

Success for All shows long-term gains, cost-effectiveness

“Success for All provides the strongest educational benefits for the dollar for reading.”

JUST AS ONE immunization does not protect most people from a disease for life, one educational intervention in the lives of at-risk youngsters does not ensure academic success through high school and beyond. Early interventions often need a boost from later ones to keep these youngsters learning at the level of their peers. Sometimes even frequent and sustained “boosters” do not do the trick.

A few reform efforts, however, have been credited with having longer-term effects. Specifically, the Abecedarian and Perry Preschool projects have been cited as contributing to lower retention and higher graduation rates and better socialization as students move through middle and high school. In 1999, the Tennessee experiment on class-size reduction also showed similar results in a statewide study.

Now, another widely used educational program for teaching at-risk youngsters is being added to that short list. It is Success for All (SFA), the school-reform program developed at Johns Hopkins University in the late 1980s and now used in 1,800 schools with more than one million children in the United States and several other countries. Even through middle school, SFA students fared better than students from comparable schools in a control group.

Specifically, as they were followed through eighth grade, students who had been in elementary schools using SFA had higher reading and math scores, fewer placements in special education classes and were retained less frequently, meaning that they completed eighth grade at younger ages.

The study also looked at the cost of Success for All. It concluded that, though the program is expensive, its results were no more costly than those incurred by school districts that shied away from such interventions, but assigned more students to special education classes and remedial programs.

“From a policy perspective, our results indicate that a nationally disseminated elementary school program may deliver enduring educational benefits to the students it serves at no additional cost,” according to *The Long-Term Effects and Cost-Effectiveness of Success for All* (Report 53) by Geoffrey D. Borman and Gina M. Hewes of Johns Hopkins University.

Using test and other student data provided by the Baltimore City Public Schools, the study followed students from the original five SFA schools and compared them to students from five comparable schools used as controls.

The study also looked at the lowest-performing members of the two groups —those who scored in the 25th percentile or below on a pretest given to all students in the study. For these students, SFA produced similar long-term effects. These students were about seven months ahead of similar students in the control group in reading; they also scored higher in math assessments, though those results were not statistically significant.

The Cost of Success

Like the three projects mentioned above, Success for All is relatively costly. In fact, a study of 26 reforms identified SFA as among the most expensive such reforms, costing between \$70,000 and \$270,000 for first-year materials, personnel, and training in a typical school. Another study estimated that SFA costs from \$260,000 to \$645,000 per year—making it the costliest school reform.

The study used various measures, including SFA's own estimates, to determine the cost of the program. It also used the average per-pupil expenditure in the United States (\$5,330 for the 1998-99 school year) and the average per-pupil cost of special education (\$6,404).

The study used several methods to gauge the cost-effectiveness of SFA. One was to add the cost of regular and special education, plus SFA programs for those students studied, over grades K-8. Because fewer SFA students used special education classes and because they were retained less—meaning they spent fewer years in these grades—the total cost of SFA students was about \$1,300 less per student for all of their elementary and middle school years.

Given the long-term effects of SFA, the study concluded that the reform was indeed cost-effective. The price of delivering the program's enduring benefits was no greater, and in some instances less, than what the control schools spent.

In another measure, the study computed the cost of reading and math gains, based on the total cost of the SFA program, the number of students and the average number of years students participated in SFA. According to this measure, "Success for All provides the strongest educational benefits for the dollar for reading," the study concluded. The results were not quite as good for math achievement.

Despite the long-term effectiveness and the cost effectiveness of SFA, the study's authors caution that it, like the other reforms mentioned, is not the "great equalizer" that Horace Mann saw as the role of American education. Nor is it "the education equivalent to the polio vaccine," the authors said, but rather one preventive measure that can be used with at-risk children, though one that retains its effectiveness longer than many.

Neighborhoods count in eighth-grade math achievement

“...place of residence may have important consequences for the academic success and the resulting life chances of adolescents.”

