# Access to Books

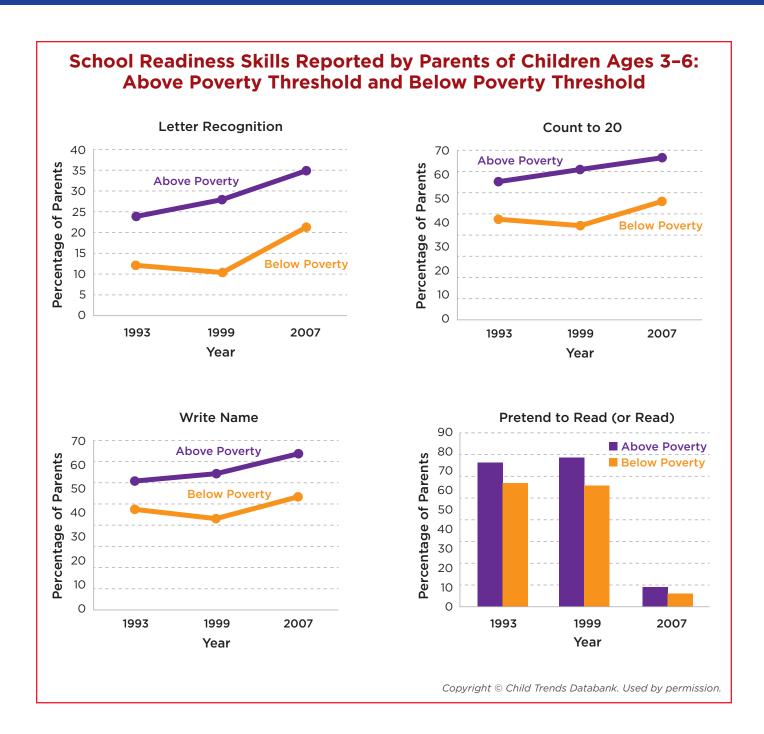
f Ensuring that books are available to any child at any time of the year will be a good first step in enhancing the reading achievement of low-income students and an absolutely necessary step in closing the reading achievement gap.

-Anne McGill Franzen and Richard Allington, 2009

It's a well-established fact that the inequities in schools—lower tax base to support schools in impoverished areas, shortages of qualified teachers, lack of books and materials—hurt children in high-poverty communities. The data from the National Household and Education Survey (NHES) also demonstrates that children from households with limited resources enter school at a disadvantage. Researchers arrived at this conclusion by examining the data from surveys given to the parents of children aged three to six in 1990, 1993, and 2007. The parents were asked whether their child could complete specific school readiness tasks and the results were troubling (see figure on page 50). Across all three years, "... children from poorer families are less able to recognize their letters, count to 20, write their name, or read or pretend to read a book" (reported in Lindsay, 2010; Child Trends data bank).

What might account for the differences in school readiness among children with economic challenges and those free of financial constraints? Researchers have examined multiple possibilities, but two intertwined lines of research suggest a logical argument. First, early literacy research across four decades, from Durkin (1966) to Bus, van ljezendoorn, and Pellegrini (1995) to Neuman and Celano (2006), offer convincing evidence that the interactions young children enjoy at home with their caregivers—especially conversation and hearing stories read aloud—play a significant role in academic success and beyond. Children who are read aloud to at

- **Early** Literacy
- **Family** Involvement
- **Access to Books**
- **Expanded** Learning
- **Mentoring Partnerships**



home develop a stronger vocabulary, more background knowledge, better expressive and receptive language abilities, and stronger phonological awareness and early literacy skills.

The second line of research centers on access to books. Children from impoverished households have access to fewer books and other reading materials than do their more financially stable peers. Not only do poor children have fewer books in their homes, but they also live in communities with fewer books in the classroom, school, and public library. If their neighborhood even has a public library,

they are likely to encounter reduced hours and limited funding for replenishing and updating the collection (Neuman & Celano, 2001; Krashen, 2012).

Drawing from the research, the argument follows this logical line of thinking:

- Children from less affluent families do not perform as well on achievement tests compared to children of more affluent families.
- These gaps related to families' socioeconomic status are present even before children enter school.
- Reading to young children is related to stronger subsequent academic achievement.
- Children in low-income families have access to fewer reading materials than children of middle- and upper-income families (Lindsay, 2010; Krashen, 2012).

