Educator's Briefing – September 2008

Students in Kolkata, India, improved their auditory discrimination skills in noise from the 2nd to the 71st percentile

Implementation Objectives

St. Mary's Orphanage and Day School in Kolkata, India, was interested in evaluating the effectiveness of the Fast ForWord Language product for improving the auditory discrimination and phonological processing skills of bilingual English speaking students. The participants were students between the ages of 9 and 11 who spoke colloquial Bengali and were bilingual English speakers. All had an Indian language as their mother tongue. All participants used the Fast ForWord product as part of their class curriculum during the late spring of 2006.

Methodology

School personnel tested the students' auditory discrimination and phonological processing skills at the beginning and end of the study using the Goldman-Fristoe-Woodcock Test of Auditory Discrimination (GFW) and the Comprehensive Test of Phonological Processing (CTOPP). School personnel administered the assessment.

Educators were trained in:

- Current findings on the neuroscience of how phonemic awareness and the acoustic properties of speech impact rapid development of language and reading skills
- Methods for assessing candidates for use of Fast ForWord
- Appropriate measures for testing and evaluation
- Effective implementation techniques
- Use of Progress Tracker reports to monitor student performance
- Techniques for measuring gains students achieve after they have finished using the product

Schedule of Use

Students at the St. Mary's Orphanage and Day School used the Fast ForWord Language product for 50 minutes a day, five days per week. On average, students used the product for 40 days during a two-month period.

Assessment Results

The GFW is a screening measure of a student's ability to discriminate between speech sound in quiet and noisy situations The CTOPP measures a student's awareness of, and access to, the phonological structure of oral language as well as phonological memory, ability to rapidly execute a sequence of operations, and ability to blend and segment words and non-words..

Improved Auditory Discrimination Skills
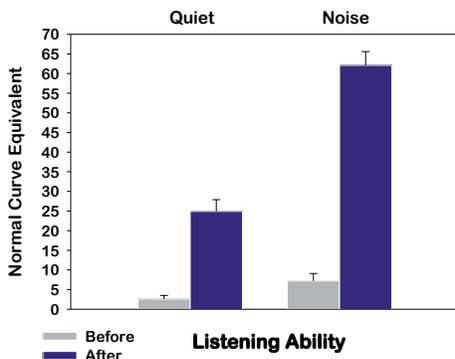
On average, students significantly improved their English skills following Fast ForWord participation. Auditory discrimination skills improved from the 1st to the 11th percentile for students listening in quiet, and from the 2nd to the 71st percentile for students listening in noise, as measured by the GFW. This corresponds to a 32% decrease in errors made in quiet, and a 42% decrease in noise, indicating that the students were better able to discriminate between easily confused English phonemes. The ability to quickly and effortlessly identify English phonemes is critical for fluent mastery of the language. Based on scores from the CTOPP, average improvement across various phonological processing skills, critical for fluent reading, was approximately one standard deviation, corresponding to an improvement from the 36th percentile to the 75th percentile.

Educational Gains

The results found in this study support other studies demonstrating that using the Fast ForWord products results in the strengthening of foundational reading skills, better positioning students to partake in the classroom curriculum.

Students achieved significant gains in auditory discrimination and phonological processing skills.

Fast ForWord® by Scientific Learning