Poverty, performance, and frog ponds

WHAT BEST-PRACTICE RESEARCH TELLS US ABOUT THEIR CONNECTIONS

Higher-performing schools create conditions that enable schools to address some of the challenges of teaching high concentrations of students living in poverty.

By Janet I. Angelis & Kristen C. Wilcox
For eight years, we’ve studied schools whose students consistently perform above predicted levels to see if we could identify what’s happening in “beating the odds” schools that distinguishes them from schools with similar challenges yet average performance. Indeed, we found that higher-performing schools do share common characteristics that set them apart from average performers. The three most essential:

- **Teachers, administrators, and staff collaborate and share responsibility.**
- **They make decisions based on a variety of evidence.**
- *Their vision of success includes high-poverty students achieving beyond predicted levels.*

The similarities across successful schools hold whether the schools are in urban, rural, or suburban areas, whether they’re large or small, and whether their students are native born or recent immigrants. No matter the locale or the particular circumstances, higher-performing schools have created conditions in which they support each student to succeed. In higher-performing schools, teachers and administrators optimize the potential positive effects of their unique school ecologies on student performance. They foster what some researchers have dubbed frog-pond processes, where large concentrations of students from typically lower-performing groups benefit from a school’s ability to address their particular needs and provide opportunities to shine among peers (Goldsmith, 2011).

Using regression analyses permits us to parse socioeconomic factors from student achievement, and select schools that consistently do well despite their demographic challenges. To be sure, the inequalities of society are replicated in the public school system (Darling-Hammond, 2010; Ravitch, 2010). Moreover, the schools we describe don’t regularly outperform those serving wealthier students. Yet anomalies exist, and the purpose of our studies has been to learn more about schools whose students consistently perform better than expected, given their poverty levels.

Because of their distinct settings and student populations, some of the specific ways schools address their challenges differ from site to site. But collaboratively using data to drive decisions about curriculum and instruction with the goal of ensuring that every student can and will learn and that “poverty is no excuse” are common across all the schools. We draw our examples from schools whose student poverty levels (as measured by free and reduced-price lunch rates) range from 50% to 100% in a variety of settings.

**THE SCHOOLS**

To conduct our studies, we identified sets of schools matched by demographics, including levels of poverty and per pupil expenditures, yet with different student performance levels over three years on New York’s English language arts (ELA) and mathematics assessments. In addition to demographic and performance factors, we also sought schools representative of the state’s geographic diversity. From 2004 to 2009, we conducted four such studies, one each for elementary, middle, and high schools, as well as a study of middle schools whose students consistently performed well in science. In 2010-11, we re-
identified 24 essential skills and strategies necessary for students to succeed on not only the state’s ELA assessment, but all high-stakes assessments. These skills range from traditional comprehension skills (finding the main idea, interpreting graphics) to using and interpreting literary elements to test-taking skills (analyzing questions, understanding rubrics). At the beginning of each month, the ELA teacher on each team introduces colleagues to three or four of these literacy skills along with strategies to integrate them into their instruction during the month; teachers assess students on those skills at month’s end. The preliminary results from this latest study confirm earlier findings related to the importance of collaboration, use of evidence, and shared visions of success.

**COLLABORATION**

Everyone is responsible for teaching all children.

— Principal, Jefferson Middle School

Educators in “beating the odds” schools attribute their success to meaningful collaboration. They report working in a trusting and respectful climate where the schedule provides time to collaborate, and informal collaboration is the norm as well. They use their scheduled time to plan interdisciplinary units, to learn new instructional strategies from colleagues, and to develop common assessments and then analyze results. And when they are not formally collaborating, they focus on children’s social, emotional, and academic growth. They serve on committees and teams to interview potential new hires, modify the curriculum, or evaluate proposed new programs. They do not work in isolation (Wilcox & Angelis, 2009).

For example, instruction at Port Chester Middle School and Columbus Elementary School is mostly interdisciplinary. Both schools serve large numbers of recent immigrants from poor areas of Central America (68% and 82%, respectively), so they focus on literacy and language acquisition for all students. The middle school’s mantra is that “every teacher is a teacher of literacy.” Working with a consultant, they

