



Schools of Promise Case Studies 2005-06

Cross-Case Analysis

Submitted by Strategic Research Group
June 30, 2006

Project Overview

Over the past six years, Ohio has seen tremendous growth and change in education. Students' proficiency scores have improved by more than 17 points over the past six years, and the number of schools in academic watch or emergency has been significantly reduced.¹ Ohio students outperform students in neighboring states on the National Assessment of Educational Progress (NAEP), and Ohio students' ACT and SAT scores have been well above national averages for the past 10 years.² We have much to celebrate in the accomplishments of our students and educators. Still, challenges remain. Despite our aspirations for academic excellence and a goal to "leave no child behind," substantial performance gaps persist between students in specific demographic groups in our state. For example, even though Ohio has successfully reduced the number of African American students who did not meet the "basic" level in mathematics on the NAEP,³ dramatic inequality can still be seen in academic performance. Only 66.8 percent of African-American students graduated in 2003-2004 compared to 89.8 percent of white students. Even more troubling is that the gap seems to start as early as the third grade—just 58.6 percent of African American students were at or above the "proficient" level in reading compared to 81.8 percent of white students.⁴ These achievement inequalities hold long-term economic implications as well. Students who do not graduate are limited in their capacity to earn once they enter the workforce.⁵ Inequality established early in a child's education that persists into adulthood may translate into a lifetime of poverty and risk.

Evidence from Ohio's *Schools of Promise* shows success is possible and attainable for all children. Despite high levels of poverty and other indicators of academic risk, schools identified as *Schools of Promise* have been successful in raising and maintaining high levels of academic performance in mathematics and reading, particularly among minority and economically disadvantaged students. These schools are excellent models of what our education system can achieve, and lower performing schools should study and emulate them. What are the key ingredients to their success? How have they managed to meet or exceed their goals—and what can other schools still struggling with barriers learn from their examples?

¹ The Ohio Department of Education, *State of Education in Ohio 2005-2006* (PowerPoint presentation). Retrieved Jan. 25, 2005 from <http://www.ode.state.oh.us/superintendent/StateofEducation20052006/StateofEducation20052006.ppt>.

² Ibid.

³ The Education Trust. *State Progress in Moving Students to Higher Levels of Proficiency—Math 2000-2003*. Retrieved Jan. 25, 2005 from <http://www2.edtrust.org/>

⁴ The Ohio Department of Education, *State of Education in Ohio 2005-2006*.

⁵ The Ohio Department of Education (May, 2003). *Toward High Achievement for All Students. The Report of the State Board of Education, Closing Achievement Gaps Task Force*.

From previous examinations of *Schools of Promise*, five themes have been identified:

Theme 1: Ohio *Schools of Promise* deliver rigorous instruction aligned to the State's academic content standards.

Theme 2: Ohio *Schools of Promise* provide leadership that leads to the continuous improvement of the school.

Theme 3: Ohio *Schools of Promise* design instruction to ensure every student's success.

Theme 4: Ohio *Schools of Promise* engage parents and the community to support student success.

Theme 5: Ohio *Schools of Promise* create a culture where each individual feels valued.

The *Schools of Promise* have been the focus of extensive investigation in the past four years. What else is there to be learned from these exemplary models? The aim of this case study is to gain additional insight into how these organizations began on a path of success and to identify resources necessary for success.

In particular, the focus of this research is on teacher quality and the role of the teacher in high-performing schools. How do teachers, administrators, students, and parents define "quality?" What teacher characteristics are perceived as most important by each of these stakeholder groups? With these questions in mind, the present research examines issues related to teacher quality in these schools and key stakeholders' beliefs and expectations regarding teacher quality. Key issues include the role of teachers as leaders in the school, the school's climate and culture, and what factors the key stakeholders believe have contributed to the success of their school.

Case Study Methodology

To complement additional lines of research currently under investigation in Ohio, ODE suggested that one criterion for selection of case study schools was that they have a high proportion of minority and/or low-income students. Another important criterion identified through discussions with ODE was whether or not the school had sustained its designation as a School of Promise for two or more years. With these criteria in mind, SRG developed a sampling plan based on four school categories. The goal of the sampling plan was to select two schools (one elementary, one high school from each category⁶).

The four categories established (and the number of eligible schools in each category) are:

- Category 1: High minority, High poverty, Sustained *School of Promise* (1)
- Category 2: High minority, High poverty, New *School of Promise* (18)
- Category 3: Low minority, High poverty, Sustained *School of Promise* (4)
- Category 4: Low minority, High poverty, New *School of Promise* (18)

⁶ There were only three middle schools in the population of *Schools of Promise*, so this category was not considered in the sampling plan.

SRG examined the characteristics of the 115 2005 *Schools of Promise*, and identified a school as “High minority” if total enrollment at that school included 25% or more minority or multiracial students.⁷ A school was considered to be “High poverty” if 50% or more of the students were low-income. A school was considered to be “Sustained” if it retained its designation for 2 years or more. Note there were very few schools meeting this criteria. Schools were eliminated from the pool of eligible schools if they had a specialized curriculum (i.e., business, art, or technology specialization) or if they had been studied as a *School of Promise* in the previous 24 months. These criteria substantially reduced the pool of potential schools eligible for study to 41 schools; however SRG identified at least one school in each category. See Table 1 for a summary of case study schools. One school in Category 2 declined to participate, so a replacement school was selected from the remaining eligible schools.

Table 1. SRG Case Study Schools—Final Sample

Category	School	County	Percent Minority 2004-05	Percent Poverty 2004-05	Years SOP	SOP Qualification
1	Brickell Elementary	Defiance	35%	50%	2	Reading
2	Centennial High School	Franklin	50%	47%	1	Reading and Mathematics
2	Maple Leaf Intermediate	Cuyahoga	34%	52%	1	Reading & Mathematics
2	Withrow University High School	Hamilton	94%	49%	1	Reading
3	Struthers High School	Mahoning	6%	64%	4	Reading and Mathematics
4	Conrad Elementary School	Licking	14%	71%	1	Reading
4	Noble Elementary School	Seneca	12%	53%	1	Reading and Mathematics
4	Meigs High School	Meigs	2%	51%	1	Reading

Each case study included a school-level survey to collect pertinent statistics regarding the school (one survey per school), a teacher-level survey to collect feedback from all teachers in the school, observations of instruction in six reading and mathematics classrooms (approximately 30 minutes each), personal interviews with key instructional staff and administrators, interviews with reading and mathematics teachers, focus group discussions with students selected from the observed classrooms, telephone interviews with parents (20 per school), and review of newsletters, school newspapers, professional development calendars, and other relevant supplemental material (if provided by the school). Table 2 summarizes research activities across the eight schools.

⁷ The median percent minority students for the 115 SOP was 11%. This means that half the SOP schools have 11% or fewer minority students; this identified about 49 schools (42% of all SOP) in the “high minority” category.

