

High-performing, high-poverty schools: Research review

Children who live in poverty often attend the lowest performing schools. State and national assessments consistently show poor children lagging behind in performance.¹ Very poor communities face many hardships, where children, families, and the schools that serve them confront a host of challenges. For schools, these challenges include children who start school without early literacy skills, high rates of absenteeism and trisience, difficulty attracting experienced teachers, and much more (Stiefel et al. 2000).

It is challenging work to turn around a low performing school in an impoverished community, but there is promising research to support the notion that it can be done. What common qualities, attributes, and conditions characterize high-performing, high-poverty schools?

There are public schools in poor communities that are making substantial progress, or have excelled, in their mission of teaching children to read, do mathematics, and develop higher-order thinking skills. Researchers have looked at such schools to determine what characteristics they share. Lessons learned from high-performing, high-poverty schools could bolster efforts by school leaders and educators strengthen low-performing schools (Carter 2000). The best available research indicates that positive change and success can occur even under the most challenging conditions.

Defining high-performing schools

Definitions and standards for high-performing schools varied across and within these studies. Nonetheless, each of the schools examined showed positive growth and progress. All of the studies used standardized test results, primarily in mathematics and reading, to identify high-performing schools. For instance, a school might have been identified as high-performing if it showed improved test scores across all grades or across all subjects. A school also might have been identified as high-performing if it showed improved test scores on one subject within one or two grades.

Most of the studies reviewed here focused on results of state-mandated tests. These tests offer researchers validated instruments and the potential for comparisons across schools, although not across states. Each state bases its tests on its own academic standards, which differ in content and rigor. Despite the variations in definitions and standards for high performance in schools across and within these studies, each of the schools examined showed positive growth and progress.

Findings from the research

In the 1980s, researchers began to document the attributes of successful schools (then called "effective schools") serving high-poverty populations (see for example, Pechman and Fiester 1996). More recent research shows that many more schools in poor communities than previously believed perform well as measured by state accountability plans.

The Education Trust, for example, has documented thousands of high-poverty schools making progress in improving educational outcomes of students. In its analysis of an American Institutes for Research database that combined school-level scores on state assessments and demographic information, Education Trust identified 4,577 public schools² nationwide whose students achieved in the top third in reading and/or mathematics assessment for their state³ and had at least 50 percent low-income and at least 50 percent African American and Latino students (Ali & Jerald 2001, Jerald 2001). These schools educated more than 2 million students, including nearly 1.3 million poor, 564,000 African American, and 660,000 Latino students.

What combination of practices, attributes, and resources produces such schools? Most of the research arrives at similar conclusions about the factors that influence school-wide performance, although they vary in their assessment of relative importance or proportion of those factors.

The whole is greater than the sum of its parts

The first factor is what Cawelti (2000) referred to as "a sustained focus on multiple factors." That is, schools do not achieve high performance by doing one or two things differently. They must do a number of things differently, and all at the same time, to begin to achieve the critical mass that will make a difference in student outcomes—in other words, high-poverty schools that achieve gains in student performance engage in *systemic* change.

When we look across the studies, ten factors are consistently identified. In this analysis, we separate them into five building blocks and five practices:

Building blocks

- A culture of high expectations and caring for students
- A safe and disciplined environment
- A principal who is a strong instructional leader
- Hard-working, committed, and able teachers
- A curriculum focused on academic achievement that emphasizes basic skills in mathematics and literacy

Practices

- Increased instructional time
- Ongoing, diagnostic assessment
- Parents as partners in learning
- Professional development to improve student achievement
- Collaboration among teachers and staff

In the sections that follow, we explore each of these characteristics.

Building blocks of high-performing, high-poverty schools

Culture of high expectations and caring

Fundamental to high-performing schools is the culture of high expectations shared by the school's principal, teachers, staff, and students. Central to this culture is the conviction that all children can achieve and succeed academically. Much of the research points to the presence of such a culture as "necessary" or even the "dominant theme" in making it possible for a school to succeed in a high-poverty community (see for example, Barth et al 1999, Kannapel & Clements 2005, Ragland et al 2002).

