# NCII reviews three studies on the Fast ForWord Language Series with medium to large effect sizes

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### Overview

The National Center on Intensive Intervention (NCII) is funded by the U.S. Department of Education and housed at the American Institutes for Research. As part of their mission to help educators implement data-based individualized instruction, NCII reviews studies on various educational interventions used with struggling students, and publishes their analyses.

# Methodology

NCII reviews focus on the degree to which intervention studies meet the following criteria:

- Participants: at-risk students in Grades K-12;
- Study design: two group study, preferably with random assignment, comparable initial skills and demographics between the two groups, and no attrition bias;
- Fidelity of implementation: data showing the program was used as designed;
- Study measures: accurate (psychometrically reliable) and important (relevant to the program's instructional content). Targeted measures assess skills targeted by the intervention. Broader measures assess related aspects of competence.

NCII reviews also report the effect size found in each study. The effect size quantifies the impact of the intervention by comparing the post-intervention skills of the two groups (a medium effect size is around 0.5, while a large effect size is around 0.8).

### **Results**

NCII reviewed three studies on the Fast ForWord Language products. The following table summarizes those studies, including their designs and effect sizes.

Study Information	Study Authors	Miller, Merzenich, Tallal, DeVivo, Linn, et al.	Scientific Learning Corporation	Slattery
	Year Published	1999	2004	2003
	Students	388	50	60
	Study Design	Randomized Control Trial (RCT)	Two-Group, Matched	Randomized Control Trial (RCT)
	Effect Size (Targeted)	<b>Medium</b> (0.59)	<b>Medium</b> (0.44)	<b>Large</b> (1.44)
	Effect Size (Broader)		<b>Medium</b> (0.51)	<b>Large</b> (1.03)
	Statistically Significant	Yes	No	Yes

## References

Ellis, PD, (September 7, 2009). Thresholds for interpreting effect sizes. In Thresholds for interpreting effect sizes. Retrieved from

http://www.polyu.edu.hk/mm/effectsizefaqs/thresholds\_for\_interpreting\_effect\_sizes2.html.

Miller, SL, Merzenich, MM, Tallal, P, DeVivo, K, Linn, N, Pycha, A, Peterson, BE, Jenkins, WM, (1999). Fast ForWord Training in Children with Low Reading Performance. Proceedings of the 1999 Netherlands Annual Speech-Language Association Meeting. <a href="https://www.scilearn.com/alldocs/rsrch/sbr/30052ffwlanguageprodrpt.pdf">www.scilearn.com/alldocs/rsrch/sbr/30052ffwlanguageprodrpt.pdf</a>

National Center on Intensive Intervention. Academic Intervention Tool Chart. http://www.intensiveintervention.org/chart/instructional-intervention-tools.

Scientific Learning Corporation. (2004). Improved Language and Early Reading Skills by Students Who Used Fast ForWord Language to Reading, MAPS for Learning: Educator Reports, 8(1)1-4. www.scilearn.com/alldocs/rsrch/sbr/30053ffwltorprodrpt.pdf

Slattery, CA. (2003). The Impact of a Computer-Based Training System on Strengthening Phonemic Awareness and Increasing Reading Ability Level (Doctoral Dissertation; UMI No. 3103754). (For a summary: <a href="https://www.scilearn.com/alldocs/rsrch/sbr/30186bethlehemedurpt.pdf">www.scilearn.com/alldocs/rsrch/sbr/30186bethlehemedurpt.pdf</a>)

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# **Number of Studies:**

3

# Number of Students:

498

## **Grade Level:**

1<sup>st</sup> - 5<sup>th</sup> Grade

#### Tests:

Qualitative Reading Inventory II (QRI)

Woodcock Johnson Test of Achievement

Test of Auditory Comprehension of Language (TACL)

Clinical Evaluation of Language Fundamentals (CELF)

Phonological Awareness Test (PAT)

Yopp Singer Test of Phoneme Segmentation



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