WHERE A CHILD lives *does* make a difference in how well he or she performs in school. Children who live in neighborhoods with high crime and extreme poverty often don't achieve academically as well as those who live in safer, cleaner, more affluent neighborhoods.

Though crime, poverty and a disproportionate number of single-parent households are often facts of life in inner-city neighborhoods, parental disinterest is not. In fact, parents in poor neighborhoods may be more diligent than other parents about supervising their children because of the dangers in the neighborhood and a shortage of organized activities. They may have high expectations for their children in middle-school and well beyond. In fact, low-income parents in disadvantaged neighborhoods may have higher expectations for their children than higher-income parents in the same, or a similar, neighborhood.

The effect of a neighborhood on its schools and the achievement of its youngsters in those schools is well-documented. Less is known, however, about the interplay of a neighborhood with its schools and parents and how that interplay impacts student achievement. “Research on the possible links between schools, family practices and student achievement is very sparse. So far, little is known about whether schools shape the processes by which parents transmit educational advantages to their children,” say the authors of *Neighborhood and School Influences on the Family Life and Mathematics Performance of Eighth-Grade Students* (Report 54).

This study, by researchers Sophia Catsambis and Andrew A. Beveridge, is presented in a recent CRESPAR technical report. Catsambis and Beveridge looked for both direct and indirect effects of neighborhoods on schools and families and the follow-through influences of those schools and families on student achievement. Neighborhoods, they hypothesize and later determine, may affect parents' involvement with the children's education and, thus, their abilities to help their children succeed in school. Although more research is needed to determine the magnitude of neighborhood effects, the study points to the importance of considering neighborhood context in further research and school program development.

The study measured achievement among eighth-graders in mathematics because it has proven to be an important predictor of college attendance and completion. They chose to look at eighth-graders because those students are on the verge of independence, as young adolescents, influenced more by their peers, perhaps, than by their parents and teachers.

Using data from the National Educational Longitudinal Study (NELS) of 1988-92 and the 1990 U.S. Census, the researchers were able to analyze families, neighborhoods, and schools simultaneously. Parent involvement was measured by seven indicators, including parents' contacts with schools, parents' educational expectations for their children, and parent-child communication about school.

Findings

Among the study's findings are:

- Disadvantaged neighborhoods and schools with high poverty and absenteeism rates depress students' mathematics achievement.
- Disadvantaged neighborhoods keep parents from activities, such as participation in parent-teacher organizations, that seem to positively influence students' success in school, including mathematics achievement.
- Where they live may have a greater effect on inner-city students because they tend to live in poor, and often dangerous, neighborhoods.
- Parents have higher educational expectations for daughters and for all children who show interest in school.
- Parents' involvement with schools is influenced by socioeconomic status, race and ethnicity and the mother's work status.
- African American parents may overcome the impact of disadvantaged neighborhoods more effectively than parents of other races, despite low socioeconomic status. They are likely to increase contacts with schools in poor neighborhoods and provide more out-of-school lessons for their children.
- Parents can help their children overcome the educational disadvantages of their neighborhoods by frequent communication, close monitoring of activities and extra learning experiences, such as museum visits and music lessons.

“We conclude that place of residence may have important consequences for the academic success and the resulting life chances of adolescents. Although the life chances of minority and poor adolescents are negatively affected by the characteristics of their neighborhoods, some of these disadvantages may be offset by family and parenting practices,” the report states.

Research base shallow for judging superintendents' success

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STANDARDS EXIST for nearly every part of the education community, except the top. Although faced with huge obstacles and tenuous futures, superintendents have few guidelines for doing their jobs well, meeting their own goals or others' expectations. Likewise, school boards and communities have few firm measures by which to gauge how effective their school leaders are. And student achievement, which has become the basis for teacher merit raises, school viability and curriculum changes, is rarely a standard by which superintendents are judged.

Being a school district superintendent is a tough job. In large urban districts, especially, superintendents routinely inherit situations that make success difficult. They often face students with dismal test scores, buildings in need of great repair, teacher shortages and a myriad of other problems compounded by inadequate budgets. At the same time, their jobs are highly political as they must work with school boards, teachers' unions and many other groups with special interests.