Let's look first at the price of a lack of access to books—and then the advantages of access.



If we wish to close the gap between the rich and poor in this nation and we know where the gap grows and widens, then it is criminal to ignore it.

-Jim Trelease, 2007

## No Books and the Terrible Cost

When Neuman & Celano (2001) examined four neighborhoods, two poor and two middle-income, they found "stark and triangulated differences" in access to materials between them. Children in middle-income neighborhoods had multiple opportunities to observe, use, and purchase books (approximately 13 titles per child); few opportunities were available for low-income children who, in contrast, had approximately one title per 300 children. Other avenues of access to print were also unavailable: school libraries in poor communities were often closed, unlike thriving libraries in middle-class schools, which featured 12 titles per child. Public libraries were open only for brief hours in low-income neighborhoods, compared with many open hours in middle-income neighborhoods. Additionally, while middle-class day care centers featured quality books for the children in their care, in low-income neighborhoods, Neuman and Celano found on average fewer than one to two books available per child; of those books, the majority were mediocre or of poor quality.

In his study of book access in Los Angeles, USC professor emeritus Stephen Krashen found that students attending schools in Beverly Hills had access to eight times as many books in their classrooms as students attending schools in the high poverty and largely African-American communities of Watts and Compton. What's more, the Beverly Hills school libraries carried about three times as many titles, and their public libraries carried roughly twice as many (2012).



Because low-income children have limited access to books, they also likely miss out on the stimulating parent-child interactions around books and stories, in particular, the read-aloud. And without the read-aloud, children are deprived of the opportunity to learn about their world, acquire more sophisticated vocabulary beyond their everyday language, and understand how decontextualized language works, which is the beginning of abstracting information from print.

As Stanovich (1986) notes, in his classic model of the Matthew Effect, the differences in these early opportunities become "magnified over time so that less-skilled children have fewer interactions with text than their more skilled peers." Limited, unrewarding experiences with reading add up and, ultimately, children miss out on reading as a pleasurable meaning-making experience with tremendous value and usefulness. Simply put, the reading rich get richer and the reading poor miss out on more academic growth with every passing year; children are caught in a vicious cycle of intellectual deprivation.

Donald Hayes and Judith Grether (1983) investigated high-and lowpoverty students in 600 New York City Schools. They discovered a seven-month difference in scores at the beginning of second grade,

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## Statistics: Access to Books Is the Key to **Successful Reading Development**

Sixty-one percent of low-income families have no books at all in their homes for their children. While low-income children have, on average, four children's books in their homes, a team of researchers concluded that nearly two-thirds of the low-income families they studied owned no books for their children (US Dept. of Education, 1996).

Children in low-income families lack essential one-on-one reading time. The average child growing up in a middle-class family has been exposed to 1,000 to 1,700 hours of one-on-one picture book reading. The average child growing up in a less economically stable family, in contrast, has only been exposed to 25 hours of one-on-one reading (McQuillan, 1998).

The most successful way to improve the reading achievement of low-income children is to increase their access to print. Communities ranking high in achievement tests have several factors in common: an abundance of books in public libraries, easy access to books in the community at large, and a large number of textbooks per student (Newman et al., 2000).

The only behavior measure that correlates significantly with reading scores is the number of books in the home. An analysis of a national data set of nearly 100,000 United States school children found that access to printed materials—and not poverty—is the "critical variable affecting reading acquisition" (McQuillan, 1998).

but this widened to a difference of two years and seven months by the end of Grade six. As Jim Trelease notes (2007), "... what made this particularly striking was the research showing little or no difference in these students' achievement when school was in session: ... they learned at the same pace." But all that changed once the children entered sixth grade. As Hayes and Grether note:

The differential progress made during the four summers between second and sixth grade accounts for upwards of 80 percent of the achievement difference between economically advantaged ... and ... the [economically disadvantaged] schools.

## The Impact of Print

In an unprecedented search uncovering 11,000 reports and analyzing 108 of the most relevant studies, children's book distribution and ownership programs were shown to have positive behavioral, educational, and psychological outcomes. The study—Children's Access to Print Materials and Education-Related Outcomes (2010) was commissioned by Reading Is Fundamental (RIF), the largest children's literacy nonprofit in the United States. As outlined by Lindsay (2010), RIF, which receives federal funding to distribute books to low-income children, contracted with Learning Point

Young children who have access to books in the home and who are read aloud to regularly have the best chance of becoming successful readers.