Table 2: SRG Case Studies - Summary of Research Activities

	High Schools				Elementary Schools				TOTAL
	Centennial	Meigs	Struthers	Withrow	Brickell	Conrad	Maple Leaf	Noble	
Administrators Interviewed	3	1	3	2	4	1	4	1	19
Teachers Interviewed	12	13	10	7	12	10	13	9	84
Classrooms Observed	7	7	6	6	6	6	6	6	50
Teachers Surveyed	35	49	34	43	11	21	25	15	233
Teacher survey response rate	70%	98%	89%	86%	92%	100%	96%	79%	87% ⁸
Student focus Groups	2	2	1	2	3	3	2	2	17
Parents Interviewed	20	20	20	20	20	23	20	20	163

Each of the eight case study reports is organized using the “Five Lessons Learned” identified in earlier *Schools of Promise* case study research which emphasize the importance of: providing rigorous instruction aligned with the standards; providing strong leadership that results in continuance improvement of instruction; designing instruction to ensure student success; engaging parents and the community to support student success; and, establishing a school culture that values individual students. This cross-case analysis highlights commonalities among the schools in terms of these lessons.

Elementary School Case Studies

Three elementary and one intermediate school were selected for case studies. The schools are as follows:

- Brickell Elementary School, Defiance, Ohio:** Brickell is the only elementary school among the four studied in the present research that sustained its *Schools of Promise* designation over a two-year period. Brickell is a small school with a cohesive group of teachers. The school serves a working class community with a fairly large percentage of Hispanic families. The school experienced a major change in the 2004-2005 school year when the long-term principal retired and a new principal was hired. The school faces more challenges on the horizon as the district consolidates the four existing elementary schools into one new facility.
- Conrad Elementary School, Newark, Ohio:** Conrad Elementary School serves students in kindergarten through fourth grade living in the school’s east Newark neighborhood. Conrad Elementary has considered itself the heart of its community for more than 100 years. By spending nearly three hours a day on literacy, teachers and administrators at Conrad School in Newark have made a major commitment to improving student achievement. A literacy coordinator works full time to coordinate literacy activities and to provide training and coaching for teachers.

⁸ This is the overall survey response rate. It was computed by using the total number of respondents across all schools in the numerator and the total number of teachers across all schools in the denominator.

- Maple Leaf Intermediate School, Garfield Heights, Ohio:** Maple Leaf is distinctive because the school serves only fourth and fifth grade students, a decision made out of necessity to serve the growing student population with the district's existing facilities. Located in the Garfield Heights school district (a suburb of Cleveland, Ohio), Maple leaf serves a high proportion of economically disadvantaged and minority students. The district puts a strong emphasis on meeting students' social and emotional needs as well as their educational needs. Since 2001, the school has seen enormous gains in student proficiency overall and among at-risk subgroups.
- Noble Elementary School, Tiffin, Ohio:** Noble Elementary School turns 75 years old in 2006 and is the oldest of the five elementary schools in the district. Although the school has open enrollment, most of the students come from the surrounding community. The teaching staff at Noble has been teaching together for a long time, which has created a strong network of relationships and understandings. Most of the teachers have been at the school for more than 10 years, and many grew up in the surrounding communities.

Table 3 provides an overview of the elementary schools' characteristics.

Table 3: SRG Elementary Case Studies - City/Town, District and School Characteristics

	Brickell		Conrad		Maple Leaf		Noble	
County	Defiance		Licking		Cuyahoga		Seneca	
City/town population	16,465		46,279		30,734		18,135	
School grade levels	K-4		K-4		4-5		K-5	
District	Defiance		Newark		Garfield Heights		Tiffin	
District typology	Urban		Urban		Urban		Urban	
2004-2005	School	District	School	District	School	District	School	District
Rating*	EX	EF	CI	EF	EF	CI	EX	EF
Enrollment	183	2,376	214	6,411	553	3,823	261	2,858
Percent economically disadvantaged students	50%	33.1	71%	40%	52%	48%	53%	32%
Percent racial/ethnic minority students	35%	26%	14%	9%	34%	31%	12%	7%
Number of state indicators met	8 out of 8	13 out of 23	4 out of 8	10 out of 23	6 out of 7	13 out of 23	9 out of 9	21 out of 23
Student attendance rate	96%	95%	94%	94%	95%	94%	96%	95%

*The school and district ratings from highest to lowest are: Excellent, Effective, Continuous Improvement, Academic Watch, and Academic Emergency.

Teachers at these elementary schools tended to form cohesive groups. Many had worked together for a long time and knew one another and the community well. Almost all the teachers at these schools were considered Highly Qualified. Teachers tended to be experienced (on average, about 14 years experience at each school) and in two of the schools, at least 70 percent had master's degrees. Table 4 summarizes teacher characteristics at these schools.

Table 4: SRG Elementary School Case Studies - Summary of Teacher Characteristics

2004-2005	Brickell	Conrad	Maple Leaf	Noble
Full-time Teachers	12	12	27	19
Average teacher salary	\$43,657	\$44,855	\$58,089	\$47,396
Percent of highly qualified teachers	100%	95%	100%	100%
Teacher attendance rate	97%	98%	95%	97%
Average years of experience	16.7	13.7	14.0	20.3
Percent of teachers with master's degrees	73%	43%	84%	40%

Lesson 1: These schools deliver rigorous instruction aligned to the standards.

All four of these elementary schools share a rigorous adherence to state standards. At each school, teachers have actively participated in efforts to align instruction to the standards. Administrators and teachers communicate standards clearly and effectively to students and parents. All teachers regularly collaborate and share best practices to align instruction vertically (across grade levels) and horizontally (within grade levels). Teachers in all four schools believe understanding and applying content standards is an important aspect of their effectiveness.

School leadership typically described alignment as an incremental process, and teacher involvement in the process is seen as critical. Although several years ago teachers may have resisted the idea of standards-based instruction, involving them in alignment, clearly communicating achievable goals for student improvement and encouraging teachers to collaborate have been effective practices for these schools.

For example, at Brickell and Noble, teachers participate in constructing and revising the district's curriculum. At Maple Leaf, teachers serve as curriculum leaders. They work with their peers and keep teachers informed and focused on the content standards. At Maple Leaf and at its elementary feeder schools in the Garfield Heights district, student performance data, broken down to the teacher level, has been effective in helping teachers identify student weaknesses and in pinpointing standards that need additional attention in the classroom; information is shared between buildings to help transition students effectively. At Conrad, the principal formerly held a district position in which she was responsible for student data analysis and she draws on that experience in her current role; teachers participate in regular training on using student data to identify instructional priorities. Using student performance data to set attainable goals and empowering teachers to meet these goals are unifying themes in these four schools.

Reading and literacy form the core of the curriculum in these schools. For example, at Brickell, the school has embraced a phonics program (Saxon Phonics) which they feel provides an important foundation, and the teachers utilize Accelerated Reader to set goals with students. At Conrad, the school participates in a Literacy Collaborative which extends reading instruction up to three hours a day; students write in journals daily in both reading and mathematics classes. At Maple Leaf, the principal announces an "Achievement Word of the Day" in morning announcements that teachers in all subject areas (even art, physical education, and music) integrate into the day's lessons. Across all four schools, there was a general sentiment that reading and literacy were critical to student success in all other subject areas, and so all the schools place emphasis and priority on these skills.

Lesson 2: These schools provide leadership that results in continuous improvement of instruction.

At all of the four elementary schools, the principal's leadership is supplemented by curriculum leadership. At Brickell, curriculum leadership comes from the assistant superintendent. At Maple Leaf, teachers serve as curriculum leaders in reading/language arts, mathematics, science, and social studies. At Noble, a district-level curriculum director works with teachers throughout the district to review curriculum and choose textbooks. At Conrad, the school employs a Literacy Coordinator who is responsible for providing staff development for the primary teachers at her site, including coaching, guided meetings, and support to the other teachers.