It's easy to see why turnover is high. Urban superintendents serve an average of 2.5 years; the national average for all districts is 6.2 years. Some superintendents burn out, but many are fired or otherwise dismissed when they do not produce positive results after only a year or two.

Yet, experts say this is a time when strong, effective leadership is an important part of school success. What makes a superintendent effective? On what principles is he or she judged? What must superintendents accomplish—and how—to be effective? What makes them ineffective?

Answers to these questions are different for every district. While the quality of leadership is a concern for most school districts, how to measure that quality—or lack of it—is questionable.

Research is little help. Studies on effective school system leadership are sparse, and inconclusive, a review of education literature shows. “Contemporary research rarely focuses on examining the effectiveness of educational leadership at the district level. As a consequence, examples of effective school system management are few,” writes Janet Y. Thomas of Johns Hopkins University, author of *The Public School Superintendency in the Twenty-First Century* (No. 55), a technical report published recently by CRESPAR.

What studies do exist do not set forth guidelines that aim to lead a school system executive to success. They do not even look at high-performing districts for clues to effective leadership. Is there a difference between superintendents in districts with consistently high achievement outcomes and those in districts with low-performance indicators? The jury is still out.

Most studies provide only anecdotal evidence about leadership style, as well as a superintendent's ability to withstand political pressure and maintain good relations with the school boards that hire them.

History offers some clues, but no definitive answers. “When the foundations for public

schooling were laid, there were no specific guidelines for evaluating the effectiveness of school leaders,” according to the report. “Yet the quality of superintendent leadership was always an area of concern.”

In the 19th century, schools and learning were linked to religion, and leadership in public education was seen as more of a calling than a profession. There was little training in leadership at the university level and Christian knowledge and values were favored over academic achievement.

Toward the end of the 19th century, schools faced the challenges of industrialization, immigration, and urbanization. Communities wanted their schools to have more structure and their school leaders to be more like businessmen—able to use school resources wisely and make decisions well for different groups of people. After World War II, school focus changed again; educators adjusted curricula to prepare students for everyday life. Many people said the schools had lowered their standards. At that time, key leadership roles began to shift toward principals and questions arose over who should be educated and who the educators should be.

The principals continued as key leaders in the 1980s, when school reform became popular, and beyond. The focus continued to shift away from superintendents.

Through all of these phases, little was determined about the management practices of superintendents in high-performing districts. Did they lead differently than superintendents in low-performing districts? Was leadership linked to performance? Could leadership determine or influence student performance?

Many of these questions remain unanswered. Superintendents find few guidelines in education literature to help them with their tough jobs and, likewise, school boards find few standards by which to judge their superintendents’ effectiveness.

This review shows that public education needs a set of guidelines, “establishing a level of excellence toward which all public school administrators should strive.” These guidelines should include fixed standards—such as student attendance and graduation rates—for assessing the superintendent. They should also look at the superintendent in his various roles. How effective is he, for instance, as an educational leader, as a politician and as an organization manager?

Middle school history curriculum has wide appeal

“We aim for academically challenging, standards-based materials in every classroom, every day.”

FOR MORE THAN FOUR YEARS, curriculum writers in the Talent Development Middle School program have been building a better history course. By fall they expect to be finished—with enough lessons to fill two years of middle-school classes in American history from the country’s beginning to the present.

The writers at Johns Hopkins Center for Social Organization of Schools are using Joy Hakim’s 10-book *History of US* as the foundation and structure of their course, adding extensive teacher and student materials to make the non-traditional history books more useful in the classroom. Begun in 1998 with a pilot in three Philadelphia middle schools, the history project continues to expand. Now published and distributed by Oxford Press, the Hopkins-produced “teaching guides and resource books” are being used not only in eight Talent Development Middle Schools in Philadelphia and elsewhere, but also in hundreds of other classrooms. Oxford Press is the publisher of Hakim’s series, which was released in 1994.