-Catherine Snow, Peg Burns, and Susan Griffin. 1998 Associates to conduct "an objective and rigorous research synthesis on the impact of print access on children's attitudes, motivations, reading behaviors, emergent literacy skills, and academic achievement." Their goal was two-fold: 1) to demonstrate for policymakers probable impacts of the Inexpensive Book Distribution Program (federal funding stream for RIF); and 2) to provide RIF with information regarding target populations best served by these programs and the program characteristics that produce the greatest impact. In general, the findings show that providing children access to print materials accomplishes the following:

- Improves reading performance. Among the studies reviewed, kindergarten students showed the biggest increase
- Is instrumental in helping them learn the basics of reading, such as letter and word identification, phonemic awareness, and completion of sentences
- Prompts them to read more frequently and for greater amounts of time
- Improves their attitudes toward reading and learning

The researchers also suggest that a *reciprocal* relationship may exist between access and outcomes; in other words, providing interesting written materials to children increases their reading behavior and achievement, which then, in turn, further increases their desire to read and acquire more books (McGill-Franzen, et al., 1999)

## A Reading Culture in the Home

The mere presence of books profoundly impacts a child's academic achievement. From a study published in *Research in Social Stratification and Mobility* comes the astonishing information that just the mere presence of books profoundly impacts a child's academic achievement. Conducted over 20 years, the study by Evans, Kelley, Sikorac, and Treimand (2010) surveyed more than 70,000 people across 27 countries and found the following:

- Children raised in homes with more than 500 books spent three years longer in school than children whose parents had only a few books. According to the abstract, growing up in a household with 500 or more books is "as great an advantage as having university-educated rather than unschooled parents, and twice the advantage of having a professional rather than an unskilled father."
- The results suggest that children whose parents have lots of books are nearly 20% more likely to finish college. Indeed, as a predictor of college graduation, books in the home trump even



the education of the parents. And lest you think that only the privileged with the means to purchase books reap the benefit of books: not so. Even a child who hails from a home with 25 books will, on average, complete two more years of school than would a child from a home without any books at all.

- Regardless of how many books the family already has, each addition to a home library helps the children get a little further in school. But the gains are not equally great across the entire range; rather, they are larger at the bottom, far below the elite level, in getting children from modest families a little further along in the first few years of school. Moreover, having books in the home has a greater impact on children from the least educated families, not on children of the university-educated elite (Evans et al., 2010).
- In general, the books help establish a reading or "scholarly culture" in the home that persists from generation to generation within families, largely independent of education and class. This creates a "taste for books" and promotes the skills and knowledge that fosters both literacy and numeracy and, thus, leads to lifelong academic advantages.

The authors report, then, that their reading culture theory, backed by evidence, leads to the following predictions:

• First, because reading culture provides skills and knowledge that promote literacy, it implies that parents' participation in reading culture will enhance children's educational attainment



The mere presence of books in the home profoundly impacts a child's academic achievement.

-Jim Lindsay, Senior Research Associate, 2010 in all societies, regardless of the parents' formal education and social class.

- The results also support their prediction that an increase in reading culture has the greatest impact on children from families with little reading culture to begin with. It is at the bottom, where books are rare, that each additional book matters most: each additional book yields more "bang for your book" among the book-poor than among the book-rich.
- Finally, a reading culture in the home matters more if parents are poorly educated, but matters less if parents are well educated. In other words, the greatest impact of book access occurs among the least educated and poorest families.

A note of caution: the authors write, "Our results do not in any way imply that formal schooling cannot compensate for the absence of scholarly culture in the home; but they do highlight the fact that children from homes lacking in scholarly culture may require special attention."

