What Works Clearinghouse

ies INSTITUTE OF EDUCATION SCIENCES

Fast ForWord Language

Program description

Fast ForWord Language is a computer-based instructional program developed to build cognitive skills students need to improve English language proficiency and reading skill. It consists of seven game-like exercises, including nonverbal and verbal sound discrimination, phonological processing, vocabulary recognition, and language comprehension. Each exercise begins with basic skills and builds up to more complex skills. The difficulty of each task is continuously adapted so that students would get about 80% of the items correct. *Fast ForWord Language* was designed for students struggling with reading, but has been used for English language learners. There are multiple *Fast ForWord* products; this review focuses on *Fast ForWord Language* as used with English language learners.

Research

One study of *Fast ForWord Language* met the What Works Clearinghouse (WWC) evidence standards, and a second study met WWC standards with reservations. The two studies included a total of 250 kindergarten through sixth-grade English language learners from 16 school districts. The studies examined results on phonological awareness skills,[1] reading achievement, and English language development.[2]

Effectiveness

Fast ForWord Language was found to have potentially positive effects on English language development and no discernible effects on the reading achievement of elementary school English language learners.

	Reading achievement	*Mathematics achievement*	*English language development*
Rating of effectiveness	No discernible effects	Not reported	Potentially positive effects
Improvement index[3]	Average: +3 percentile points Range: 0 to +5 percentile points	Not reported	Average: +31 percentile points Range: +31 percentile points

1. Phonological and phoneme awareness, which are early reading skills, fell outside the realm of this review.
2. The evidence presented in this report is based on available research. Findings and conclusions may change as new research becomes available.
3. These numbers show the average and range of improvement indices for all findings across the two studies.

Additional program information

Developer and contact

Scientific Learning Corporation (SLC), 300 Frank H. Ogawa Plaza, Suite 600, Oakland, CA 94612-2040. Email: customerservice@scilearn.com. Web: link. Telephone: (888) 665-9707. Fax: (510) 444-3580. Using a searchable database on the SLC website (http://www.scilearn.com/providersearch), the program can be purchased from a local *Fast ForWord Language* provider.

Scope of use

Fast ForWord Language has been implemented in most states across the United States. The SLC website (http://www.scilearn.com/Results) provides case reports describing implementations for schools in Alabama, Alaska, Arizona, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Kentucky, Maryland, Massachusetts, Minnesota, Mississippi, Missouri, Montana, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Dakota, Tennessee, Texas, Virginia, Washington, and Wisconsin. The program has been on the market since 1997.

Teaching

The *Fast ForWord Language* program aims to build memory, attention, processing, and sequencing skills in the context of key language and reading skills, including listening accuracy, phonological awareness, and language structures. The program includes a series of seven computer-based exercises with acoustically modified speech and language training that approach the normal speed and volume of speech as the student progresses. Intensity of the program ranges from 100 minutes a day for four to six weeks to 50 minutes a day for 8 to 12 weeks.

All instructions on how to use *Fast ForWord Language* are included in the software package. According to the developer, the recommended teacher training includes one to three days of online and instructor-based training that varies by implementation scale and model (e.g., after-school, classroom, or computer lab). The developer offers several support services, including Live Web Seminars; access to Fast ForWord Customer Connect; ongoing customer, instructional, and technical support; and automatic monthly progress reports, which allow teachers to examine student and class progress.

Cost

Schools and practitioners can purchase individual or site licenses for single or bundled software products. Workstation and site licenses are available on a subscription or perpetual-use basis. *Fast ForWord Language* licenses start at $900 for a single-use license. Multiple *Fast ForWord Language* software licenses can be purchased at a discounted rate.

Research

Six studies reviewed by the WWC investigated the effects of *Fast ForWord Language* using an English language learner sample. One study (Scientific Learning Corporation, 2004) was a randomized controlled trial that met WWC evidence standards. A second study (Troia, 2004) had a quasi-experimental design and met WWC evidence standards with reservations. The four other studies did not meet WWC evidence screens.

The Scientific Learning Corporation (2004) study included 85 English language learning kindergartner through fifth-grade students from nine school districts. The English language learner subsample was part of a larger sample of 452 academically at-risk students. It compared English language development outcomes for 53 randomly assigned students who used the program against the outcomes for 32 control students who used their regular curriculum.