Principals establish high expectations for themselves and their staff, teachers set high expectations for themselves and their students, and students learn to have high expectations for themselves—and the adults around them. Everyone models the processes of continual learning and self-assessment that are asked of students. As one of the audit teams for the Prichard Committee for Academic Excellence observed, "I strongly believe everyone there believes all can learn, and I have never found that in another school" (Kannapel & Clements 2005).

Further, the school's leadership makes sure to root this belief system in tangible, measurable goals (Carter 2000, Ragland et al 2002). Kannapel & Clements (2005) call these "high expectations communicated in concrete ways." These goals differ from school to school—that every student will go to college, study calculus by 12th grade, or play a musical instrument, for example. What matters is the concrete, demanding but achievable goal that makes it real for students. Ultimately, the culture of high expectations becomes what Haberman (1999) calls a "common ideology" that lends the school a unity of purpose and a sense of identity (Jesse et al 2004).

The culture of high expectations is embedded in a caring and nurturing environment, where adults and young people alike treat each other with respect (see Kannapel & Clements 2005, Lauer 2001, for example). Haberman (1999) identified the ability of teachers to forge relationships with children in poverty and connect with them as the key factor in high-performing schools. In discussing what factors in the school environment produce resilience in students, Borman & Rachuba (2001) identify "strong and supportive" relationships with teachers as crucial. Cawelti (2000) points to incentives and student recognition as one expression of caring, and McGee (2004) observes the attention that high-performing schools give to health and safety, ensuring that students have nutritional meals and access to health, dental, and counseling care.

A safe and disciplined environment

For students to achieve academically, they must have a safe and disciplined environment in which to do so. Many high-performing schools adopt uniforms and strict codes of behavior, but some researchers suggest that these represent the interconnection among high expectations, caring, and respect rather than the trappings of authoritarian discipline (Kannapel and Clements 2005, Jesse et al 2004).

High-performing schools' approach to achieving safety and discipline is also rooted in the culture of high expectations. In an atmosphere where teachers and students treat one another with respect, behavior that is respectful of people, property, and self is the norm. Carter (2000) credits the focus on achievement as "the key to discipline," for it models for students the rewards of "self-control, self-reliance, and self-esteem." He notes that the study of music, which some high-performing schools emphasize, is a metaphor for students that hard work and discipline produce harmony and beauty.

A principal who is a strong instructional leader

Virtually all the studies cited here identified the principal's leadership as important to high performance. Researchers consistently point to the principal as a key player in sustaining that sense of "a culture of success for all" (McGee 1999, Haberman 1999, Cawelti 2000, Jesse et al 2004). Carter (2000) asserts that the presence of a strong principal who holds everyone to the highest standards is the most notable factor in creating a high-performing school.

But researchers differ in how crucial the principal's role is and in their definition of the preferred leadership style. Jesse et al (2004) noted both collaborative and hierarchical leaders among the principals studied. Kannapel and Clements (2005) were surprised by the variety of leadership styles they observed, yet found mostly "non-authoritarian" principals who led by collaborative decision-making. Carter (2000), on the other hand, emphasized the autonomy of principals: "effective principals decide how to spend their money, whom to hire, and what to teach."

Besides establishing a culture of high expectations, the principal's most important role seems to be instructional leadership. Principals encourage, support, and collaborate with teachers to make the best use of their talents, experience, and creativity toward the purpose of improving student achievement. They regard the hiring and training of their teaching staff as among their most critical responsibilities (Carter 2000, Kannapel & Clements 2005, Ragland et al 2002).

Hard-working, committed, and able teachers

Researchers concur that teachers are an important element of high-performing schools (Carter 2000, Kannapel & Clements 2005, Ragland et al 2002). The principal regards the teaching corps as the school's most important resource, and focuses on hiring, cultivating, and supporting the best teachers. Researchers also agree that the teachers who succeed in these schools have embraced the culture of high expectations: they are committed to seeing all children achieve (see Lauer 2001, for example). They love learning and relate well to children. They work hard, for long hours, but have high morale and devotion to their work.