Charles Bayless (2010) speaks also of a "reading culture" that develops in homes when children are able to read and enjoy their own books in their own environment:

The findings reveal what so many have both suspected and innately known to be true—access to print materials does, in fact, improve children's reading skills, among other critical educational factors. This research is conclusive evidence for educators, parents, and communities to better understand the significance of making print material available for children at school and in the home. For the majority of young people, enthusiastic and habitual reading is the single most predictive personal habit [leading to] desirable life outcomes. Enthusiastic and habitual reading is primarily a function of the family environment and culture, and it is most effectively inculcated in the earliest years (0-6), but can be accomplished at any age. Creating a reading culture can be achieved objectively and through a series of specific behaviors and activities undertaken by parents—but it requires access to books, time, persistence, and consistency.

#### It's All About the Books

Research from the Progress in International Reading Literacy Study (PIRLS; Mullis & Martin, 2007) reports much of the same. Surveying 215,000 students across 40 countries, PIRLS 2006 was one of the largest international assessments of reading literacy ever undertaken. And results from this study, too, show a similar impact of books in the home and the benefits of a home library and reading culture.

#### **Home Activities Fostering Reading Literacy**

• The researchers found a positive relationship between students' reading achievement at the fourth grade and parents having

engaged their children in early literacy activities before starting school (e.g., reading books, telling stories, singing songs, playing with alphabet toys, and playing word games).

- The presence of children's books in the home also continued to show a strong positive relationship with reading achievement. The average reading achievement difference between students from homes with many children's books (more than 100) and those from homes with few children's books (10 or fewer) was very large (91 score points, almost 1 standard deviation). On average across countries, there was a slight decrease in parents' reports of the number of children's books in the home, perhaps reflecting increased access to Internet-based literacy media.
- In PIRLS 2006, on average across countries, 37 percent of the fourth-grade students had parents who read more than five hours a week, 43 percent for one to five hours, and 20 percent for less than one hour a week. Not surprisingly, reading achievement was highest for students whose parents had favorable attitudes toward reading. In PIRLS 2006, on average across countries, the majority of students (52%) had parents with favorable attitudes.

## Why Access to Books Matters So Much

When kids own books, they get this sense, "I'm a reader." It's very powerful. 🥊 🖷

- Rebecca Constantino, UC Irvine Researcher, 2010

Donalyn Miller, sixth grade teacher in Keller, Texas, and author of the best seller, The Book Whisperer, and the Teacher Magazine blog of the same name, supports a 2,000-plus title library in her own classroom, and makes sure her students enjoy daily in-class reading of self-selected books for 20-30 minutes. Why? Because, as she explains, "We teachers have more than enough anecdotal evidence that the students who read the most are the best spellers, writers, and thinkers. No exercise gives more instructional bang for the buck than reading" (Miller, 2009, p. 55).

When it comes to the role of books and reading in increasing reading achievement, the facts are indisputable. Extensive and intensive reading supports not only high scores on reading achievement tests but also a fulfilling and productive life. "For the majority of young people, enthusiastic and habitual reading is the single most predictive personal habit for the ability to achieve desirable life outcomes" (Bayless, 2010). Effective and enthusiastic reading does, as Scholastic CEO and President Dick Robinson maintains, create a "better life." The U.S. Department of Education notes that avid, wide, daily reading is the most reliable path to the



development of proficient readers; indeed, there's no other way to become a proficient reader. No matter what we're trying to get proficient at (cooking, gardening, yoga), we have to practice many, many hours; Malcolm Gladwell (2008) maintains that 10,000 hours is the magic number for optimal success. No surprise, then, that students who read voluntarily and extensively become proficient readers. Indeed, research demonstrates a strong correlation between high reading achievement and hours logged inside a book—or volume of reading.

How important are time and engagement with books? The difference they make is nothing short of miraculous. Engaged readers spend 500% more time reading than do their peers who aren't yet hooked on books. All those extra hours inside books they love gives them a leg up in everything that leads to a happy, productive life: deep conceptual understanding of a wide range of topics, expanded vocabulary, strategic reading ability, critical literacy skills, and engagement with the world that's more likely to make them dynamic citizens drawn into full civic participation. As Mary Leonhart, author of 99 Ways to Get Kids to Love Reading (1997), notes:

"The sophisticated skills demanded by high-level academic or professional work— the ability to understand multiple plots or complex issues, a sensitivity to tone, the expertise to know immediately what is crucial to a text and what can be skimmed—can be acquired only through years of avid reading."