At Maple Leaf and Brickell, the principals serve supportive, collaborative roles and empower teachers to act as leaders in the school (although this style of leadership is new to Brickell, whose former principal retired in June 2005). Teachers take on leadership roles by actively seeking out, piloting, and integrating new technology and materials into their instruction. At Brickell, teacher leaders sought out the school's current phonics program and championed the Accelerated Reader program, both of which have been fully integrated into the school's curriculum. At Maple Leaf, teachers serve as grade-level chairs to handle administrative issues and other teachers serve as curriculum leaders to maintain alignment to standards.

At all the schools, teacher collaboration is a critical form of professional development. Teachers regularly share ideas, information and strategies to improve instruction through structured meetings and informal networks during lunch, in the hallways and after school. At Brickell, common planning time has been facilitated with substitute teachers, who provide 90-minute blocks once a week for teachers at each grade level to plan and collaborate. At Noble, teachers come in early and stay late to meet with their peers. At Maple Leaf, teachers work in networks of teams (technology, curriculum, grade-level) increasing teacher-to-teacher communication and collaboration.

In terms of professional development, a commonality among the schools is a fairly limited budget for teacher training outside the district; the majority of professional development tends to be coordinated by the district. Teacher-to-teacher collaboration, however, is an important form of staff development. Teacher leaders are particularly important in this form of professional development. For example, at Maple Leaf, teacher leaders participating in the school's Enhancing Education Through Technology (E²T²) grant attend regular statewide training and then convey that information to their peers through teacher-to-teacher training sessions at the school. Likewise, at Brickell, a teacher leader attended a national training on Accelerated Reader and then provided training and support to her colleagues in the school. At Conrad, teachers participate in a long term professional development program conducted by a teacher leader, the Literacy Coordinator. The coordinator participates in an initial year long training course then every year afterwards attends yearly professional development institutes. In turn she provides training and coaching for teachers in her school. She works directly with the principal to develop priorities for teacher development.

At these elementary schools, teacher leaders actively participate in the professional development of their peers, and in the process help to reduce the costs of training additional staff. This can be an effective model when schools have limited budgets for professional development.

Lesson 3: These schools design instruction to ensure every student's success.

The four elementary schools studied share in common strong intervention programs that are implemented and coordinated well. Intervention is important in two aspects. First, it is critical in closing the achievement gap for students who are not ready to learn when they start school or who are having difficulty mastering particular skills or concepts. Second, intervention is also important for accelerated or gifted students, who benefit from intervention on the opposite end of the spectrum, as they may be ready to move beyond their current grade level. Both types of intervention were evident in these *Schools of Promise*, although intervention for struggling students was more widespread.

All four schools offered intervention and tutoring for struggling students, and intervention begins early. At Noble, Title I funds are used for all-day Kindergarten, which helps identify students at risk and to close emerging achievement gaps quickly. Similarly, in the Garfield Heights district, intervention begins in Kindergarten. Students are assessed during the first six weeks and those with the lowest scores are put into a literacy skills class for half a day, making for day-long instruction.

Title I intervention is important at all schools for closing gaps and providing individualized instruction. At Brickell and Noble, Title I teachers are fully integrated into the classrooms. In addition to providing small group instruction to students in their own rooms, Title I teachers also participate in students' regular classrooms during small-group instruction. Also at Brickell, intervention intensifies in preparation for proficiency tests between January and March. Each grade level meets together twice a week and substitutes are brought in so students can be divided into four small groups of about 10 per group. Teachers rotate through the groups, providing focused small group instruction in language arts and mathematics, focusing on the standards with which students are struggling.

At Conrad, the school's Title I specialist is also trained in Reading Recovery, part of the Literacy Collaborative. Reading Recovery⁹ is an early intervention program designed to assist children in first grade who are having difficulty learning to read and write. At Maple Leaf, and in the Garfield Heights district, a federal grant funds after-school tutoring for at-risk students through the Extended Learning Opportunities (ELO) program. Fourteen teachers serve as tutors.

Personal tutoring was also observed at these *Schools of Promise*, providing one-on-one or small group time with a tutor during or after school. At Noble, tutoring takes place at an after-school study table, a small student group led by a Noble teacher with assistance from volunteers from nearby Heidelberg College. In Maple Leaf's district, students receive tutoring through the Extended Learning Opportunities (ELO) program, an after-school tutoring program for at-risk students. At Maple Leaf, students stay after school to work with their teachers on mathematics and reading; students receive an additional 90 minutes of mathematics and reading per week. About half the school's teachers participate in the program.

At Conrad, personal tutoring with teachers and student tutors from nearby Denison University is also important to the school's intervention program. The principal matches students with teachers on the basis of student learning styles and personalities to make sure the tutoring is most effective.

⁹ See www.readingrecovery.org for more information about this program.

In terms of differentiated instruction, technology is frequently used to customize instruction for students and focus on their specific needs. For example, at Brickell, the school uses the Accelerated Reader program, which allows students to set goals with the teacher and work at their own pace to read books, complete assessments on a computer in their classroom, and evaluate their own progress toward meeting their goals. The Fluent Reader program is also used to target students' specific reading needs. At Maple Leaf, the school participates in the Enhancing Education Through Technology program and utilizes a variety of computer programs including Compass Learning and EasyTech to customize and differentiate instruction for students below, at, or above grade level. Teachers can assign specific units to individual students and can generate detailed reports on student progress, allowing them to hone in on what a particular student needs. Students can even access the software from home or the local library if they like. At Noble, students in grades three through five participate in extended instruction in mathematics with Accelerated Math, a self-paced program which also allows teachers to design specific activities for students based on their individual needs.

Teachers are central to this particular lesson, and teachers play a critical role in the way a school designs instruction to ensure every student's success. Generally speaking, an important common thread among teachers at these elementary schools is a general tendency to be responsive to feedback, to collaborate with colleagues, and to be self-reflective and open to change. That is, teachers actively seek out ways to improve their instruction. With support from school leadership, teachers regularly use student assessment data to reflect on areas where students needed support or intervention and provide students additional time and help to improve in that area. Teachers in these schools generally take a personal stake in student improvement and share a sense of responsibility for helping students learn.

Lesson 4: These schools engage parents and the community to support student success.

Teachers and administrators make frequent efforts to engage parents and keep them informed of student progress. Still, across all four elementary schools, parent involvement was not characterized as extremely high. The high levels of poverty in all schools are perceived as complicating efforts to increase parent involvement/engagement. Parents struggle with jobs and responsibilities, and many have low levels of educational attainment themselves. To reach out to parents, Brickell's teachers extended parent-teacher conferences to a seven-day period as opposed to a two-day period and offered a wider range of times for parents to meet with teachers, thus increasing participation. All schools provided information to parents through newsletters and fliers, and Maple Leaf and Brickell are initiating web-based grade systems which parents can use to access student performance information at any time.

A key component of communications with parents is explaining academic content standards. Schools provide information through presentations, parent guides, and, at Brickell and Maple Leaf, through standards-based report cards.

The most important partners noted in these schools are those providing social and emotional support to parents and families. For example, the Families and Schools Together (FAST) program at Brickell and in the Garfield Heights district supports students and families and helps parents work more effectively with their children; families then serve as mentors for other new families recruited annually. Also in Garfield Heights, a Safe Schools, Healthy Students grant provides funding for counselors in all the district's buildings to provide support, counseling, and mediation for students in need of these services. Two schools also benefit from volunteers from

local colleges; Heidelberg College students volunteer at Noble and Denison University students volunteer at Conrad, providing an extra layer of instructional support at these schools.

