

READING INTERVENTION CASE STUDY

DISTRICT STATISTICS

NUMBER OF SCHOOLS:

27

NUMBER OF STUDENTS:

9,800

GRADES:

K-12

DISTRICT STRUCTURE:

Rural

WEBSITE:

www.stmary.k12.la.us

STUDENT POPULATION:

46% African-American

48% Caucasian

6% Other

67% free/reduced meals

St. Mary Parish Public School System Achieves State Test Score Gains and Narrows the Achievement Gap

Once a low performing district, the St. Mary Parish Public School System has achieved significant gains to become a role model for schools looking to make dramatic changes in their performance. After using the Fast ForWord® and Reading Assistant™ family of educational software products to strengthen students' brain processing and literacy skills, students have increased their reading proficiency, and improved their achievement on state tests. In addition, fourth grade promotion rates have increased and test scores for student subgroups have improved, with the district making significant progress toward closing the achievement gap.

CHALLENGES

- Economically disadvantaged community
- Low state test scores
- Schools rated "Academically Unacceptable"

In the mid-2000s, after years of struggling, St. Mary Parish Public School System knew powerful change was needed. The rural district's high stakes test scores lagged behind the state average, and there were large disparities between the reading proficiency of student subgroups. The state of Louisiana had placed several of the district's schools in Academic Assistance, a designation for schools that fail to grow sufficiently — and some had remained there for nearly 10 years.

"When we were first investigating the need for reading intervention programs, we acknowledged that as a district we were woefully behind the proficiency curve required by high stakes testing," said Superintendent Donald W. Aguiard, Ph.D. "We were looking for an intervention package

that would jumpstart early education literacy proficiency."

SOLUTION

During the 2006-07 school year, St. Mary Parish started school-wide use of the Fast ForWord software at eight elementary schools that were in Academic Assistance.

"One of the things I was excited about was that the Fast ForWord program is based on the science of how the brain learns and retains information," said Dr. Aguiard. "Our challenge wasn't necessarily that our programs were ineffective. It was that we weren't meeting the individual needs of students. We realized that to make the most of our programs, we needed to develop and strengthen the cognitive skills essential for learning and reading success."

Based on more than 30 years of neuroscience research, the Fast ForWord program accelerates learning by building memory, attention, processing, and sequencing in the areas of English language and reading. The software's intensive, adaptive exercises develop the brain to better capture, process, and retain information, which improves a student's capacity to learn.

As a result of building students' brain fitness, the district saw a marked increase in student performance in these eight schools. "This built tremendous momentum because there were so many more students reaching the proficiency bars set in high stakes testing," said Aguiard.

During the 2008-09 and 2009-10 school years, the Fast ForWord program was extended to the rest of the district. Students in grades three through five work on the Fast ForWord products 30, 40 or 50 minutes a day, depending on the school. In addition, some schools use the software with primary level

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students. At the middle and high school levels, students who score below the proficient level on their state tests are identified to work on the software for one class period a day.

Since 2008, the district has implemented Reading Assistant software as well. Reading Assistant combines advanced speech-verification technology with the latest reading science to help students strengthen their fluency, comprehension, and vocabulary. The software provides intensive reading practice and acts as a tutor, so that as students read aloud, the program “listens,” providing one-on-one guided oral reading support. At both the elementary and secondary levels, struggling readers in St. Mary Parish work on Reading Assistant 10 to 15 minutes a day.

RESULTS

- Improved state test scores
- Increased fourth grade promotion rate
- Fewer students required to attend summer remediation
- Reduced achievement gap

Since 2006, St. Mary Parish has increased the proficiency of elementary and middle school students on the Louisiana Educational Assessment Program (LEAP) English Language Arts (ELA), Math, Science, and Social Studies tests. In addition, the district has narrowed the achievement gap between white students and other student subgroups.

Fourth Grade Students

Since 2006-07, when the Fast ForWord program was first introduced in St. Mary Parish, fourth graders have shown dramatic improvement in their LEAP achievement. Students in fourth and eighth grade must score Basic or higher in English or math, and Approaching Basic or higher in the other subjects on the LEAP to advance to the next grade. From 2006 to 2010 the percentage of fourth graders performing at or above the Basic level on the initial LEAP ELA

test increased from 55 percent to 78 percent. In 2008, for the first time in a decade, the district exceeded the state average for the percentage of fourth graders reading at or above Basic on the initial ELA test. In addition, for the first time in years, the district had no schools labeled Academically Unacceptable.

Similarly, from 2006 to 2010, the percentage of fourth graders performing at or above Basic on the initial LEAP test rose from 59 to 79 percent in Math, from 53 to 69 percent in Science, and from 59 to 72 percent in Social Studies.

Fourth Grade Promotion Rates

In addition to achievement gains demonstrated on the LEAP tests, St. Mary Parish collected longitudinal data about the percentage of fourth grade students each year who were promoted to fifth grade. From 2006 to 2010, the district’s fourth grade promotion rate improved from 65 to 85 percent.

Both general education and special education students showed a positive trend in fourth grade promotion rates. Between 2006 and 2010, the fourth grade promotion rate improved from 67 to 88 percent for general education students and from 33 to 59 percent for special education students.