In a classic 1988 study, "Time Spent Reading and Reading Growth," Taylor, Frye, and

Maruyama found the amount of time children spend reading is significantly related to their gains in reading achievement. They asked 195 fifth- and sixth-grade children to keep daily logs of their reading at home and at school over a four-month period. They found that the amount of time spent reading during reading period in school contributed significantly to gains in students' reading achievement as measured by reading comprehension scores on the Gates-MacGinitie Reading Test, while time spent reading at home approached significance. There is no doubt that providing students with time to read enhances their reading ability.

- While the best predictor of reading success is the amount of time spent with books, reading achievement is also influenced by the frequency, amount, and diversity of reading. Avid readers are well acquainted with the joys of a good novel, but they also enjoy reading for a variety of purposes—exploring informational text, absorbing information to perform a task, or sharing poetic text through a range of social media.
- The primary difference between individual variations in children's vocabulary has to do with their exposure to text and reading volume. That's because oral language, compared to written, is lexically impoverished. Children encounter much richer language, replete with rare words, in the pages of children's picture books than they do engaged in conversation with their parents or watching television. Rich, vibrant language is readily available in books—but kids who don't read don't access that language.
- "The average child at the 90th percentile reads almost two million words per year outside of school—more than 200 times more words than the child at the 10th percentile, who reads just 8,000 words outside of school during a year. To put it another way, the entire year's out-of-school reading for the child at the 10th percentile amounts to just two days of reading for the child at the 90th percentile. These dramatic differences, combined with the lexical richness of print, act to create large vocabulary differences between children" (Cunningham & Stanovich, 1998).

Sharing books, talking about them, and reading them aloud is the greatest harbinger of success for our children in all areas, particularly reading. Again and again, the challenges of poverty notwithstanding, we find the most important indicator of our students' success—in school and beyond—is captured in the simple question: Do they read?

Nowhere is access to books—and access to the intellectual benefits they hold-more evident, perhaps, than in the phenomenon of the so-called summer slide. What is it and what does it have to do with access to books? Let's find out.

## The Summer Slide and the Solution

The "summer slide" or "summer reading setback" is a wellestablished phenomenon (Alexander, Entwisle, & Olson, 2007; Allington & McGill-Franzen, 2003; Cooper, Charleton, Valentine, & Muhlenbruck, 2000). It refers to the decline in reading skills over the few months when students have no access to school or books to read. The decline is especially dramatic for students who are economically deprived (Allington & McGill-Franzen, 2010).

Summer reading loss accounts for at least 80 percent of the reading achievement gap by ninth grade. 🥊 🕊

> -Richard Allington and Anne McGill-Franzen, 2009

#### **The Summer Slide**

A quick compilation of additional facts and figures outlines the challenge, consequences, and solution:

- Summer learning shortfall experienced by low-income children in the elementary grades
  has consequences that reverberate throughout children's schooling, and can affect
  whether a child ultimately earns a high-school diploma and continues on to college
  (Alexander et al., 2007).
- Two-thirds of the achievement gap between lower- and higher-income youth can be explained by unequal access to summer learning opportunities (Alexander et al., 2007). At best, students showed little or no academic growth over summer. At worst, students lost one to three months of learning (Cooper et al., 2000).
- New research indicates that sending books home with children over the summer yields great achievement gain and is less expensive and less extensive than providing summer school or engaging in comprehensive school reform (Allington & McGill-Franzen, 2008).
- Children who receive and read free books over the summer experience the equivalent of attending three years of summer school—and the difference in fall reading scores is twice as high among the poorest children in the study (Allington & McGill-Franzen, 2008).
- Reading four to five books during the summer is potentially powerful enough to prevent a decline in reading achievement from spring to fall (Kim, 2004).
- Children who read as few as six books over the summer break can maintain their reading skills at a level achieved in the preceding school year (Allington & McGill-Franzen, 2008).
- When children are provided with 10 to 20 self-selected children's books at the end of the regular school year, as many as 50 percent not only maintain their skills, but also actually make reading gains (Allington & McGill-Franzen, 2008).
- Students who read for fun almost every day outside of school score higher on the NAEP assessment of reading achievement than children who read for fun only once or twice a week (Mullis, Campbell, and Farstrup, 1993).