“The thing about the history project that’s been so interesting is we have had this huge audience that we had not anticipated,” said curriculum writer Maria Garriott. Written for use in seventh and eighth grades in Talent Development schools, the lessons are being used from fifth through eighth grades by schools and home schoolers, as well.

“They are used across the nation,” said Jane Walker, sales and marketing manager for the *History of US* at Oxford Press. “The lessons are certainly an asset to the program; they do well,” she added.

The audience is likely to grow even more next fall. PBS is planning to air a 16-part television series based on the Hakim books, and the Hopkins team has written teacher materials to accompany it.

For each of Hakim’s books, the Hopkins project has created a large red binder of approximately 25 lessons, plus five review lessons and five assessments. Introductory materials for each lesson include a briefly stated theme, an overview for the teacher, appropriate vocabulary, a resource list for students and teachers, and the skill and content standards contained in each lesson.

The lessons feature lively student-centered activities. For instance, students may be asked to conduct a mock trial for John Brown, perform a historical rap, or keep the journal of an ordinary person from another era by, first, reading about that person and then trying to adopt his or her identity during the unit.

“The curriculum was designed with both teachers and students in mind,” said Garriott.

“We provide an overview for those teachers who may need more background information on specific historic events.... To engage students and lead them to higher-order thinking, the curriculum features fast-paced cooperative learning,” she added.

“We continue to make it as rigorous and rich as we can,” added Susan Dangel, who heads the

curriculum-writing project and created the lessons' format.

The lessons are fast-paced with several different segments. For instance, a focus activity introduces the lesson and often includes predictive activities, such as brainstorming or interpreting a photograph or anecdote. That is followed by a short teaching activity that might include vocabulary work or partner reading. The bulk of the lesson— about 30 minutes typically—is devoted to student activities, usually carried out in teams. Then there is a brief “reflection and review” to sum up the main theme or concept and to offer students an opportunity to think and talk about what they have experienced.

“We aim for academically challenging, standards-based materials in every classroom, every day. We’re not dumbing down,” said Garriott. “We’re using things proven by research to work.”

Talent Development is a whole-school reform developed by at the Center for Research on the Education of Students Placed At Risk at Johns Hopkins and Howard Universities; it aims to improve the achievement of middle and high school students, particularly those in high-poverty areas, through organizational and instructional innovations. The Talent Development model recognizes the gifts and talents of each student and helps schools and teachers play to those strengths.

A strong, core curriculum is a key component of Talent Development. Middle school program director Douglas Mac Iver chose Hakim’s *History of US* for its crisp, narrative style and its non-textbook approach. Unfortunately, the series had few teaching suggestions or student materials.

So, the Hopkins curriculum-writing team was assembled and put to work, beginning with the ninth in the 10-book series.

“We ended up with a model and I wrote a couple of lessons and we had teachers try them,” added Dangel, a former teacher and principal who spent months talking to teachers and studying the schools for which the curriculum was designed before beginning to write.

Some of the challenges teachers and researchers faced in Talent Development schools influenced the structure and content of the curriculum. For instance, though usually including a homework assignment, the lessons do not expect students to read the Hakim texts outside of class because many TD schools have only one set of books for several sections of middle-school history. Therefore, students cannot take the texts home.

Garriott said this may be beneficial, however. Many students in TD schools are reading well below grade level. Therefore, the programmed use of the text and shared reading assignments help students who are not able readers.

This shared reading, called “Partner Read,” is only one of many strategies embedded in the history curriculum. Research-based and aimed at slow learners, these reading strategies have proven to have a much wider audience because of the realization that many middle school students have poor comprehension skills. These are attacked by other strategies, such as stating a purpose for a particular reading, by graphic organizers that help students focus on a reading, by vocabulary discussion, and by previewing texts.

