

Educator's Briefing – January 2012

Adding ten minutes of reading time dramatically changes levels of print exposure

Different Learning Trajectories

A growing body of evidence reveals the importance of both oral language and print exposure for children's cognitive and academic development. Examining the amount of language spoken to pre-school-aged children in the home, Hart and Risley (1995) found wide variability. Children who were exposed to less language had slower rates of vocabulary development. By third grade, they also had lower reading scores, indicating that children tend to maintain the same learning trajectory even after they enter school.

The Benefits of Extensive Reading

As important as early language experience is for establishing a child's learning trajectory, reading experience is critical for the academic development of students beyond 3rd grade. In a series of carefully constructed studies, Cunningham and Stanovich (1998) isolated the benefits of reading experience from the effects of other factors. They found that, even among students with lower general intelligence and weaker reading skills, extensive reading was linked to superior performance on measures of general knowledge, vocabulary, spelling, verbal fluency, and reading comprehension.

Differences in Print Exposure

Despite its importance, students' exposure to print also varies widely. In a study of the out of-school activities of fifth graders, Anderson, Wilson, & Fielding (1988) found that time spent reading books was the best predictor of a student's reading proficiency. They also noted that many of the students in the study rarely read books on their own; indeed, around 20% of the students devoted less than a minute per day to book reading.

Percentile Rank	Minutes of Reader Per Day	Baseline – Words Read Per Year	Plus 10 Minutes – Words Read Per Year	Percent Increase in Word Exposure
98	65	4,358,000	5,028,462	15%
90	21.1	1,823,000	2,686,981	47%
80	14.2	1,146,000	1,953,042	70%
70	9.6	622,000	1,269,917	104%
60	6.5	432,000	1,096,615	154%
50	4.6	282,000	895,043	217%
40	3.2	200,000	825,000	313%
30	1.8	106,000	694,889	556%
20	0.7	21,000	321,000	1429%
10	0.1	8,000	Based on reading level,	
2	0	0	~300,000 words	

References:

Adams, M.J. (2011). Technology for Developing Children's Language and Literacy: Bringing Speech Recognition to the Classroom. Prepared for the Joan Ganz Cooney Center.

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.

Anderson, R. C., Wilson, P.T., & Fielding, L. G. (1988). Growth in reading and how children spend their time outside of school. Reading Research Quarterly, 23, 285-303.

Cunningham, A. E. & Stanovich, K. E. (1998). What reading does for the mind. American Educator, 22, 8-15. Hart, B. & Risley, R. T. (1995). Meaningful differences in the everyday experience of young American children. Baltimore: Paul H. Brookes.

For additional information regarding significant academic gains following use of the Fast ForWord family of products go to: www.scilearn.com/resultsreports

Contact Us to Learn More: Phone: 1-888-810-0250 (US & Canada) Email: info@scilearn.com www.scientificlearning.com

Distribution of time spent reading books outside of school, with estimated words read per year and projection of increased words per year if each child's average daily time spent reading were increased by ten minutes. Adapted from Adams (2006), with baseline data from Anderson, Wilson, & Fielding (1988).

Reducing the Reading Gap in Ten Minutes

If struggling readers are to close the gap and catch up with their peers, their learning trajectories must be raised. These students often have deficits in basic reading skills that require remediation, but they also need to develop expertise through extensive reading practice. This means that a low reader's print exposure must be increased by hundreds of thousands of words each year. While this may seem like a daunting obstacle, Adams (2006) pointed out that adding just ten minutes of daily book reading can dramatically increase a student's exposure to print. For example, a student at the 30th percentile who spends an extra ten minutes a day on book reading will read around 700,000 words each year, surpassing the amount of reading currently done by students at the 70th percentile.