Cooper et al. (2000) reviewed 39 studies of summer academic loss and conducted a meta-analysis, which found that "middle-class students appeared to gain on grade-level equivalent reading recognition tests over summer while lower-class students lost on them. There were no moderating effects for gender or race ...." They concluded, "On average, summer vacations created a [reading] gap of about three months between middle- and lower-class students."

Entwisle (1997) used a fall-to-spring assessment schedule and found that children who were more economically advantaged added 47 raw score points over a five-year period on summer vacation reading achievement tests during elementary school years, whereas children from financially strapped homes added only one point. As Allington, McGill-Franzen, Camilli, Williams, Graff, and Zeig (2007) explain, Entwisle (1997) developed a *faucet theory* to explain the disparity. When the school faucet is turned on—that is, when schools are in

session-children of every economic background benefit roughly equally, but when the school faucet is turned off, as during summer vacations, reading proficiency among children from economically advantaged families continues to develop, whereas no similar growth is observed in economically disadvantaged children.

And over a number of years, the accumulated summer loss adds up to a serious achievement gap between children with means (and books) and children without. Hayes and Grether (1983), using achievement data from the New York City public schools, estimated that as much as 80 percent of the reading achievement gap that existed between economically advantaged and disadvantaged students at sixth grade could be attributed to summer setback. More recently, Alexander and others (2007) reported similar findings.

Allington and McGill-Franzen (2010) sum it up:

In other words, each of these studies suggested that summer reading setback is a major contributor to the existing reading achievement gap between more and less economically advantaged children- reading activity is the only factor that consistently correlated to reading gains during the summer.

#### The Allington-McGill-Franzen Study

For three consecutive years, Richard Allington and his team conducted a longitudinal study that sheds new light on the existing data. Working with more than 1,000 first and second graders in the treatment group and a control group of 631 students who didn't receive books, Allington and associates invited the children to selfselect 12 trade books to bring home and keep.

Allington and team found that providing easy access to self-selected books for summer reading over successive years does, indeed, limit summer reading setback. Analyzing data they collected on a literacy habits survey, they gathered convincing evidence that children in their study engaged in more reading activity during the summer months than their peers who didn't receive books, and the results on the state reading assessment indicated a statistically significant effect for those children who had access to books over the summer months. The effects were even larger for children from the most economically disadvantaged homes.

#### **Access to Books**

Why does having access to even a relatively small set of books seem to make such a big difference? Allington and McGill-Franzen (2010)

The self-teaching hypothesis put forward by Share and Stanovich (1995) suggests one reason why voluntary reading, during the summer or otherwise, would work to enhance reading

Access to books coupled with minimal family and teacher support enables low SES [socioeconomic status] students to counter 100% of the typical summer reading loss.

> -Richard Allington and Anne McGill-Franzen, 2008



development. According to the self-teaching hypothesis, each successful decoding encounter with an unfamiliar word provides an opportunity to acquire word-specific orthographic information. Such acquisition then influences reading automaticity and fluency and, perhaps, comprehension and general reading development.

What's more, we've known for a long time of the strong link between reading volume and reading proficiency. Volume of reading is critical in the development of reading proficiency; volume is defined as a combination of the time students spend reading plus the numbers of words they actually consume as they read (Allington, 2012; Guthrie, 2004).

The U.S. Department of Education maintains that independent reading is a widely recognized precursor to

- Better skills acquisition
- Superior grades
- Desirable life related to income, profession, employment, and other attributes (2005)

Clearly, when children spend a good chunk of their summer lost in books and reading, they are logging the hours of reading practice that ultimately lead to proficiency.

- It is during successful, independent reading practice that students consolidate their reading skills and strategies and come to own them. Without extensive reading practice, reading proficiency lags (Allington, 2012).
- Students who read widely and frequently are higher achievers than students who read rarely and narrowly (Guthrie, 2004; Atwell, 2007).
- Increased frequency, amount, and diversity of reading activity increases background knowledge and reading achievement. (Worthy & Roser, 2010; Guthrie, 2004).
- The volume of independent silent reading students do in school is significantly related to gains in reading achievement (Swan, Coddington, & Guthrie, 2010; Hiebert & Reutzel, 2010).
- Adolescents' and young adults' engagement in reading, including the amount of time they spend reading and the diversity of materials they read, is closely associated with test performance and reading ability (Kirsch, deJong, Lafontaine, McQueen, Mendelovits, & Monseur, 2002).
- Fourth graders in the United States do better academically when they ... have greater access to books and other reading materials in their environment (National Center for Education Statistics, 2005).

