

## **Increasing Brain Fitness and Efficiency Helps ELLs Accelerate Academic Gains**

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In Worcester Public Schools (WPS), a district of more than 23,000 students, nearly one-third of students are English language learners (ELLs). Among the 7,300 ELLs, students span all levels of language proficiency. One intervention that has had a positive impact on students' acquisition of the English language for is the Fast ForWord® program developed by Scientific Learning ([www.scilearn.com](http://www.scilearn.com)).

Research shows that by developing and strengthening memory, attention, processing rate, and sequencing — cognitive skills essential for learning and reading success — students can improve their capacity to learn. This is the research upon which the Fast ForWord program is built. Improving the ability to capture, process, and retain information is something that can benefit every learner. This includes ELL, general education, at-risk, special education, and gifted and talented students.

Our district launched the Fast ForWord software in fall 2010 in 14 schools, including elementary and secondary schools, and two alternative schools. Through the program's individualized, adaptive exercises, students build memory, attention, processing, and sequencing in the areas of English language and reading. These exercises improve the processing efficiency of the brain, so that individual phonemes within words can be more easily differentiated. This greatly speeds up the process of learning and comprehending spoken and written English, and builds fluency, vocabulary, syntax, grammar, and other language skills.

In our district, the Fast ForWord software is used by diverse student populations in grades K-12, including ELLs, students with learning disabilities, and students working below, at or above grade level. Each school decides which students will use the Fast ForWord software. Some schools target particular grade levels, and others focus on specific students or groups. Teachers and administrators also review Northwest Evaluation Association (NWEA) Measures of Academic Progress (MAP) scores, as well as Massachusetts English Proficiency Assessment (MEPA) and Massachusetts Comprehensive Assessment System (MCAS) scores to identify which students could benefit most from the software.

The software is implemented with ELL students during school time. Those schools that offer a before-school breakfast program and/or an after-school program may choose to use the software as well. This provides students with an extra dose of instruction and allows them to continue their work from their last lab session. Thus, at some schools, students may receive three doses of Fast ForWord instruction a day — before school, during the school day, and after school. In addition, schools that provide summer school programs may also choose to offer the program to students who already have Fast ForWord accounts.

As with any good intervention, school involvement is essential to make the program a success. Each principal works with Scientific Learning to provide training and support for all the staff members who will implement and monitor the program. In particular the principal's role is pivotal to ensure the program is implemented with fidelity and to coordinate the connections with teachers and families. The training used during the implementation of the program allows us to have direct consultation with individual administrators and teachers to ensure the program's use is maximized. Part of the district coordination is to meet with all lab coaches during the regular scheduled staff meeting to discuss details about the implementation and to reflect on the data collected for that period of time.

Another benefit to the program is that it required no staffing changes. Students work on the software in school computer labs or library media centers. Each school principal decides who will supervise their lab, although most labs are staffed by lab coaches and the classroom teacher usually accompanies students to the lab, something our district strongly encourages. The intention is to make certain students get the help they need when they need it, and to ensure the program is connected to students' classroom instruction.

Students typically participate in the Fast ForWord program for the entire school year. Students may participate in the program for more than one year, as needed. Data is always analyzed to make sure students are making progress and to allow targeted students to access the schedule protocols. This data analysis helps us make connection with before and after school programs to provide additional opportunities to students to participate during this extended time.

Several of our schools do an exceptional job implementing the software. For example, Chandler Magnet School is an elementary school that primarily uses the Fast ForWord software with ELLs, as well as struggling learners and students with disabilities. Roberta Mayo, the Fast ForWord teacher at Chandler Magnet School, has a model implementation in her lab. She even created a set of games related to each Fast ForWord level. In her lab, she places the games in folders that correspond to each level. Teachers can then take the games back to their classrooms to provide students with extra practice in areas of need.

At the district level, Nancy Ridick, the ELL mentor coach and Fast ForWord mentor coach, is also a champion of the program. To maintain implementation fidelity across our schools, Ridick visits each lab at least once a month. She meets with the lab coach to review the Fast ForWord reports and offer assistance as needed. In addition, she meets with individual students to review their data, which the students enjoy.

Lab coaches, teachers and district administrators monitor student progress in the Fast ForWord program with Progress Tracker™, an online data analysis and reporting tool. We also use the MySciLEARN web interface to access reports featuring graphical depictions of trends, at-a-glance data summaries, and icons highlighting both good and poor performance.

The lab coaches review the Fast ForWord data daily. If students have stopped making growth, the coaches initiate interventions. The goal is to intervene before the student becomes frustrated. Coaches frequently discuss the reports with classroom teachers to suggest areas for instruction or intervention.

In addition, coaches share the Fast ForWord data with students. Some lab coaches and teachers share Fast ForWord reports with students' parents as well. Parents may choose to automatically

receive weekly progress reports via email. At the district level, Ridick, holds monthly meetings with the lab coaches to review the Fast ForWord data. If she and the lab coaches see several students are struggling with a particular area, they may create a packet of intervention activities that teachers can take back to their classrooms for whole group instruction, small group instruction, or center time.

A big question for most districts is funding. The funding for our program was initially provided by Race To The Top funding. In the following years we started to strategically allocate Title I funding or other supplemental support funding to open new lab across the district. Also the district makes a yearly commitment to pay for the PD and licensed contracts.

By strengthening both processing efficiency and English language skills, we have been able to accelerate the performance of ELLs and help students make academic gains. We have been able to move hundreds of students from levels I and II to levels III and V on the Massachusetts English Proficiency Assessment in a short period of time. MEPA analysis shows significant movement of students reaching the transitioning level and making progress from one level to the next. Based on Massachusetts Comprehensive Assessment System test analysis we have been able, as a district, to perform better than the state.

By combining effective interventions with high-quality instruction in our classrooms, we are making learning engaging and meaningful for our ELL students, and helping accelerate their transition into mainstream classrooms.

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