“Over the past four years, our fourth grade students have made astounding gains, outpacing their state counterparts in English language arts as well as math and science,” said Aguillard. “Our fourth graders now rank 14th in the state, signifying a continuance of annual

proficiency increases since 2006. As a result, the number of fourth graders who require summer remediation has declined significantly, and students’ self-confidence and motivation have soared. In reading and across the curriculum, our students are clearly benefitting from our ongoing efforts to provide effective, targeted instruction and interventions through the Fast ForWord and Reading Assistant programs.”

Percentage of Fourth Graders Meeting Promotional Standards	
Year	Percentage
2006	65%
2007	68%
2008	79%
2009	77%
2010	85%

Percentage of Fourth Graders Meeting Promotional Standards		
Year	General Ed.	Special Ed.
2006	67%	33%
2007	75%	27%
2008	85%	43%
2009	81%	53%
2010	88%	59%

Fourth Grade Initial LEAP Test									
Subject	2003	2004	2005	2006	2007	2008	2009	2010	NC*
ELA	53%	54%	60%	55%	64%	73%	73%	78%	+ 25%
Math	54%	54%	62%	59%	59%	71%	69%	79%	+ 25%
Science	45%	56%	59%	53%	59%	66%	67%	69%	+ 24%
Social Studies	56%	58%	55%	59%	66%	63%	63%	72%	+ 16%

*Net Change is measured from the year before Fast ForWord participation to 2010, i.e. 2006-2010 for 4th graders.

continued

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Eighth Grade Initial LEAP Test									
Subject	2003	2004	2005	2006	2007	2008	2009	2010	NC*
ELA	51%	42%	45%	52%	57%	57%	65%	62%	+ 5%
Math	50%	53%	57%	51%	58%	56%	60%	61%	+ 5%
Science	45%	43%	50%	46%	55%	52%	58%	57%	+ 5%
Social Studies	44%	47%	47%	51%	55%	53%	60%	58%	+ 5%

*Net Change is measured from the year before Fast ForWord participation to 2010, i.e. 2008-2010 for eighth graders.

Eighth Grade Students

From 2008 to 2010, in two years of Fast ForWord implementation in the middle schools, the percentage of eighth graders performing at or above Basic on the initial LEAP test rose from 57 to 62 percent in ELA, from 56 to 61 percent in Math, from 52 to 57 percent in Science, and from 53 to 58 percent in Social Studies.

Gifted Students

In addition, gifted students in grades two through nine made significant gains during the 2009-10 school year on Reading Progress Indicator (RPI), a computerized assessment designed to rapidly measure the impact of the Fast ForWord products. This group of students, whose average grade level was 4.0, initially had a reading level of 5.6. After an average of nine months, their reading level increased to 7.4.

Twenty-eight of these students were in fourth through ninth grade and had scores available from the 2009 and 2010 administrations of the LEAP and/or Integrated Louisiana Educational Assessment Program (iLEAP). On average, these students improved their ELA scores by 15.3 points and their Reading scores by 10.7 points.

Demographic Subgroups

According to Dr. Aguillard, St. Mary Parish has also made progress toward closing the achievement gap between white students and black students who, respectively, comprise 48 percent and 46 percent of the student population.

Between 2004 and 2010, black students closed the achievement gap with their white student peers on both the ELA and Math LEAP tests. The gap reductions are large for St. Mary Parish middle schools — a 6 percentage point reduction for both ELA and Math. At St. Mary Parish elementary schools, both gaps were cut nearly in half between 2004 and 2010. This indicates that St. Mary Parish has had tremendous success in closing the achievement gap between black and white students at both the elementary and middle school levels.

Gains have also been made in closing the gap between economically disadvantaged students, who represent 67 percent of the student population, and across the district as a whole.

"In grades three through five in English language arts, the achievement gap between white and black students in the elementary grades dropped from 22 points in 2005-06 to less than 10 points in 2009-10, so we've seen a significant reduction in a four-year period of time," he said. "In addition, from 2004 to 2010, the percentage of students achieving proficiency in English language arts increased 56 percent among black students, 27 percent among white students, 48 percent among economically disadvantaged students, and 38 percent across all students in grades three through five."

SLC Leadership Center

In recognition of the district's exemplary implementation of the Fast ForWord

LEAP English/Language Arts Gap Size (Percentage Points)		
	2004	2010
White-Black (Middle School)	28%	22%
White-Black (Elementary School)	18%	10%

LEAP Math Gap Size (Percentage Points)		
	2004	2010
White-Black (Middle School)	31%	25%
White-Black (Elementary School)	32%	16%

and Reading Assistant programs, Scientific Learning selected the St. Mary Parish Public School System as an SLC Leadership Center in 2010. The district, which was named a Scientific Learning National Reference Site in 2009, was chosen for this honor from National Reference Sites across the country.

"We absolutely see the Fast ForWord and Reading Assistant programs as tools that can eliminate the concept of low performing schools," said Aguillard. "They have proven to be very effective and very affordable ways to eliminate the idea that some schools can't reach proficiency — even among schools that had been in School Improvement since 1999. As a professional educator, I am convinced these programs deliver what they promise."

Fast ForWord®
Reading Assistant™

888-358-0212
www.scientificlearning.com