The teaching materials were specifically designed for inexperienced teachers and those with little knowledge of history—two realities of underachieving urban schools. To accommodate such teachers, the lesson plans are highly detailed and include everything a teacher needs. The lesson overviews are particularly popular with teachers not trained in history, said Dangel, because they give the teachers the background and context they may lack.

“We’ve gotten a really good response from teachers,” said Garriott. “We’re seeing schools picking and choosing, using it [the curriculum] in many different ways.” This is particularly true in non-Talent Development schools for which materials are purchased from Oxford. Hakim herself

recommends the materials; these are the kinds of supplements she had hoped her publisher would have provided originally, she said.

The TD curriculum supplements the Hakim texts, particularly in the history of minority groups, such as African Americans and women. For this, it relies on primary sources and on the “ordinary folks of history,” in addition to the big names people expect to find in history books. For instance, in the introductory lesson for Book 8, students are introduced to five people who lived between 1870 and 1917. One is an immigrant seamstress who works in a shirt factory, another is a 14-year-old Georgia sharecropper and another a Pennsylvania steelworker. Students read profiles of them, based on primary sources of individuals who recorded the events of their lives and times.

In fact, the use of primary sources throughout the curriculum “kind of exploded,” Garriott said. And teachers have confirmed that these materials often capture students’ interest more than other approaches. Students, they said, enjoy examining documents, diaries and other artifacts of history—the stuff of interesting, engaging history.

Postdoctoral fellowship program offers freedom, support

**“This gives
me the opportunity
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THE NEW postdoctoral fellows at the Center for Social Organization of Schools (CSOS) at Johns Hopkins University are finding the first months of their fellowships a time of freedom, opportunity, exploration, and growth. They say it is a time away from the demands of teaching and dissertation deadline

s to contribute to the work in progress at CSOS—which includes the Center for Research on the Education of Students Placed At Risk (CRESPAR)—and consider what they’ll do next in their careers.

“I have a lot of freedom to work on things that interest me,” said Christopher Swanson, one of the first three Spencer Foundation Postdoctoral Fellows who began their appointments in September. Joining Swanson are Karla Lewis and Deborah Land.

They have the distinction of being the first Spencer Postdoctoral Fellows at Hopkins, chosen for the two-year appointments from more than 80 applicants. The fellowship is a joint project of Hopkins’ Sociology Department and CSOS. Three more postdoctoral researchers will join the program in September.

Lewis, Land, and Swanson have different backgrounds and research interests and bring different perspectives to the many projects in progress at the center:

Karla Lewis earned her doctorate in education at the University of Illinois at Urbana-Champaign last May. She wrote her dissertation on the role and development of instructional aides in schools and how aides, as well as teachers and administrators, are important to successful school reform. Lewis interviewed instructional aides at five schools in three different Illinois school districts, and began helping some aides continue their educations to become teachers. She is working with Joyce Epstein and Beth Simon in CRESPAR’s School, Family, and Community Partnerships program.

Deborah Land was working at CSOS when she applied for the Spencer fellowship. She came to Hopkins after receiving a doctorate in community and developmental psychology at the University of Virginia. Land’s dissertation on adolescent behavior—teasing, bullying, and harassment—took her into schools in Virginia, Maryland, and California and prompted a greater interest in education.

Christopher Swanson received his doctorate in sociology from the University of Chicago. His dissertation looks at standards-based reform and its effect on state-level education policy. He has also studied the transition from high school to college and the effects of extracurricular activities on college admission.

All three researchers are continuing the work they began for their dissertations. Practically, they are attempting to break out parts of those larger works for publishable articles for journals, something the fellowship gives them time to pursue.

“It’s very difficult to start a new job as a professor and think about what your research is,” said Lewis, who intends to teach in a college or department of education. “This gives me the opportunity . . . to get on solid ground with research” before adding classroom responsibilities.

Lewis is already trying her hand at a couple of things “outside my comfort zone”—quantitative analysis and a focus on high schools. She is more familiar with qualitative analysis, as in her dissertation, and with elementary schools.

