaches varied, particularly with respect to mathematics instruction, some notable commonalities were evident. In all schools, for example, academic focus primarily involved curriculum alignment, a practice designed to align instructional sequences to sequentially organized state standards. But because student achievement on particular tests was the ultimate justification for these efforts, the educators at these schools also thought it was necessary to "teach to the test" in far more explicit ways, such as drilling students on specific items that were likely to be included on the tests.

Interestingly, despite these commonalities, there was considerable variety in the approaches to mathematics pedagogy that teachers were using across the schools. Intentional work on mathematics pedagogy seemed to be taking place to some extent in all of the schools, except the comparison elementary school. But this work did not lead the schools in the same direction. Instead, several schools seemed to be adopting constructivist practices to a considerable degree, while several others seemed to be strengthening traditional practices and augmenting them with some constructivist techniques. In some schools, individual teachers appeared to hold different views about mathematics pedagogy and were using different approaches.

Community Engagement

As institutions connected to the life of the rural communities where they were located, the six *Schools of Promise* had the support of local parents and non-parent citizens. Nevertheless, at several of the schools, previous administrators had been neglectful or actively dismissive of community relationships. At the time of this study, educators at all of the schools believed that efforts to reestablish productive connections to families and other community members were needed.

Perhaps the least intensive repair work was needed at Fredericksburg Elementary, where the period of alienation between school and community had been relatively brief and where many staff members had long-standing connections to the community. The current principal, moreover, seemed keenly aware of the importance of community engagement and made a concerted effort to participate in community events and to invite the community into the school. Two such efforts were the "Home Link" program, an initiative for routinely sending information and materials home to parents, and "Family Math Nights," an after-school program where parents came to school to do mathematics with their children. According to one teacher, parents as well as children learned mathematics during these after-school sessions, an opportunity that parents seemed to appreciate.

Of the *Schools of Promise*, the three Felicity Franklin schools were the most systematic in their efforts to reestablish community engagement, making community involvement a central part of the Continuous Improvement Plan. Under this plan, teachers were required to make frequent connections with parents: by phone, through interim report cards and newsletters, and in other ways that teachers found workable, and they were required to show evidence of their efforts. In addition, district administrators strongly encouraged teachers to take a positive stance in all of their communications with parents and community members.

These efforts resulted in greater community awareness and involvement in the schools. At the time of the study, there was a large volunteer program and a weekly "Family Reading Night" at the elementary school, frequently scheduled parent conferences at all three schools, a parent-organized "After Prom" at the high school, and a neighborhood alliance providing school supplies to needy students districtwide.

The Felicity community highly supported the district's efforts to establish a culture of caring. According to one long-term member of the school community, a former teacher and now a volunteer at the elementary school:

> We now, in the last five years, have been really actively recruiting people to come in and volunteer. And it's made such a big difference. But we went 25 years without them because of this whole mindset that we don't want the outside – who are the parents of these children and the taxpayers of this community – to come in and see what is going on.

One other circumstance in Felicity seemed to contribute to heightened community engagement –the decision to build a single-campus facility in the center of town on the original site of Felicity Franklin High School. Interestingly, by the time of the study, the new facility was beginning to contribute to a sense of togetherness and continuity. This was taking place despite the fact that some community members had balked at the district's decision to tear down the old high school building. Even though district administrators had opened the building, including the gymnasium, to community groups, most people still seemed to think that additional efforts to reconnect the community and the schools – especially the middle and high schools – were still needed.

Whereas community engagement in the Felicity Franklin district resulted from educators' overt efforts to make connections with parents and community members, the impetus at Peebles High School seemed to be coming from the other direction. In part, increased attention to school-community relations reflected parents' concerns about test scores. As one educator explained, "I think parents started getting worried about kids not graduating or passing the test when the proficiency started." And according to a parent,

> I think a lot of our community holds the schools accountable for the kids, how the kids behave and what the kids are taught. I, as a parent, expect my kids to learn what they need to learn to graduate and make it in the real world once they get out of here.

Another basis for increased community engagement was the initiative undertaken by some members of the Peebles community to establish a separate district. These citizens seemed to think that the establishment of the large countywide district had severed the

ties between Peebles and its school. As one community member explained, "I know there has been a problem as far as communicating needs and wants, because we are in such a large school district that the needs aren't always met." Comments from these community members revealed their belief that the establishment of a separate district would galvanize community support for the school and promote school improvement.

School-community relations at Western High School were somewhat different from those at the other *Schools of Promise* in the study. In contrast to Felicity Franklin's systematic program, for example, Western High School made fewer efforts to cultivate community engagement. And unlike the Peebles community, the Latham community (where Western is located) was not insisting upon increased engagement. Rather, some community members seemed to distrust and therefore to remain detached from the school, while others seemed to support and remain involved with it. Similarly, some educators seemed to appreciate the community and to connect with certain community members, while others seemed to disparage it, believing that the goal of the school was to reduce the local community's influence on its children.

Community engagement at the comparison schools. Although the comparison schools confronted greater threats to school-community engagement than did any of the *Schools of Promise*, educators at these schools were aware of the importance of making connections to the community. At Comparison High School, many parents and community members were angry about the district's recent consolidation of the elementary schools in the district. Moreover, some of the parents interviewed for the study made critical remarks about the commitment and competence of the school's teachers. Nevertheless, educators acknowledged that certain families continued to maintain a high level of involvement, and they talked about possible ways to reach out to a larger segment of the community.

At Comparison Elementary School, reactions to consolidation also clouded the relationship between the school and the community. Nevertheless, educators were making efforts to involve parents in schoolwide initiatives (e.g., the Ohio Reads program), and they believed the community was supportive of their efforts. According to one teacher, "We get great support here from the community, because that is what is here…. It is just a small farming community. And that's what makes this school so special because we have that support."

Summary. In the *Schools of Promise* as well as the comparison schools, educators believed that strong school-community relations represented an important resource for school improvement. Nevertheless, efforts to promote such engagement confronted considerable challenges in many of the schools because, in the past, educators had acted in ways that tended to alienate parents and community members. School and district consolidations represented the most dramatic examples of such alienation; but even where consolidation had not taken place, educators had succeeded in restricting community members' access to the schools.

At the time of the study, educators in most of the schools were trying to reverse the trend. Some schools were developing new initiatives, such as "Family Reading Night" and parent-volunteer programs, to cultivate increased involvement. Other schools were just beginning to consider ways to positively connect with parents and community members. At one school, the community's concerns about students' test scores – coupled with efforts to create an independent district – contributed to increased levels of engagement.

Conclusions

Overall, the research showed that there was general agreement across the schools about the conditions, resources and activities that were likely to contribute to school improvement. Educators at all of the schools saw the value of strong leadership, respectful relationships, collegiality, an explicit focus on academics, and community engagement. Common across the schools was the belief that curriculum alignment and explicit test preparation were necessary to increase student achievement.

Beyond these two practices, schools differed considerably in the approaches they favored. Whereas some of the schools used practices that tend to be seen as traditional, such as top-down leadership and direct instruction, others used practices associated with school reform, such as distributed leadership and inquiry-based instruction. The analysis did not offer any evidence, however, that one set of practices yielded better results than another. In fact, the evidence suggested that the coherence of the practices that were adopted and their resonance with community values enhanced the likelihood that they would be successful.

The research also showed that *Schools of Promise* and comparison schools did not differ systematically with respect to the practices that were considered useful for fostering improvement. What seemed to differentiate the two groups of schools were (1) the longevity of the improvement initiative, (2) the coherence of the reforms adopted, and (3) the severity of the challenges that the schools confronted.