

Emerge



A Child's Place

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Occupational Therapy
Speech Therapy

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Disorders
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Proven Results for Overcoming READING CHALLENGES



Bonnie Hacker, OT
Founder / Director

In the 21st century, children reading below grade level has been measured as a somewhat common occurrence.¹ The declining level of literacy among school children is made more worrisome by the fact that our society demonstrates rapidly increasing demands for high levels of literacy. The costs of waiting until middle school to address below-grade-level reading are too great. We know that delayed development of reading skills affects vocabulary growth,² alters children's attitudes and motivation to read,³ and leads to missed opportunities to develop comprehension strategies.⁴ Research suggests that children who are poor readers during the first three years of elementary school find it extremely difficult to ever achieve an average level of reading.⁵

The pediatric speech therapists of Emerge - A Child's Place use a variety of strategies and tools to help children overcome various reading challenges. One of those tools is the Fast ForWord program. For children with language challenges, multiple studies have shown Fast ForWord to achieve gains of one year to 18 months of language development on standardized tests after only six weeks of intense training.⁷⁻¹⁰

Even intense training is perceived as play by the children. Intense means five days per week. For busy parents, Emerge typically provides Fast ForWord training at lower frequencies and achieves good results. Parents can discuss the pros and cons of different schedules with an Emerge speech therapist.

Fast ForWord is a computer-based training program designed to be conducted by speech or educational professionals. The children perceive Fast ForWord as playing fun video games, but the program is actually a highly responsive language development system based on neurological studies about the patterns of plasticity in the language-related centers of the brain. One of the underlying hypotheses of the Fast ForWord system is that difficulty recognizing and sequencing the spectrotemporal structure of speech contributes to language impairment. The computer games use modifications to the acoustic and temporal properties of speech to help children accomplish greater phonological awareness and achieve success in the game. As each child's success in sound, syllable, word, and sentence comprehension increases, Fast ForWord games gradually reduce the levels of acoustic and temporal modifications toward normal speech. The game's difficulty responses are based on neurological studies examining the exact proportion of positive feedback needed to maximize learning. In addition to achieving overall language improvements, Fast ForWord achieves phonological awareness improvements greater than the improvements achieved by academic enrichment activities, Earobics computer assisted learning activities, and individual language intervention conducted by a speech pathologist.⁶ While most studies have been conducted in school-age children, the program is actually for pre-school children and older. Fast ForWord can help in a variety of situations where language might be impaired.

When you see children with below average language development, check with Emerge - A Child's Place to see what efficient strategies may be available for those children.



Please tell parents about Emerge - A Child's Place
Believing in a Child's Potential to Flourish

References

1. National Center for Education Statistics. (2001). *NAEP 2000 Reading. A report card for the nation and the states*. Washington, D.C.: U.S. Department of Education.
2. Cunningham, A. E., & Stanovich, K. E. (1998). What reading does for the mind. *American Educator*, 22 (Spring/Summer), 8–15.
3. Oka, E., & Paris, S. (1986). Patterns of motivation and reading skills in underachieving children. In S. Ceci (Ed.), *Handbook of cognitive, social, and neuropsychological aspects of learning disabilities* (Vol. 2). Hillsdale, NJ: Erlbaum.
4. Brown, A. L., Palincsar, A. S., & Purcell, L. (1986). Poor readers: Teach, don't label. In U. Neisser (Ed.), *The school achievement of minority children: New perspectives* (pp. 105–143). Hillsdale, NJ: Erlbaum.
5. Torgesen, J. K., Rashotte, C. A., & Alexander, A. (2001). Principles of fluency instruction in reading: Relationships with established empirical outcomes. In M. Wolf (Ed.), *Dyslexia, fluency, and the brain* (pp. 333–355). Parkton, MD: York Press.
6. Gillam R, Loeb D, Hoffman L, et al. The Efficacy of Fast ForWord-Language Intervention in school-age children with language impairment: a randomized controlled trial. *J Speech Lang Hear Res*. 2008 February; 51 (1): 97-119.
7. Tallal P, Gaab N. Dynamic auditory processing, musical experience and language development. *Trends in Neurosciences*. 2006; 29: 382-390.
8. Tallal P. Improving language and literacy is a matter of time. *Nature Reviews: Neuroscience*. 2004; 5: 721-728.
9. Merzenich M, Jenkins W, Johnson P, et al. Temporal processing deficits of language-learning impaired children ameliorated by training. *Science*. 19996; 271: 77-81.
10. Tallal P, Miller S, Bedi G, et al. Language comprehension in language learning impaired children improved with acoustically modified speech. *Science*. 1996; 271: 81-84.