Swanson, too, is venturing into new territory—working with Stephen Plank and Gina Hewes on the implementation of standards on science curricula. Swanson’s previous work looked at mathematics achievement, as he explored the effects of standards-based reform on state-level policy and eventually on classroom instruction.

Swanson said one thing that drew him to apply for the Spencer Fellowship at Hopkins was the variety of projects being done by CRESPAR and CSOS researchers.

Deborah Land also liked the possible links between CRESPAR projects and her research into adolescent behavior. “I wanted to know more about education,” she said of her initial decision to take a position with the Systemic Supports for School Reform program after finishing her work at Virginia. “I felt that the school setting was what I was most interested in. Adolescent behaviors spill over into home and neighborhoods, but so much peer behavior goes on in schools,” she said.

For her dissertation, Land interviewed students in a private school in Charlottesville, in a suburban public school in California, and in urban public schools in Maryland and Virginia. One interesting finding, she said, is that there were more incidents of bullying, teasing, and harassment reported in the private school than in either the urban or suburban public schools. “Urban students have a different threshold” for such behaviors, she said, discovering, perhaps another avenue for study.

The Spencer Postdoctoral Fellowships are funded by the Spencer Foundation, established by the late Lyle M. Spencer, the founder of Science Research Associates Inc., an educational publishing firm. The foundation’s mission is to investigate ways in which education can be improved around the world. The fellowships aim to ensure another generation of well-trained education researchers.

Reading Strategies Critical in Talent Development Schools

NOT TOO LONG AGO, reading as a separate subject dropped out of school days and curricula after fourth or fifth grade. By that time, students were expected to read—and comprehend.

Although teachers, parents, and even employers assumed that someone who could decode words could understand them, too, it has become apparent throughout school and beyond that literacy cannot be taken for granted. In recent years, scores on many state and national tests showed middle-school students underachieving in reading. Now, educators are looking seriously at the difference between reading as decoding and reading as comprehending. They realize that students need instruction in both—from preschool through high school. Research has shown that students at risk of school failure are often several years behind their grade level in reading skills and lack the vocabulary and life experiences that help readers understand unfamiliar material.

So when these students come to an assignment, some are unable even to read it and many fail to comprehend, understand, and use what they read. Nor is it only at-risk students who have trouble comprehending what they read. The U.S. Department of Education has, in fact, identified comprehension as a problem for many readers and a subject ripe for research. It has committed millions of dollars over the next few years to find out which curriculum and instruction practices promote comprehension skills and what is the best way to assess those skills.

CRESPAR's Talent Development (TD) model already includes intensive instruction aimed at reading and comprehension deficiencies. The TD interventions use age-appropriate materials—not easy to find for poor readers in their teens—and research-based strategies to improve older students' reading skills, while not diluting the rigorous academic program offered to all students in TD schools.

Reading strategies are embedded in the middle-school curricula so that students get reading help in every subject, and every teacher can function as a reading teacher. In social studies, for instance, the focus is on American history, based on a 10-book series, *History of US* by Joy Hakim. Curriculum writers at Johns Hopkins University, who are developing teacher and student materials for the series, have added strategies to their lessons. “We needed to discover ways to support reading,” said Susan Dangel, one of the creators of curriculum materials. Among those supports are activities to help students understand what they are reading. Some are teacher-led activities, such as introducing vocabulary and setting goals for a reading assignment. Others are student strategies, such as reading in pairs.

Hopkins' curriculum writers have been asked by Oxford Press, which publishes the history series, to write a handbook on reading to accompany the curriculum materials.

Student Team Literature. This basic middle school reading program focuses on literature rather than “basal” stories. The teacher prepares students by introducing the book, its author, and new vocabulary and by giving background information. Students read silently and aloud and then do activities—often in cooperative teams—based on their reading. Students learn strategies they can use any time they read—strategies such as asking themselves questions about what they are reading, putting the selection into their own words, and taking notes and outlining difficult materials.