<table>
<thead>
<tr>
<th>School, City, or Town</th>
<th>Grades Served (Number of students)</th>
<th>Free/Reduced-Price Lunch Rate</th>
<th>Year*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ulysses Byas Elementary School, Roosevelt</td>
<td>K-6 (420)</td>
<td>100%</td>
<td>2004</td>
</tr>
<tr>
<td>Columbus Elementary School, New Rochelle</td>
<td>K-5 (816)</td>
<td>78%</td>
<td>2010</td>
</tr>
<tr>
<td>John F. Kennedy Elementary School, Port Chester</td>
<td>K-5 (725)</td>
<td>78%</td>
<td>2010</td>
</tr>
<tr>
<td>Saunders Trades &amp; Technical High School, Yonkers</td>
<td>9-12 (1,395)</td>
<td>76%</td>
<td>2006</td>
</tr>
<tr>
<td>Westbury Middle School, Westbury</td>
<td>6-8 (849)</td>
<td>74%</td>
<td>2006</td>
</tr>
<tr>
<td>Jefferson Middle School Science, Jamestown</td>
<td>5-8 (390)</td>
<td>69%</td>
<td>2008</td>
</tr>
<tr>
<td>Centennial Avenue Elementary School, Roosevelt</td>
<td>K-5 (440)</td>
<td>66%</td>
<td>2010</td>
</tr>
<tr>
<td>John F. Kennedy Middle School, Utica</td>
<td>6-8 (1,025)</td>
<td>60%</td>
<td>2006</td>
</tr>
<tr>
<td>Port Chester Middle School, Port Chester</td>
<td>5-8 (790)</td>
<td>52%</td>
<td>2006</td>
</tr>
<tr>
<td>South Kortright Central School, South Kortright</td>
<td>9-12 (126)</td>
<td>52%</td>
<td>2006</td>
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</tbody>
</table>

*The year indicated for each school correlates with the year the school was identified as part of the sample.

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**Port Chester Middle School performance on grade 8 ELA assessments**

<table>
<thead>
<tr>
<th>Year</th>
<th>Port Chester Middle School</th>
<th>New York state average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>49%</td>
<td>65.6%</td>
</tr>
<tr>
<td>2007</td>
<td>57%</td>
<td>71.7%</td>
</tr>
<tr>
<td>2008</td>
<td>55%</td>
<td>69%</td>
</tr>
<tr>
<td>2009</td>
<td>75.5%</td>
<td>75.5%</td>
</tr>
</tbody>
</table>
result is that Port Chester Middle School students consistently perform well above similar schools, and they meet or beat the state average on ELA assessments, despite a poverty level that generally exceeds the state average by 10-15 percentage points.

Columbus Elementary uses problem-based learning and culminating events to support language learning and the acquisition of academic content knowledge and skills in all students across all grade levels. For grades 3, 4, and 5, the culminating event is the Expo. Grade 4 classes work with an architectural society to learn about designing an exhibition space. A competition among 4th-grade teams produces the winning design, which the 4th graders then build, converting the school’s gymnasium into an exhibition hall. Third and 5th graders populate the booths with demonstrations of their year’s work. Third graders present their science investigations, while 5th graders present their integrated math, science, and technology investigations. All students in each grade, no matter how long they’ve been speaking English, are docents for visitors to the Expo, which include parents and community members. A Literacy Fair offers a similar cross-disciplinary and hands-on experience for kindergarten, 1st, and 2nd grades.

Collaboration within a school is only part of the equation. The more effective schools reach out to the communities around them, admittedly a challenge made harder by poverty (McGee, 2004). In Yonkers, the state’s fourth most populous city, all schools are schools of choice, with a lottery determining admission when needed. Therefore, Saunders Trades & Technical High School each year greets incoming freshmen who didn’t likely attend the same feeder schools and who take public bus transportation from all corners of the city to reach the high school. From these disparate beginnings, the school builds its frog pond. Within this 1,400-student school, teachers and administrators work with cohorts of students in a program that combines academic rigor and technical training. Each assistant principal and guidance counselor stays with a class cohort for all four years so that they can know and guide them well. With parents spread across the city, the school creates events such as street fairs to bring them into the school community.

**EVIDENCE-BASED DECISION MAKING**

We use data to drive instruction and intervention to move our children forward. We don’t take anything for granted.

– District administrator, Port Chester

Even if something works, we try to find something better. If it works for 80% [of students], we try to find something that works for 100%.

– Teacher, Columbus Elementary School

In addition to state assessment data, what counts as evidence and how it’s collected varies from school to school, but the more effective schools in our study continually collect and analyze a variety of data — formal and informal. Schools collect data from a variety of sources including daily student interaction, surveys of students, teachers, parents, and community members, and from results of interim and benchmark exams generated by teachers, departments, and the school district. (Wilcox & Angelis, 2011).

They also share an attitude of “never good enough,” and their stance toward change is to expect it, respect it, and, by continuous progress monitoring, try to cause it. Perhaps most important, they look for trends in their data to spot risk factors and put preventive programs in place. When the state increased graduation requirements, South Kortright looked back over 10 years of data to see how their students would have fared under the new regulations. That analysis led to the identification of a need for stronger language arts instruction in earlier grades to support stronger performance in high school.