Lesson 5: These schools create a culture where each individual feels valued.

Teachers at all four elementary schools are aware that students from economically disadvantaged families experience hardships other children do not; in interviews teachers regularly noted that even very young students are often dealing with home lives that can be described as “tumultuous.” As found in other *Schools of Promise* research, these teachers care deeply about connecting with the students, helping and supporting them—but teachers also hold students to high standards.

All schools emphasize discipline and mutual respect among staff and students, and a “family” atmosphere was very much evident. Principals and teachers know the students well and have personal connections with them that reflect an interest in students’ well being beyond the classroom. Frequent praise and positive reinforcement were regularly observed at all schools. Nowhere was this more clear than at Maple Leaf, where district-wide staff place an importance on meeting the “needs of the heart” for students, and providing a strong network of social and emotional support for students. Maple Leaf also emphasizes character education, and the principal leads a “caught doing good” campaign by rewarding students with public recognition when they are caught demonstrating good behavior during classroom walk-throughs or in the hallways.

Character education also received emphasis at Brickell, Noble, and Conrad. Each school emphasized the importance of treating one another with respect. Some schools use posters to reinforce the importance of cooperation, discipline, and trustworthiness, and at Noble and Conrad “class rules” were often seen in classrooms, and students earn age-appropriate rewards for good behavior (like stickers) that in some cases can earn rewards for the entire class, like a pizza party.

Social support for students and families are also an important consideration. In particular, Maple Leaf has both a social worker and a counselor on staff. The district places a strong emphasis on “meeting the needs of the heart” for students and families, and guidance counselors and social workers are available in every school in the district through their Safe Schools, Healthy Families grant. The school and district administrators realize that often students’ troublesome behavior in school reflects problems at home, and students will learn better if the problems are addressed at their source. Thus, the district provides support for students and their families in stressful or extraordinary circumstances including counseling, mediation, and anger management training (to name a few).

Similarly, at Brickell, local partners provide social support for students and families. For example, the school has a good partnership with local service organizations in the northwest Ohio region, in particular the Salvation Army, to provide resources for families in need. They also participate in the Families and Schools Together (FAST) program to support and engage parents of at-risk students.

The relatively small size of the schools contributes to the close connections observed between teachers and between teachers and students; however, as noted in previous *Schools of Promise* research, small schools are vulnerable to closing their doors because of budget concerns and the current sample is no exception. Brickell will soon be consolidated with the

district's three other elementary schools as the district moves to a single elementary school model, and Conrad will be combined with another elementary school, Kettering, in a few years. Teachers were excited about the change but concerned about maintaining close relationships with their colleagues.

High School Case Studies

Of the four high schools selected for case studies, two are from major urban districts, one is from an urban district bordering on a major urban district, and a fourth is an extremely rural school. At all four schools, at least half the students come from economically disadvantaged homes.

- **Centennial High School, Columbus, Ohio** Centennial is an extremely diverse high school, with students from over 30 different countries. Because of this diversity, the school has an English as a Second Language (ESL) department (as do all Columbus Public Schools). Centennial's college preparatory focus attracts students from all over the school district, some of whom may ride 45 minutes on a bus. Parents and students note the school's impressive array of Advanced Placement (AP) courses, and through a partnership with Columbus State Community College, students can earn college credit while still in high school. In 2005, Centennial was ranked as one of the top high schools in the country by *Newsweek* magazine.
- **Meigs High School, Pomeroy, Ohio** In the heart of Appalachian Ohio, Meigs High School prepares students for successful futures with both a college and a technical preparatory track. The school includes a Comprehensive Career Center and promotes a combined academic and career/technical curriculum. The school emphasizes applied academics, or hands-on, innovative teaching methods that integrate academic content with real-world applications. The school was in academic emergency four years ago, but has made significant improvement in a short time.
- **Struthers High School, Struthers, Ohio** Struthers High School is part of a small school district comprised of just three schools. Struthers borders on Youngstown, one of the state's major urban districts. Struthers High School is one of only five schools in the state to have sustained its designation as a *School of Promise* for four consecutive years, and is one of the few schools in the state to earn this title for student achievement in both reading and mathematics. Struthers High School has received national recognition, and was named a Blue Ribbon School of Excellence in 2006. The school building is less than three years old, features extensive investments in technology and includes a career center. The Struthers district has been undergoing a significant transition in recent years; after a great deal of new construction, Struthers lapsed into fiscal emergency this year and has experienced significant administrative reductions across the district.
- **Withrow University High School, Cincinnati, Ohio** Withrow High School was formerly a very large urban school with a very low rate of student success. A multi-year grant from the Gates Foundation enabled a complete transformation of this school, which was separated into three new, smaller schools. Withrow University High School is set apart by strong leadership, high expectations in a supportive environment, a consistent, comprehensive focus on college preparation beginning the summer before students

begin their freshman year, and a sense of community and family that unites students and staff.

Table 5 provides an overview of the characteristics of selected high schools and their districts.

Table 5: SRG High School Case Studies - City/Town, District and School Characteristics

	Centennial		Meigs		Struthers		Withrow	
County	Franklin		Meigs		Mahoning		Hamilton	
City/town population	711,470		1,966		11,756		331,285	
School grade levels	9-12		9-12		9-12		9-12	
District	Columbus Public		Meigs Local		Struthers City		Cincinnati Public	
District typology	Major Urban		Rural		Urban		Major Urban	
2004-2005	School	District	School	District	School	District	School	District
Rating*	EF	AW	CI	CI	EX	EF	EF	CI
Enrollment	760	59,754	643	2,010	614	1,979	571	35,839
Percent economically disadvantaged students	47%	71%	51%	61%	64%	66%	49%	65%
Percent racial/ethnic minority students	50%	70%	2%	3%	6%	7%	94%	78%
Number of state indicators met	5 out of 7	3 out of 23	4 out of 7	7 out of 23	7 out of 7	12 out of 23	5 out of 6	3 out of 23
Student attendance rate	93%	93%	94%	94%	94%	95%	96%	94%

*The school and district ratings from highest to lowest are: Excellent, Effective, Continuous Improvement, Academic Watch, and Academic Emergency.

Teachers in these high schools were notably strong in the subject areas they teach: half the teachers or more at all the schools had master's degrees, most are considered Highly Qualified, and a high proportion of students at each school meet nearly all the state standards. Teachers at these high schools were rigorous but supportive; they developed and cultivated personal relationships with the students yet held high expectations for student achievement. Table 6 summarizes teacher characteristics at the four schools

Table 6: SRG High School Case Studies - Summary of Teacher Characteristics 2004-2005

	Centennial	Meigs	Struthers	Withrow
Full-time Teachers	50	50	38	50
Average Teacher Salary	\$60,255	\$37,568	\$48,386	\$44,871
Percent of Highly Qualified Teachers	97%	77%	80%	67%
Teacher Attendance Rate	97%	95%	94%	95%
Average Years of Experience	19.2	22.0	18.0	9.6
Percent of teachers with master's degrees	77%	49%	66%	56%

Lesson 1: These schools deliver rigorous instruction aligned to the standards.