#### The Lasting Consequences of the Summer Setback

While much of the summer slide research has focused on the elementary grades, researchers from Johns Hopkins University used data from the Baltimore Beginning School Study to examine the long-term educational consequences of summer learning difference by family socioeconomic level. They examined student achievement scores from ninth grade back to first and concluded that the achievement gap between the student haves and have-nots is largely due to the differences in access to books and, consequently, to the summer slide. They also suggest that the students who are affected by the summer slide and a developing achievement gap are also less likely to complete and graduate from high school and attend a four-year college (Alexander et al., 2007). (For an overview of the downward spiraling effect of the summer slide, see table on page 64.)

The negative consequences are devastating for individual students, but, in truth, their collective setback affects us all-often leading to higher dropout rates, lost earnings and tax revenues, increased need for public assistance, and the like. We need to find ways to get books into our students' hands and into their homes, because it's the right thing to do. But it's also a smart financial investment; the return on investment—on multiple levels—is hugely significant.

Reading volume ... significantly affects ... general knowledge of the world, overall verbal ability, and academic achievement.

-John Shefelbine, 2000

Summer reading loss is cumulative. Children who missed out over the summer months don't catch up in the fall because, meanwhile, their peers have been moving even further ahead with their skills. By the end of sixth grade, children who have repeatedly fallen behind in reading skills over the summer are two years behind their classmates. It is for this reason that some researchers estimate that one-half to two-thirds of the achievement gap for diverse students living in poverty is the result of summer learning loss (Alexander et al., 2007; Cooper et al., 2000; McGill-Franzen & Allington, 2003).

#### **Access to Books & Return on Investment**

RESEARCH FACT

Cost of High School Dropouts Draining U.S. Taxpayer (U.S. DoE, 2011)

Allington, R. et al. (2007). Ameliorating summer reading setback among economically disadvantaged elementary students. Paper presented at the American Educational Research Association, Chicago.

Sum, A. et al. (2011). High school dropouts in Chicago and Illinois: The growing labor market, income, civic, social, and fiscal costs of dropping out of high school. Boston, MA. Northeastern University.

Sum, A. et al. (2011). The consequences of dropping out of high school: joblessness and jailing for high school dropouts and high cost for taxpayers. Boston, MA. Northeastern University.

The cost of summer school intervention was estimated at \$1,500 per student annually, while the cost of the books supplied in the Allington intervention was approximately \$50 per student annually.

The cost of getting a high school dropout back to school and through to graduation is \$13,000 a year, or roughly \$33,000 total.

On average, over the course of his or her working life, a high school dropout receives \$71,000 more in cash and in-kind benefits than he or she pays in taxes. The societal costs may include imprisonment, government-paid medical insurance, and food stamps.

In contrast, high school graduates pay \$236,000 more in taxes than they receive in benefits, and college degree holders pay \$885,000 more in taxes than they receive.

Lifetime earnings of dropouts totaled \$595,000, the study found, compared to \$1,066,000 earned by high school graduates and \$1,509,000 by those with a two-year junior college degree.

In Illinois, the fifth-most-populous U.S. state, with nearly 13 million residents, 11.5 percent of adults aged 19 to 24 left school without earning a high school diploma, and in Chicago that figure reached 15 percent.

• The highest dropout rates were among African American and Hispanic men, at as high as 30 percent.

High school dropouts accounted for 51 percent of the Illinois prison population, the study found.

- The cost of housing an inmate is \$22,000 annually, and adds up to more than \$1 billion a year for the 46,000 prisoners being held in the state, according to state statistics.
- Among men aged 18 to 34, 15 percent of the dropouts were in prison, an incarceration rate that was five times higher than that of high school graduates.

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#### Access to Books & Return on Investment (continued)

#### **RESEARCH FACT**

**The Fiscal Consequences** of Dropping Out of High **School in Rhode Island** (2008) (Kids Count Rhode Island, 2009)

For every \$1 of lifetime tax payment by a high school dropout in Rhode Island, high school graduates are expected to pay \$1.45, college-educated residents without a bachelor's degree are expected to pay \$1.76, and those with a bachelor's degree and master's or a higher academic degree are expected to pay \$2.29 and \$3.33, respectively.

