# 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 $3^{\text {rd }}$ 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 <br> Rank | Minutes of <br> Reading Per <br> Day | Baseline - <br> Words Read Per <br> Year | Plus 10 Minutes - <br> Words Read Per <br> Year | Percent <br> Increase in <br> 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, $\sim 300,000$ |  |  |
| 2 | 0 | 0 |  | words |  |  |

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 $30^{\text {th }}$ 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 $70^{\text {th }}$ percentile.

Scientific
Learning
Reading
Assistant ${ }^{*}$

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