Like the elementary schools, attention to standards and the Ohio Graduation Test (OGT) are important considerations in these high-performing schools. At Centennial, teachers follow a carefully-designed district curriculum and collaborate vertically and horizontally with other teachers in the school to make sure instruction is aligned with standards and one another. Also, a significant proportion of Centennial teachers participated in the development of the curriculum, an advantage for them and other teachers in the school.

Struthers High School has been a leader in the state in terms of alignment to state standards, and emphasizes seamless instruction in reading and mathematics across the district's three schools. As a result, Struthers High School has been named a *School of Promise* four consecutive years.

Similarly, Meigs High School's principal and staff credit alignment to standards with being able to improve the school's rating from Academic Emergency to Effective in just one year. The standards are fully integrated into teachers' classrooms now, and teachers interviewed feel comfortable and confident in the way their lessons map to the standards.

At all these schools, however, educators' goals for student achievement are more far-reaching than passing the OGT. At Centennial and Withrow, the OGT is considered one step in preparation for a successful college experience. Both schools focus their attention on building student readiness for college, both in terms of content knowledge and study skills. They also work with college partners (Centennial with Columbus State Community College and Withrow with Xavier University) to provide access to college experiences for their high school students.

Struthers and Meigs also focus on preparation for life after graduation. The Struthers superintendent has a background in vocational education; in the Struthers district, a career-oriented technology path begins as early as fifth grade and flows seamlessly through senior year of high school. At Meigs, the high school has a Comprehensive Career Center, providing a technical preparatory track as well as a college preparatory track for students. School-wide, Meigs emphasizes the value of career education, and encourages students to take both career/technical and academic courses regardless of their primary track; both are viewed as critical to applying knowledge in the workplace.

Lesson 2: These schools provide leadership that results in continuous improvement of instruction.

Strong, directive, supportive leadership is a common characteristic at all four high schools. Convergent evidence from teacher survey data and teacher interviews indicates that teachers feel supported by their principals. At all four high schools, teachers tend to agree that there is an atmosphere of trust and mutual respect at the schools. Principals are described as collaborative. They solicit teacher feedback in decision making and empower teachers to make informed decisions. Yet teachers know they can count on their principals for support when they need it.

At Centennial, Withrow, and Struthers, student performance data are routinely examined at the teacher level as part of the continuous improvement process. School leaders support this process, which identifies areas on which individual teachers can focus to help students improve.

Opportunities for professional development at Centennial and Withrow generally are provided by their districts. Given the large size of these districts, opportunities tended to be varied and frequent. An effective way to increase the reach and effectiveness of teacher training is to use teacher leaders for staff development. At Centennial, in particular, only a few teachers participate in national conferences and trainings, but through structured and informal collaboration with their peers, the information is disseminated teacher-to-teacher.

Meigs High School benefited from a large federal Carl Perkins grant in excess of \$100,000 which can be used for teachers' professional development. The funds help teachers incorporate new technology into their classrooms and provide training for them to use technology more effectively. Although teachers are encouraged to go outside the district for training, some commented that they don't like to take time away from their students by attending training during the school day. In an effort to increase teacher collaboration, the principal has created common planning time and lunchtime for teachers in the same subject area. He also coordinates a teacher review session of the school's OGT practice tests, to encourage teachers to identify and discuss areas of student weakness and how to address them.

At Struthers, due to a district-wide financial crisis, funds for professional development are tight. So, the school's professional development activities are primarily internal and focus on identifying student needs, alignment to standards, and collaboration among teachers.

Across all four high schools, teachers participated in four primary forms of professional development:

- Understanding and applying Ohio content standards to student instruction;
- In-depth study of their academic content area(s);
- Instructional strategies to meet the learning needs of diverse groups of students; and,
- Collaboration for improving instruction through common planning time or scheduled meetings.

When asked what considerations are important in preparing new teachers to be effective in schools like theirs, teachers in these four high schools emphasized the value of direct classroom experience, and suggested that teachers in training receive early and extensive experience in classroom settings. This gives the teacher important insight into the student population as well as the real demands placed on teachers' time.

Lesson 3: These schools design instruction to ensure every student's success.

Teachers play a critical role in intervention with struggling students in these high schools, and spend time before, during, and after school working individually with students to help them understand and apply new material. At two of the schools—Struthers and Centennial—student-to-student support was available in the form of peer tutoring.

A commonality among most of the teachers at all four schools is a high degree of enthusiasm and excitement, not only for their subject areas but also for working with students. Cumulatively, classroom observations, interviews, and survey results reveal that teachers clearly enjoy the experience of working with high school students, and this seems to be an important aspect of teacher effectiveness in all the schools. Teachers' attitudes toward teaching were clearly

positive, and administrators, students, parents, and even outside observers could not help but recognize it.

Intervention is also important at the high-school level. At Struthers, the Building Assistance Team (BAT) program brings together a struggling student with teachers, guidance counselors, and parents. Students actively participate as the team works together to identify problems and develop strategies to overcome them. Interventions are customized for each student.

Meigs High School offers a Title I program for students struggling in mathematics. At the end of every school year, the school identifies students who have not passed the OGT or who have taken another form of assessment and scored low. Students are identified for intervention based on their mathematics grades from the previous year and their current and prior test scores. The school has also adopted Accelerated Reader, which provides teachers with a way to monitor students' guided reading practice. Students choose their own books then complete assessments on the computer specific to the book they read. The program has helped improve reading skills among the school's Career and Technical students, in particular.

Teachers at all the schools described how they vary their instructional techniques and incorporate technology to enhance their lessons, particularly at Centennial, Struthers, and Meigs. Use of interactive technology like graphing calculators, SmartBoards, and PowerPoint create opportunities to engage students and to support concept development, active "hands-on" learning, and higher-order thinking. Teachers at Centennial and Withrow also emphasize the importance of discussions to engage the students.

Teachers emphasized the importance of strong classroom management skills, both in terms of managing student behavior as well as teachers managing their own time. As demands on teachers increase, it is increasingly important for teachers to be organized and efficient in dealing with paperwork and administrative duties.

Lesson 4: These schools engage parents and the community to support student success.

Parent involvement and support was a prominent theme among these high schools. Two of the four schools, Withrow and Centennial, are open enrollment schools and draw students from across their large districts. Staff at these schools said families recognize the schools as a desirable destination for their excellence in academics and strong college preparatory opportunities. Based on survey and interview results, Centennial's staff believe that strong parent support and an effective PTA has kept the school open despite suggestions from the district that it might be closed.

Likewise, Struthers' staff also emphasizes the critical role parents play. At Struthers, parent support for teachers and the value of education is seen as one of the primary reasons for their sustained success. Teachers say the strong working-class values in the community place an emphasis on education, and parents support teachers wholeheartedly. Teachers' parent conferences are reliably "booked solid", and teachers know they can count on parents to "back them up" at home.

In contrast, parent involvement at Meigs High School was quite the opposite. Parent involvement in the school is historically low, likely due to economic pressures in the Appalachian Ohio community. Teachers feel they are "on their own" in working with students, yet continue to

reach out to parents at every opportunity to keep them informed of student progress and let them know they are welcome at the school.

Community partners provide important support, particularly at Withrow. Through the efforts of school administrators, the school has built partnerships with the United Way for family counseling, Xavier University for students' college readiness, and with a host of local businesses who fund tutoring programs, provide students' bus fare, and host mentoring programs to increase students' career-related knowledge.