The mean lifetime tax payment of a high school dropout is less than half of the mean lifetime tax payment of all state residents (\$368,000 versus \$769,000).

Adult Rhode Island residents who were high school dropouts are expected to pay only \$0.84 in taxes for every \$1 of the cost that they impose on the government from cash or non-cash transfers and incarceration between the ages of 16 and 64.

Each high school dropout in Rhode Island is estimated to impose a lifetime cost (net fiscal impact) of \$72,000 due to their smaller tax payments and higher government transfers and institutionalization costs. Each high school graduate (without any college education) is expected to make a net positive fiscal contribution of \$317,000 over his or her working life.

The True Cost of High **School Dropouts (Levin &** Rouse, 2012)

If we could reduce the current number of dropouts by just half, we would yield almost 700,000 new graduates a year, and the investment in their education would more than pay for itself.

Studies show that the typical high school graduate will obtain higher employment and earnings—an astonishing 50 to 100 percent increase in lifetime income—and will be less likely to draw on public money for health care and welfare and less likely to be involved in the criminal justice system.

Further, because of the increased income, the typical graduate will contribute more in tax revenues over his lifetime than if he'd dropped out.

When the costs of investment to produce a new graduate are taken into account, there is a return of \$1.45 to \$3.55 for every dollar of investment, depending upon the educational intervention strategy. Under this estimate, each new graduate confers a net benefit to taxpayers of about \$127,000 over the graduate's lifetime.

This is a benefit to the public of nearly \$90 billion for each year of success in reducing the number of high school dropouts by 700,000-or something close to \$1 trillion after 11 years.

Proven educational strategies that increase high school completion provide returns to the taxpayer that are as much as three and a half times their cost.

Investing our public dollars wisely to reduce the number of high school dropouts must be a central part of any strategy to raise long-run economic growth, reduce inequality, and return fiscal health to our federal, state, and local governments.



## **What Our Children Need**

Senator Ted Kennedy once suggested that, together with food stamps, we issue "book stamps" to parents for them to trade in for appropriate books for their children. In order to thrive academically and beyond, children need abundant access to a wide variety of books and reading material. To make this happen, we need:

- Local, state, and federal intervention to keep quality libraries open in low-income neighborhoods (Neuman & Celano, 2001, 2006)
- Local, state, and national book giveaway programs, or access to inexpensive but high-quality children's literature such as that in Scholastic's Read and Rise or R.E.A.L.
- Widespread dissemination—to schools, community partners, and families—of the message that the summer slide is real, yet can be prevented with a book-distribution program that brings together kids and books. Such a program is easy, efficient, and relatively inexpensive to implement, but the difference it makes is incalculable

So many inner-city children never leave the five-block radius of their home. Books can give them another world.

> -Access Books, Southern California Book Giveaway Program, 2010

As stated at the outset, despite broad evidence of a reading achievement gap and its correlation with economic disparity in the United States, educational initiatives at local, state, or federal level have been largely lacking. Ignoring this problem comes at a huge cost to the economic and social well-being of the nation.

One immediate response to the reading achievement gap should be to provide access to books. We should make it a national priority that all children from all backgrounds have easy access year-round at home and at school—to the books they want to read.

### In Sum

In 2009, in an article for Teachers College Record, Richard Allington and Anne McGill-Franzen sounded the alarm:

Summer reading loss accounts for at least 80 percent of the reading achievement gap by 9th grade. Yet almost no federal or state programs or school district initiatives target summers as key to closing the achievement gap loss. As we all know, the gap in reading achievement between economically disadvantaged students and other students in American schools is substantial and to our dismay, stubbornly persistent. According to the NAEP data for high school seniors, that gap is roughly four years in reading achievement, with poor twelfth graders scoring almost identically to more advantaged eighth graders.

One immediate response to the reading achievement gap is access to books. We should make it a national priority that all children from all backgrounds have easy access year-round-at home and at school—to all the books they want to read. 1

A good first step in addressing root causes of the reading achievement gap, in our view, would be for schools, with or without federal dollars, to work hard to ensure that every child, both rich and poor, has easy access all summer long to books they can and want to read.

> -Richard Allington and Anne McGill-Franzen, 2009