The principals who hire teachers place somewhat different emphasis on the qualities that they look for in hiring, in part because it is so difficult to recruit teachers to high-poverty schools. Some require candidates to teach a demonstration lesson. Others work closely with colleges to place student teachers that they can observe and cultivate as promising candidates. Other principals hire teachers with little experience or training but the right attitudes and beliefs about children and learning, and train them on the job. In such cases, some principals report that off-the-shelf curriculum packages help these less experienced teachers deliver instruction more effectively sooner, by providing detailed guidance for them to follow in the classroom. Still other schools establish master teacher or coaching systems to mentor new teachers.

A curriculum focused on academic achievement that emphasizes basic skills

These schools consistently emphasize academic achievement and instruction. Many purchase commercial instructional packages or curricula. Many use state standards as the basis for curriculum design and assessment (see Cawelti 2000 for example). In Barth et al (1999), it was noted that "the most significant finding" of its survey was the extent to which high-performing schools use standards to guide school activity: 80 percent report using standards to design curriculum and instruction, 94 percent use standards to assess student progress, and 59 percent use standards to assess teacher effectiveness.

The research of Kannapel and Clements (2005) suggests that the choice of curriculum or instructional style was less important than the focus: "The key seemed not to be what they were doing so much as the fact that the entire faculty and school community had focused consistently over time on academics, instruction, and student learning."

Most high-performing schools adopt curricula that emphasize basic skills in reading and mathematics (see for example, Carter 2000, Cawelti 2000, McGee 1999). The philosophy is simply that children who have not mastered the basic skills will not effectively progress in their education. Some encourage early childhood education programs in the school and community. The Education Trust found that 86 percent of high-performing schools had increased time spent on reading, and 66 percent on mathematics (Barth et al 1999).

But high-performing schools do not stop with the acquisition of basic skills. It was also found that schools were seeking to develop higher-order skills (Barth et al 1999). Carter (2000) reported a variety of ways that schools sought to develop the "reading habit" in students, building libraries and offering Junior Great Books, a program of the Great Books Foundation that provides engaging texts geared to students from kindergarten through 12th grade. Other schools require students to demonstrate excellence in speech and writing, or to prepare research papers and literary analyses in early elementary grades. Middle schools and high schools offer college preparatory curricula. Some schools offer curricula enriched by sports, arts, or music; others include the explicit study of character.

Practices of high-performing, high-poverty schools

Increased instructional time

These schools consistently find ways to provide additional instructional time for their students—or "time on task"—especially in reading and mathematics (Barth et al 1999, Carter 2000, Cawelti 2000, Feldman 2003, Kannapel & Clements 2005, and McGee 1999). Schools offer longer instructional periods and ensure that the time spent in school is "on task"—not wasted. They extend the typical school day with longer school days or after school, weekend, or summer programs.

At other public schools, leaders have found creative routes to expanding the school day, bringing in teams of business or senior volunteers, for example, to provide extra tutoring. They also increase instructional time by arranging for extra support by aides, parents, and even older students. Some offer intensive reading periods during which every adult in the school—teachers, aides, principals—stops what they are doing to provide reading assistance. At many schools, teachers whose contracts would enable them to leave at 3 p.m. simply continue to work another two or three hours, running homework clinics or providing other extra help. In other cases, teachers are paid for their extra time.

Ongoing, diagnostic assessment

A common assumption is that the topic of testing in schools refers to annual state student assessments. Many high-performing schools do welcome state testing, because it provides a baseline upon which to assess their performance against an external standard.

But the fundamental purpose of testing at high-performing schools is to diagnose and guide the instruction of individual students (see for example, Carter 2000, Kannapel & Clements 2005, Ragland et al 2002). Teachers use assessment data to identify where students should improve and adjust their teaching strategies accordingly. Because teachers assess students individually, they can tailor instruction individually.

Barth et al (1999) surveyed top scoring and/or most improved schools as identified by their states. Among the 1,200 schools surveyed, 366 responded to the survey in 21 states. Barth and colleagues reported that 81 percent of those 366 high-performing schools established comprehensive systems for monitoring student progress regularly and frequently. Some schools conduct assessments as often as once a week in reading, mathematics, spelling, or other subjects. Others have established benchmarks in primary academic subjects that they use to assess every child every month or two. Some use a pre-test and post-test structure to provide data with which teachers can adjust their strategies to meet learning needs more effectively. These systems provide data that teachers can use to diagnose learning issues quickly so as to provide immediate help to students who are struggling. In short, ongoing, diagnostic assessment offers schools what McGee (2004) called an "internal capacity for accountability."