Centennial and Meigs also have strong partners in local community colleges. Centennial partners with Columbus State Community College to provide dual-credit opportunities for students and to prepare them for success in college. Meigs partners with Washington State Community College through the Washington-Morgan-Meigs College Tech Prep Consortium, a program that helps high school students earn credits toward college as well as gain advanced technical skills.

Lesson 5: These schools create a culture where each individual feels valued.

Along with their alignment to standards and emphasis on academic rigor, perhaps the most important characteristic of these schools is the warm, supportive, "family" environment cultivated among staff and students. Teachers are important role models and provide stability, support, and structure. Discipline, structure, and order were also particularly important among these schools, perhaps in part because students often come from difficult home lives, making structure in the school day particularly important. Positive reinforcement is used to encourage good behavior. Student success is promoted publicly in the schools on a regular basis. For example, the names of students making honor roll are often posted in conspicuous places. "Success stories" are featured in the school paper.

Teachers in these four high schools invest significant time working individually with students who need extra help. Teachers' connections with students are important both academically and emotionally. The ability to develop and maintain rapport with students is a critical aspect of their effectiveness. Relationships grounded in trust and personal connections facilitate the learning process and motivate students to work hard. Teachers at all four schools demonstrated deep regard and caring for their students. They acknowledge that many come from disadvantaged backgrounds and often deal with complex and difficult problems at home. Teachers acknowledge students' situations but still maintain high standards and hold high expectations for what students can achieve.

All four schools foster a sense of community, where everyone in the building—administrators, teachers, custodians, and cafeteria workers—share a stake in student success. Administrators consider all staff part of the same team. At Withrow, for example, every staff person has participated in site visits to other high-performing urban schools.

At Centennial and Withrow, in particular, the schools' cultures embrace diversity. A significant proportion of these schools' students are racial or ethnic minorities, and students are accepting and welcoming of diversity on every level.

At all four high schools, a clear common denominator was an emphasis on discipline, structure, and mutual respect, providing an important foundation for learning. At Withrow, the school's discipline policy extends to a carefully monitored dress code policy. The school also

implements gender-based classes (i.e., exclusively male or female classes) as a disciplinary measure. Staff and students believe the gender-based environment helps students focus on their lessons. Struthers also implements a dress code policy, and bans among other things earrings and beards for males, visible tattoos, holes in jeans, and the use of cell phones in the building. The policy, administrators believe, reflects the community's values and emphasizes structure and respect.

Many resources are available to support students' social and emotional needs. At Withrow, the "Families Forward" program gives additional support to Withrow's staff and students. The program, which is funded through the United Way, provides two counselors on site for social services and support to students. At Centennial, the school has an ESL department (like many Columbus Public Schools) for international students.

At Meigs, the principal and teachers feel the school's integration of career and academic classes helps all students succeed regardless of their interest. Balancing academic with applied information is important because it helps build student achievement and gives students the skills to succeed beyond graduation. The "tech-prep" facilities and mixed emphasis on career-technical and academics are important to help students find their strengths and be successful.

Struthers and Meigs, being smaller schools, reflect the values that are important to their communities. Many teachers at these schools are from the local community and feel that they understand the area, the students, their families and the "culture" of the school, something they see as an advantage in building connections with students.

Focus on Teachers

A particular focus of the present research is the role of teachers in *Schools of Promise*. Clearly, teachers are fundamentally important in terms of designing instruction to ensure every student is successful, but teachers also play key roles in terms of alignment to standards, continuous improvement, connections with parents, and creating a culture where everyone feels valued.

Across all eight schools, teachers, administrators, parents, and students were asked what makes teachers effective, and a set of common characteristics emerged. These include:

- Teachers should be enthusiastic and have positive attitudes about teaching and the students they teach. Their enthusiasm motivates and engages students, and students often commented on how their favorite teachers made learning fun.
- Teachers must be knowledgeable in their subject area(s). This is particularly valued by administrators, although principals acknowledge that being an expert in a particular field does not in itself guarantee an individual will be an effective teacher.
- Teachers must know the Ohio content standards and align instruction to the standards. Understanding the content standards was often mentioned as critical by teachers as well as administrators.
- Teachers should create a climate of high expectations for student success and reinforce academic rigor in the classroom. Teachers and administrators in particular emphasize how important it is to hold all students to high standards, but at the same time they say it is important to support students to do their best.

- Teachers should create opportunities for students to apply and use information beyond memorizing facts; they should encourage independent thinking and problem solving, not just rote memorization. Teachers often mentioned the importance of scaffolding and concept development, and many teachers utilize technology to give students the opportunity to work and think independently. For example, by using graphing calculators or motion detectors students can figure out how to solve problems themselves. Some teachers use computer programs like Accelerated Reader to allow students to see their own progress in meeting their reading goals. In both reading and mathematics, many such examples of hands-on learning were observed by researchers and described by teachers.
- Teachers should build and cultivate personal connections with their students and be able to develop rapport with students. Teacher-student relationships are an important aspect of the supportive environment cultivated at these successful schools. Teachers frequently comment that having good relationships with students increases their motivation to learn and succeed in the classroom, and many believe that students are motivated to succeed, in part, to please their teacher(s).
- Teachers should differentiate instruction to meet the needs of students from different backgrounds and students with various learning styles. It is a challenge to provide support to struggling students while at the same time helping advanced students move on to higher levels. Teachers frequently incorporated small group instruction into the school day and worked collaboratively with intervention specialists (particularly at the elementary school level). At all the schools visited, tutoring and one-on-one instruction are commonplace activities and occur before, during, or after school with teachers often volunteering their time.
- Teachers should be self-reflective, open to change, and collaborate with their peers to improve instruction. Administrators and teachers frequently use student performance data to identify problem areas for their students. Student performance data are often shared and discussed openly. Teachers frequently collaborate with one another, discussing teaching strategies in both formal and informal settings—the latter being perhaps most important. Although often teachers met formally in department or staff meetings, informal sharing of ideas and information frequently takes place before or after school, during common planning periods, or over lunch.
- Teachers must be empathetic toward the students but hold them to high standards for achievement and accountability. Teachers frequently commented that students from economically disadvantaged homes struggle with home lives that can often be tumultuous. Teachers often spoke with great empathy about their students' experiences, but emphasized that they are held to the same high standards as any other student.
- Teachers must demonstrate effective classroom management skills and reinforce discipline, organization, and structure. Discipline and structure are an important component of the school day at these schools. Students know the rules and follow them. Another aspect of effective management often mentioned by teachers, however, was time management. Teachers often have to manage many administrative tasks in addition to instructional tasks, and must be organized and disciplined themselves.

A review of the research literature highlights additional factors that have been identified as important in teacher effectiveness and how they are manifest in the eight *Schools of Promise* studied in this research project.

Commitment

First, the research literature shows teachers' commitment can impact student achievement. Commitment can refer both to teachers' commitment to their schools and their commitment to their profession. Commitment is increased when teachers have the necessary skills to be effective, believe what they are doing is important, are granted autonomy in their classrooms, participate in school leadership, receive feedback on their performance, collaborate with others in their school, and have the resources they need to do their jobs effectively (Firestone & Pennell, 1993).