The Troia (2004) study included 191 English language learning first- through sixth-grade students in seven elementary schools in five rural Washington school districts. It compared reading outcomes for 99 students who used the program against the outcomes for 92 students who used their regular curriculum.

In both studies, the treatment group received English language instruction using *Fast ForWord Language,* while the comparison group followed their regular education curriculum.

Research *(continued)*

The treatment groups used the *Fast ForWord Language* program about 100 minutes a day, five days a week for five to eight weeks. Each participant worked on multiple 20-minute *Fast ForWord Language* training exercises every day.

Effectiveness

Findings

The WWC review of English language learners addresses student outcomes in three domains: reading achievement, mathematics achievement, and English language development.

Reading achievement. Troia (2004) reported neither statistically significant nor substantively important (according to WWC criteria) differences in reading achievement between the *Fast ForWord Language* group and the comparison group.

English language development. Scientific Learning Corporation (2004) reported, and the WWC confirmed, that *Fast ForWord Language* had a statistically significant and substantively important positive effect on English language development for elementary school English language learners.

Rating of effectiveness

The WWC rates interventions as positive, potentially positive, mixed, no discernible effects, potentially negative, or negative. The rating of effectiveness takes into account four factors: the quality of the research design, the statistical significance of the findings (as calculated by the WWC[4]), the size of the difference between participants in the intervention condition and comparison condition, and the consistency in findings across studies (see the WWC Intervention Rating Scheme).

The WWC found *Fast ForWord Language* to have no discernible effects on reading achievement and potentially positive effects on English language development

Improvement index

For each outcome domain, the WWC computed an improvement index based on the average effect size (see the Technical Details of WWC-Conducted Computations). This improvement index represents the difference between the percentile rank of the average student in the intervention condition versus the percentile rank of the average student in the comparison condition. Unlike the rating of effectiveness, the improvement index is entirely based on the size of the effect, regardless of the statistical significance of the effect, the study design, or the analysis. The improvement index can take on values between –50 and +50, with positive numbers denoting favorable results.

The improvement index for reading achievement is +3 percentile points, with a range of 0 to +5 percentile points. The improvement index for English language development is +31 percentile points.

Summary

Of the two studies reviewed by the WWC, one reported potentially positive effects of *Fast ForWord Language* on English language development, and the other reported no discernible effects on reading achievement of elementary school English language learners. The evidence presented in this report is limited and may change as new research emerges.

4. The level of statistical significance was calculated by the WWC and, where necessary, corrects for clustering within classrooms or schools and for multiple comparisons. For an explanation, see the WWC Tutorial on Mismatch. See the Technical Details of WWC-Conducted Computations for the formulas the WWC used to calculate the statistical significance. In the case of *Fast ForWord Language,* no corrections for clustering or multiple comparisons were needed.

References

Met WWC evidence standards

Scientific Learning Corporation. (2004). Improved language skills by children with low reading performance who used Fast ForWord Language: MAPS for learning. *MAPS for Learning, 3*(1), 1–13.

Met WWC evidence standards with reservations

Troia, G. A. (2004). Migrant students with limited English proficiency: Can Fast ForWord make a difference in their language skills and academic achievement? *Remedial and Special Education, 25*(6), 353–366.

Did not meet WWC evidence screens

Hall, S. L. (2002). *Final Report: Scientific Learning/Fast ForWord program: 2001–2002.* Dallas, TX: Dallas Independent School District.[5]

Scientific Learning Corporation. (2003). Improved language and early reading skills of English-language learners in the Paradise Valley Unified School District who used Fast ForWord Language. *MAPS for Learning: Educator Reports, 7*(1), 1–5.[6]

Scientific Learning Corporation. (2004). Improved reading achievement by students in the Killeen Independent School District who used Fast ForWord Products. *MAPS for Learning: Educator Reports, 8*(23), 1–9.[7]

Scientific Learning Corporation. (2004). Improved language and early reading skills by students in school district 54 in Schaumburg, Illinois, who used Fast ForWord Language. *MAPS for Learning: Educator Reports, 8*(6), 1–4.[7]

For more information about specific studies and WWC calculations, please see the WWC *Fast ForWord Language* Technical Appendices.

5. Study author did not provide data separately for English language learners.
6. Does not use a strong causal design: the study did not use a comparison group.
7. The study used a one-group pretest-posttest with no variation in the amount of intervention design.