Students show reading fluency gains after guided oral reading practice with Reading Assistant

Implementation Objectives

The Reading Assistant product uses speech-recognition technology to provide students with computer-based, one-on-one tutoring for guided oral reading practice. This briefing summarizes a study done on the impact of the Reading Assistant product on the fluency of elementary school students in mainstream classrooms in Massachusetts (Adams, 2006). The research design was an experimental study using a nationally-normed measure to determine the fluency gains of students who used the Reading Assistant relative to the fluency gains of students in a grade-matched comparison group.

Methodology

Each student's reading fluency was assessed at the beginning and end of the study with Edformation's Standard Oral Reading Fluency Assessment Passages.

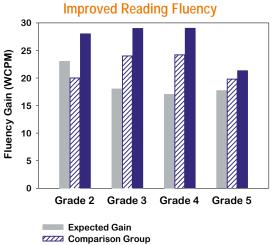
The Reading Assistant product was used by second and third graders in one school and by fourth and fifth graders in a second school. Fourth and fifth graders from the first school and second and third graders from the second school served as the comparison group.

Schedule of Use

Students used the Reading Assistant product 30 minutes per day, two days per week, for seventeen weeks. The average number of sessions completed varied by grade, ranging from 15 sessions for the second graders to 24 sessions for the fourth graders. The Reading Assistant was used during students' scheduled computer lab time, and it did not replace or reduce instructional time in their standard reading curriculum.

Assessment Results

Edformation provides a set of graded passages that teachers can use to calculate the number of words a student can read correctly in one minute. Edformation provides norms for the reading rate based on a large database of student scores, making it possible to estimate expected gains. This fluency measure has been shown to be highly reliable and is strongly correlated with measures of reading comprehension and overall reading ability.



Comparison Group Reading Assistant Group the Reading Assistant made significantly greater gains in words correct per minute (WCPM) than students who received their standard reading curriculum alone. In addition, the Reading Assistant group exceeded expectations for fluency gains based on Edformation's normative data. The advantage for the Reading Assistant group was consistent across the four grade levels.

On average, students who used

Educational Gains

The results found in this study demonstrate that using the Reading Assistant product to enrich reading instruction with guided oral reading practice can

Graph adapted from Adams, 2006.

help students increase their reading fluency. Use of the Reading Assistant strengthens foundational reading skills, better positioning students to partake in the classroom curriculum.

Students achieved significant gains in reading fluency.





Program Study Statistics

School year: 2003-2004

Number of Students: 410 students

Grade Level: Second through fifth grade

Products Used: Reading Assistant

Assessment tools used: Standard Oral Reading Fluency Assessment Passages by Edformation

School Structure: Suburban

References:

Adams, M. J. (2006). The promise of automatic speech recognition for fostering literacy growth in children and adults. In M.C. McKenna, L.D. Labbo, R. D. Kieffer, & D. Reinking (Eds.), *International Handbook of Literacy and Technology, Volume 2.* Mahwah, NJ: Lawrence Erlbaum Associates.

To request other reports showing significant academic gains following use of the Fast ForWord family of products go to: www.scilearn.com/resultsreports

Contact us for more information: 1-888-282-7401 (US and Canada) info@scilearn.com www.scientificlearning.com