Many schools in our study are so-called turnaround schools. Although currently outperforming similar schools, they weren’t doing so five to 10 years ago when the state designated them as needing improvement or, worse, placed them under registration review, which could lead to possible closure. In many cases, collaboratively monitoring progress has enabled the turnaround. Teachers and administrators have embraced data as helping them identify and address problems while setting their sights on higher goals and constantly measuring progress toward meeting those goals. For example, at Jefferson Middle School, grade-level departments set goals for their subject areas and develop action plans that are aligned with the district’s overall Student Achievement Improvement Progress process. Then they benchmark, analyze results, and refine. Benchmarking exams at the end of each trimester are a major element in this process. After grading these exams, they discuss the
results within and across grades, and across schools. The primary purpose of the benchmark tests is to assess the program and identify needs rather than provide grades for individual students.

Everyone pays attention to the results of high-stakes state assessments, of course, but evidence of student success is seen much more broadly. For example, South Kortright administers “nothing’s perfect” surveys and uses responses from teachers and students to identify and address issues or problems, particularly after implementing a change, such as adding a 10th period. Results are shared in a faculty meeting, where faculty review and discuss them to get a general idea of what’s working and what isn’t. Then, smaller groups are formed to try to solve particular problems.

VISION

Poverty is not used as an excuse for performance levels.
— Administrator, Jefferson Middle School

What the more effective schools have in common is not only the refusal to accept the limitations of poverty, but educators’ commitment to the vision that every student can succeed in school and in life. From elementary to high school, they seek to transfer their vision of success to students and families, raising aspirations and confidence. Believing that students, their families, and communities “deserve to achieve,” they place the bar high and bring students and parents along. They are cheerleaders for students’ success. For example:

- Columbus Avenue’s social worker brings Latina moms to museums in Manhattan so they will be able to do the same with their children.
- South Kortright provides real and virtual field trips to expose their isolated rural students to the wider world.
- Saunders Trades & Technical prominently posts all college acceptance letters and an accompanying thermometer showing the total amount of scholarships won.

It takes more than cheerleading, though. High expectations are backed up by the academic programs to achieve and by policies designed to prevent any student from sinking due to social, emotional, or other reasons. Saunders school officials go into the city to find any student whose absence is of concern. South Kortright has added after-school tutoring, structured study halls, and a 10th period for students who need more academic support; they’ve also made any student failing two or more courses ineligible to participate in extracurricular activities unless they’re attending after-school tutoring. Kennedy Middle School has implemented a service to ensure that students who need it attend after-school tutoring: School security escorts students on teacher-provided lists from their last period classes to a central location where they are met by the teacher requiring their presence.

To get at underlying causes of poor behavior, attendance, and academic performance, Utica’s Kennedy Middle School and Westbury Middle School have implemented alternative programs. In Utica, a special bus picks up the 14 to 16 students in the
program at their homes so parents can see them board. Their school day runs from noon to 5:30 p.m. when they’re bused directly home. The focus of their day is on developing the behavior and skills that will enable them to be successful academically — anger management, and interpersonal and social skills. They receive social services support as well as academic course work so that they can keep up with their core subjects. Westbury provides an alternative program for students who aren’t successful in a normal school setting. The self-contained program serves 15 students with a special education teacher, a content-area teacher, and a social worker. Its goal is for students to succeed academically, but they often have to work first on social-emotional issues as well as attendance.

Ulysses Byas Elementary School stresses self-control and discipline. Students wear uniforms in a “fight-free, drug-free, disrespect-free school,” where the whole focus is on learning. Self-management is reinforced through a court system with mock trials in which students serve as attorneys and judges for peers who get out of hand, meting out punishments, such as writing about the infraction or having the aggressor in a fight talk with the victim. Centennial Avenue Elementary wants students as well as teachers to understand performance indicators so students know what they’re working toward. Yet, they do not lose sight of the whole child and the need to develop skills to be successful in life.

CONCLUSION

A vision of success for students, commitment to working together to achieve it, and being willing to take a hard look at data to measure progress help keep educators in these challenging settings on target. Aware that they can’t overcome all of life’s challenges for their students, they nevertheless create settings — their frog ponds — in which students can succeed. And they refuse to excuse themselves or their students from reaching high and trying. The schools are anomalies in that they outperform other schools with high concentrations of student poverty, but it is not by chance that their students perform so well. In these schools, the negative effects of poverty on individual student academic achievement are, of course, not eliminated, but they are modified significantly. Teamwork, inquiry-based practice, and shared visions of high expectations — these are the elements that differentiate impoverished schools where despair is replaced with hope.

References