Parents as partners in learning

Although researchers generally find that high-performing schools encourage parent involvement, the form it takes varies considerably. At one end, Jesse et al (2004) found that many high-performing schools sent lots of communications home to parents, but did not seek their active involvement.

On the other hand, Barth et al (1999) found that high-performing schools were increasingly engaging parents in processes that would help them understand standards and student work. Teachers and staff at these schools view parents as "critical partners" in the learning process (Ragland et al 2002). Carter (2000) also found school staff actively working with parents to bring learning into the home. He explored the contract model, where parents literally sign a contract with the school, committing to getting the child to school on time or helping with homework, for example.

Professional development

Continual training and self-improvement of the teaching staff is another hallmark of high-performing schools, one that mirrors the expectations these schools have for their students. The Education Trust found that one-third of high-performing schools spent 10 percent of their Title I budgets on professional development (Barth et al 1999).

Professional development at high-performing schools differs distinctively from the norm. It is directly linked to changing instructional practice in order to improve student achievement (Barth et al 1999, Jesse et al 2004, Kannapel & Clements 2005, McGee 1999). It is often team-based and school-wide, and it reflects a continual process of improvement. Lauer (2001) found that teachers at high-performing schools were more likely than teachers at other schools to report that professional development improved their teaching.

Collaboration

Finally, several researchers identified collaboration and teamwork among school staff as a feature typical of high-performing schools. They regularly communicate across teaching areas and programs and are eager to learn from each other (Kannapel & Clements 2005, Ragland et al 2002). Teamwork and collaboration are very typical, and provide venues for teachers to critique and assist one another, actively looking to improve each other's teaching to help students meet specific academic standards. They address barriers to learning, collaborate to identify solutions, and take part in school-wide intervention strategies. High-performing schools may also set aside significantly greater collaborative planning time (Feldman 2003).

Conclusion

Can the lessons from high-performing, high-poverty schools help others? What inspires a school to start on the road to improvement? Noting that the question requires further research, Kannapel and Clements (2005) suggest three potential motivators: state passage of a reform act, a school's recognition that it has "hit bottom," or the transformation of a school's culture into a belief system that asserts that all children can learn and succeed, regardless of the income or other demographics of their community.

Whether the impetus to change comes from leadership inside or outside the school, the research on high-performing schools demonstrates that schools in the most troubled neighborhoods can become places where children make progress and perform well academically. Schools that cultivate a culture of high expectations, for students and teachers alike, that emphasize academics and student learning, and engage in continual assessment and efforts to improve, are on the road toward becoming high-performing schools.

Scope and methodology of the research review

To prepare this synthesis document, we used keywords relevant to the research question and searched numerous educational databases resulting in nearly 300 studies published within the last 7 years. From this initial list of 300 studies, only those studies that focused on kindergarten through 12th grade (K-12) students in the United States were included in the review. All studies were screened for evaluation design quality based on a set of established criteria. Studies were sought that adhered to strict methodological rigor; however no studies of this type were found. The majority of studies focused on this research questions have been secondary analyses of statewide and national data on student and school performance, descriptive studies, and ethnographies/case studies. Among this group of studies, 17 were selected for their relevancy and evaluation rigor and reviewed for this synthesis.

Footnotes

¹ For example, the 2003 reading assessment of 4th-graders shows that among children who were eligible for free and reduced-price lunch, 55 percent scored below the basic level; at the other end of the scale, only 15 percent performed at the proficient level or higher. A similar pattern exists for the 2003 4th grade mathematics and for the 8th grade reading and mathematics assessments. Moreover, these patterns have persisted over time.

² There were a total of 89,599 public schools in the nation in 2000.

³ Schools identified as high-performing or most improved had students scoring in the top third in reading and/or mathematics in at least one grade level. Elementary, middle, and high schools were included in the analyses.

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