In the eight *Schools of Promise* studied, teachers demonstrated a high degree of commitment to their schools, to students and to their profession. Many of the teachers had been teaching at the school for a long time and had close relationships with their colleagues and with their students. Specifically, educational research has found a relationship between teacher commitment and teachers' understanding of their tasks and responsibilities; teacher autonomy; feedback on teacher performance; participation in decision making, teacher collaboration, and learning opportunities (Firestone & Pennell, 1993). Many of these themes emerged across the eight *Schools of Promise* studied.

- Teachers are, overall, highly experienced in the teaching profession and in their subject areas. Nearly half or more of teachers at all schools have master's degrees, and more than three fourths of teachers at all schools are considered Highly Qualified.
- Teachers interviewed at all schools believe their roles in student learning are important. Across all eight schools, teachers convey a clear sense that their role is valued by students and administrators. Many principals commented proudly of the expertise and caring of their teachers, and teachers often commented that they felt appreciated and supported by principals. Most importantly, teachers often commented that their students needed them—socially and emotionally as well as educationally. Teachers at these *Schools of Promise* recognize that their students often come from economically disadvantaged homes, and struggle with complex social and family situations. Teachers understand that they provide students with critical support that extends beyond the walls of their classroom.
- The schools typically convey clear structure. Although each school follows a clearly-delineated curriculum aligned to state standards, teachers have autonomy in their classrooms and are encouraged to develop effective instructional practices to meet the needs of their students. Teachers use school or district curricula as a starting point and customize it to best fit their own teaching styles and their students' needs and preferences.
- Collaboration among teachers to align instruction to the academic content standards and improve their effectiveness is arguably the most important form of staff development observed at the eight schools. All schools either build in common planning time or require meetings specifically for the purpose of teacher collaboration. Impromptu collaboration is common. Teacher-to-teacher collaboration provides important learning opportunities and clearly contributes to a sense of cohesiveness and positive climate.
- At all these schools, teachers use student performance data from state proficiency tests or other assessments to identify students' strengths and weaknesses; with support from school leadership, teachers use that information to target student needs and modify instructional delivery practices.

Teacher leadership

Another recurrent theme in the schools studied was effective use of teachers as leaders. The term “teacher leader” has many various definitions, but York-Barr & Duke (2004) define teacher leadership as a process by which teachers, individually or collectively, exert influence over others in the school community to improve teaching and learning practices and increase student learning. Table 7 (modified from York-Barr & Duke, 2004) summarizes the tasks that were identified specifically as teacher leader tasks.

Table 7. What do teacher leaders do?

Dimension of Practice	Examples of Supporting Literature
Coordination, management	<ul style="list-style-type: none"> • Coordinating daily schedules and special events; participating in administrative meetings and tasks; monitoring improvement efforts
School or district curriculum work	<ul style="list-style-type: none"> • Selecting and developing curriculum; defining outcomes and standards
Professional development of colleagues	<ul style="list-style-type: none"> • Mentoring other teachers; leading workshops; engaging in peer coaching; modeling, encouraging professional growth
Participation in school change/improvement	<ul style="list-style-type: none"> • Confronting barriers and challenging the status quo in the school's culture and structures; facilitating communities of teacher learning thorough organization wide processes; working with peers for school change; taking part in school-wide decisions
Parent and community involvement	<ul style="list-style-type: none"> • Becoming involved with parents, encouraging parent participation; creating partnerships with community businesses; working with the community and community organizations
Contribution to the profession	<ul style="list-style-type: none"> • Participation in professional organizations; becoming politically involved
Pre-service teacher education	<ul style="list-style-type: none"> • Building partnerships with colleges and universities to prepare future teachers

Furthermore York-Barr and Duke (2004) review the literature on teacher leaders, and identify common characteristics among teacher leaders. Specifically, research has found that teacher leaders have significant experience in their teaching fields, extensive knowledge of teaching and learning, expertise in their subject area, and a clearly developed teaching philosophy. Teacher leaders have an enthusiasm for teaching and learning, and actively seek out opportunities to grow and improve. They are respected and valued by colleagues and are sensitive and receptive to feedback from others. They are hard working and possess strong administrative and organizational skills.

Teachers who lead are respected by their colleagues and administrators. They assume a learning orientation in their work and demonstrate knowledge and relevant skills. The success of teacher leaders depends, in good measure, on the nature of their work, which must be valued by their peers, visible within the school, and continually reviewed and modified on the basis of feedback and evaluation.

Evidence across the eight *Schools of Promise* studied as part of this investigation highlights the key role teacher leaders play, particularly in terms of professional development. For example:

- Teachers participate in school-level decision making. Principals actively seek out teachers' feedback and involve them in their decision making processes whenever possible. Some examples are all-staff meetings at Withrow University High School, where teachers work in teams to identify and address priorities in student performance data. A similar process takes place at Centennial, where all staff meetings are used as a forum to solicit teacher feedback in the decision-making process. At Maple Leaf Intermediate School, teachers serve as both grade-level chairs and curriculum leaders. But this process is not always a formal one; at Brickell, the principal often eats lunch with the teachers and gathers their input through casual conversation.
- Teachers actively participate in the development of school and district curriculum. For example, many teachers at Centennial contributed to the development of the Columbus Public School's mathematics, science, and English curriculum guides. Teachers at Brickell also participated in the development of the Defiance district curriculum. And teachers at Maple Leaf were involved in a process to review and align the curriculum in the Garfield Heights district.
- Teachers are a key point of communication with parents, and they actively seek out the most effective ways to communicate with parents in their school and community. At Brickell, parent-teacher conferences were arranged over a period of seven days as opposed to the usual two days to allow for more convenient meeting times for parents. Teachers at many schools say that e-mail is becoming increasingly important as a form of parent communication, and web-based applications that allow parents to access student grades, attendance, and progress reports are being piloted or employed at Withrow, Centennial, Brickell, and Maple Leaf.
- Principals empower teachers to take leadership roles, which increases teacher-to-teacher communication and teacher engagement in change and continuous improvement. Teachers in these schools serve as leaders in curriculum, school administration, and in adopting new technology. At Brickell, teachers took the lead in adopting Accelerated Reader and Saxon Phonics, and feel these programs have had significant benefits for student learning. At Maple Leaf, teachers serve as curriculum leaders in reading/language arts, mathematics, social studies, and science, and through the school's Enhancing Education Through Technology (E2T2) grant, a core group of teachers participates in high-quality professional development on use of technology to improve student learning—and these teachers pass on what they learn to their peers. At Conrad, a teacher serves as the school's Literacy Coordinator. After participating in extensive training in the district-wide Literacy Collaborative initiative, she works full-time with teachers to train teachers and coordinate literacy activities in the school. And at Centennial, teachers in the mathematics department participate in the Urban Systemic Project funded by the National Science Foundation. Like other schools participating in the project, Centennial has a study group of teachers facilitated by a lead teacher. The group uses student performance data to determine building needs and designs a plan to address those needs. The lead teacher uses feedback and observations about what makes students successful in subjects like mathematics.
- Teacher leaders attend state or national conferences and serve an important function in their schools by disseminating information to their colleagues, increasing the reach of training opportunities particularly when schools have few resources for teacher development. At Brickell, one teacher leader attended the national Renaissance

Learning conference on Accelerated Reader, then presented to her colleagues at a district professional development day. At Centennial, teacher leaders in mathematics and science participate in national conferences, sometimes as trainers, as at the Texas Instruments conference. As mentioned above, at Maple Leaf teachers participate in E2T2 trainings and conferences at the state level, and then disseminate the information locally to their peers. And at Conrad, a teacher leader serving as Literacy Coordinator participates in an intensive training through the Literacy Collaborative, then provides continuous support, training, and coaching to teachers in her school.