The emphasis on literacy continues in high school, where many at-risk students are reading two years below grade level. TD schools use block scheduling, which gives students four 90-minute classes per day—more time to focus on a subject and complete several activities during each class.

Strategic Reading. For readers who are well below their grade level, the Talent Development model offers a ninth-grade research-based course in Strategic Reading. Designed by CRESPAR researchers, it is a balanced literacy program that provides students with multiple opportunities to construct, examine, and extend meaning from print. Also, it offers help in writing clearly and listening effectively—skills that support good reading and foster all learning.

Literacy Lab. This is computer-based instruction under development that gives an extra dose of language arts to students who lack reading and writing skills. The lab is used in conjunction with Strategic Reading to give needy students more help and a broader choice of reading materials. The Literacy Lab consists of three stations: a computer station where students read, often from the Internet; a writing area; and a listening area, where students can hear tapes of the core texts read by good readers. This helps them read and gives them the opportunity to hear fluent readers.

Reading & Writing In Your Career. This 10th-grade course is also under development for students who need additional help with reading and writing. The focus is on content and skills that students will need throughout their high school careers and when they are job hunting. A similar course is being planned for 11th grade, as well.

Talent Development Middle Schools in Philadelphia

URBAN MIDDLE SCHOOLS that serve high-poverty populations are often attended by large numbers of students who are multiple years behind grade level, staffed by inexperienced and under-supported teachers, and operate in a chaotic teaching and learning climate. As a result, few students obtain a rigorous and standards-based middle grades education and high levels of teacher turnover are the norm.

The Talent Development Middle School (TDMS) has been specifically designed to enable middle schools to engage students with rigorous curriculum and instruction, provide teachers with the support they need to develop deep content knowledge, and develop safe, nurturing, and challenging learning environments.

Since 1995, through a partnership with the Philadelphia Education Fund and the School District of Philadelphia, the Talent Development Middle School model has accomplished this in 12 challenging middle schools within the district: 1995—Central East; 1997—Cooke, Beeber; 1998—Shoemaker, Clemente; 1999—Strawberry Mansion, Roosevelt; 2001—Lewis, Edwin Vare, W. Pierce, Tilden, Penn Treaty.

There is significant achievement advantage to attending a TDMS school. Evaluations of the model have been conducted in seven Talent Development Middle Schools and their comparison schools. These evaluations provide strong evidence that full implementation of the model leads to substantial gains in student performance and improved morale for both students and staff. TDMS students on average have had achievement gains which are two to three times higher than the district average on the Pennsylvania State Student Assessment (PSSA) in 8th grade. These schools have also out-performed a matched set of demographically similar control schools.

The first two schools in Philadelphia to fully implement the Talent Development model were Central East and Cooke Middle Schools. Each school has significant achievement gains in mathematics, reading, and science. These gains have put both schools on trajectories to reach ambitious performance goals.

On multiple indexes and measures, Central East Middle School has exhibited strong and sustained achievement gains since the implementation of the TDMS model.

After two years in a Talent Development Middle School, students at Cooke Middle School had twice as much achievement growth in reading and mathematics as students in the control school.

TDMS students report high use of recommended reading strategies. On the most recent PSSA reading test, eighth graders were asked about the reading strategies they use. The results indicate that students in Talent Development Middle Schools are already employing many of the core strategies recommended in the School District of Philadelphia's ELA Scope and Sequence and Balanced Literacy documents.

Teachers give high marks to Talent Development Middle Schools' training and curriculum. Focus groups and interviews with 60 teachers in seven Talent Development Middle Schools conducted in February and March 2000 by independent researchers indicate that teachers are quite favorable when asked to evaluate Talent Development's professional development sessions, curriculum materials, and instructional approaches.

New teachers in particular found the support they receive is crucial to their professional growth as teachers.

The researchers have also found evidence of a notable positive impact of the TDMS model on pedagogy, content, and learning environment. They compared Central East to five other schools not using the model and concluded that the model has produced "greater consistency in pedagogy, content, and environment...[and] a greater emphasis on mastering challenging content."