- A significant number of teachers in these schools are highly motivated to learn, grow, and improve and actively seek out ways to improve the effectiveness of their relationships with students, parents, and one another. This was apparent in the schools studied based on the high degree of productive collaboration between teachers and the frequent use of student data to refine instructional practices. Further, in interviews, many teachers expressed an orientation toward continuous improvement, and a large proportion of them had completed advanced degrees (see Tables 4 and 6).

School climate and culture

According to Hoy & Miskel, organizational culture is a set of shared norms, values, and assumptions (2005). These shared assumptions “hold a school together” and give it a distinct identity. Hoy & Miskel distinguish three different types of culture: a culture of efficacy, a culture of trust, and a culture of control (2005). The relationship between school culture and student achievement is still unclear, however Deal asserts that effective schools have strong, shared values, consensus among the staff on important issues, and a strong leader who embodies the school’s core values (1985). One can see evidence of the norms because people in the schools participate in behaviors or activities that reflect the core values.

In many of the *Schools of Promise* studied, teachers contribute in important ways to the school climate and culture. Although leadership often sets a direction and example for teachers, the teachers respond to leadership in positive ways. Teachers also support the school’s efforts to improve and/or maintain high levels of achievement in their words and actions. They actively participate in meetings and trainings supported by the school or district, they frequently communicate with colleagues to improve their effectiveness and share resources, and their behaviors in and out of the classroom are consistent with the school values.

Over the eight case studies, many examples of teachers embodying school norms were observed. For example, when schools place an emphasis on alignment to standards, teachers’ actions reflect school norms; they post the standards in or outside their classrooms and point out to students what standards are being covered. Another example is that teachers may call attention to students who are excelling in school-supported academic or behavioral programs, reinforcing the importance of the program and endorsing the program themselves. Yet another example is frequent use and application of technology in the classroom, supporting their schools’ efforts to adopt and integrate technology in the classroom. Thus, although principals at these schools may set a direction or tone for the school, teachers’ participation and adoption of a behavior or set of behaviors as a norm determines whether a particular initiative or effort will become part of the school culture.

Whereas culture tends to describe shared assumptions and ideologies, organizational climate describes shared perceptions about the behavior of colleagues in a school (Hoy, 1990). That is, school climate refers to “collective perceptions” among teachers, administrators, and others

about behaviors in the school environment. An “open school climate” is characterized by cooperation, authenticity, and mutual support. A “closed climate” is exactly the opposite: the environment is marked by intolerance, division, lack of commitment, and the principal is unsupportive, inflexible and controlling.

Hoy (1990) also describes school climate in terms of health, and distinguishes between three organizational levels within a school: technical, managerial, and institutional. According to Hoy and his colleagues, a school is defined as “healthy” if the technical, managerial, and the institutional levels function in harmony—the principal provides strong and directive leadership and supports teachers; teachers are committed to teaching and learning and have the resources they need; the atmosphere is collegial and collaborative, and members of the school community are proud of it (Hoy, 1990; Hoy & Miskel, 2005). School health correlates with teachers’ trust and organizational commitment, and student achievement as well.

Again, a strong theme at the schools observed is that principals are typically strong leaders who clearly support the teachers emotionally, professionally and in providing them necessary resources to be effective in the classroom. Often, principals point out areas they want teachers to address, such as particular standards or indicators where student performance is low, and ask the teachers to develop the strategies and plans necessary to ameliorate the problem.

Administrators hold teachers accountable, and maintain a presence in the classrooms at many schools. For example, at Withrow, the administrative team often spontaneously visits classrooms and talks to students to evaluate whether if they have grasped the day’s lesson and understand which standard and learning objective is being addressed. Similarly, at Struthers, the school’s two co-principals often spontaneously sit in on classes, and teachers commented that their presence is supportive and encouraging. At Conrad Elementary, the principal has formed a collaborative with two other principals in her district, and they share the responsibility of conducting school “walk-throughs” that are intended both to evaluate and support teachers. At Maple Leaf, the principal spontaneously visits classrooms daily and includes positive reinforcement for students as part of his visits. The school’s “Caught Doing Good” program rewards students who are observed demonstrating good behavior with “gold coins” and their names and photos are posted on a centrally-placed bulletin board.

Teachers, in turn, have strong perceptions that their principals appreciate them, support them, and want them to succeed. At every school there was a nearly unanimous perception that “My principal supports me when I need it.” Teachers understand their principals’ priorities and values, although at the major urban districts, principals often have less impact in decision making than the school district and teachers clearly recognize this fact. Meetings occur frequently and serve a clear purpose. Additionally, teachers have many opportunities to collaborate with one another and to talk to the principal through informal interactions every day. Principals maintain a presence in the hallways and classrooms and know their students’ names, behaviors that reflect the importance they place on making personal connections. In so doing, they serve as models for the teachers.

Perhaps the strongest theme across all eight schools was openness to change among administrators and teachers and a tendency to be self-reflective. Staff at these schools constantly seek ways to grow, change, and improve. This was common among principals in their support of the school’s continuous improvement efforts, as well as teachers, who often use student performance data diagnostically and modify their instructional delivery as necessary to maximize their effectiveness. In turn, they model this behavior for students.

Summary

In the present *Schools of Promise* research, teachers serve a central role. They are highly trained professionals with significant experience. Across the eight schools studied, we found teachers who were committed to their schools, their colleagues, and most importantly their students. They believe what they are doing in their classrooms is important, they feel valued and supported by administrators, and they work collaboratively with colleagues in a “team” atmosphere. Teachers often actively participated in leadership roles in the schools—in terms of school administration, curriculum, and technology to name but a few areas.

Teachers contribute in important ways to the school climate and culture. Although leadership often sets a direction and example for teachers, the teachers respond to leadership in positive ways. Teachers are held accountable to their students, to school leadership, and to one another. Regular classroom visits from the principals are customary at many of the schools studied and serve as support as well as evaluation. Student performance data at the classroom level is often shared openly and strategies are discussed collaboratively. Teachers support their schools’ efforts to improve and/or maintain high levels of achievement in their words and actions. They actively participate in meetings and trainings supported by the school or district, they frequently communicate with colleagues to improve their effectiveness and share resources, and their behaviors in and out of the classroom are consistent with the school values

Across all eight schools, teachers, administrators, parents, and students were asked what makes teachers effective, and several common characteristics emerged. These include:

- Teachers should be enthusiastic and have positive attitudes about teaching and the students they teach.
- Teachers must be knowledgeable in their subject area(s).
- Teachers must know the Ohio content standards and align instruction to the standards.
- Teachers should create a climate of high expectations for student success and reinforce academic rigor in the classroom.
- Teachers should create opportunities for students to apply and use information beyond memorizing facts; they should encourage independent thinking and problem solving, not just rote memorization.
- Teachers should build and cultivate personal connections with their students and be able to develop rapport with students.
- Teachers should differentiate instruction to meet the needs of students from different backgrounds and students with various learning styles.
- Teachers should be self-reflective, open to change, and collaborate with their peers to improve instruction.
- Teachers must be empathetic toward the students but hold them to high standards for achievement and accountability.
- Teachers must demonstrate effective classroom management skills and reinforce discipline, organization, and structure.