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Addressing summer reading loss may help reduce the achievement gap between low-income and middle-income children.

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Solving the Problem of Summer Reading Loss

After they start school, low-income children lose ground to middle-income kids in reading. Some hypothesize that this growing gap in reading achievement is due, in large part, to different rates of learning during the summer months. Even small differences in summer learning accumulate over the years, making the achievement gap substantially larger at the end of elementary school than at the beginning. One longitudinal study showed that more than half of the gap in 9th-grade reading comprehension scores between low-income students and their middle-income counterparts was explained by differences in summer learning that accumulated from 1st to 5th grade (Alexander, Entwisle, and Olson 2007).

The phenomenon of summer reading loss is well-known to educators, but the most commonly proposed solutions are either ineffective or too costly. However, research is pointing to an alternative approach that does work and is cost-effective.

Summer School Is Not the Solution

In the past, school districts have sought to prevent summer reading loss with summer school programs. This approach is just not practical when virtually every U.S. school district faces a shrinking budget. Many districts have already been forced to eliminate summer school programs, which are expensive because they involve both facilities costs and substantial personnel costs. Moreover, research shows that, though summer school improves reading achievement overall, it actually increases the gap between middle-income and low-income children (Cooper et al. 2000).

Some urban school districts have tried summer programs for low-income children that aim directly at reducing summer loss. The evidence for their effectiveness is mixed, and the available studies typically provide no information about costs or cost-effectiveness, so school

JAMES S. KIM is an assistant professor at the Harvard Graduate School of Education. **THOMAS G. WHITE** is a senior research scientist at the University of Virginia. districts lack the information they need in deciding to implement a similar program. For example, Teach Baltimore is a multi-year intervention that recruits and trains college students to provide one full day of instruction per week for seven weeks each summer. Borman and Dowling (2006) found that the program produced no overall improvement in reading, though they did find statistically significant positive effects for students with above average attendance rates across two or three summers. Cost data were not provided.

They Need More Than Books

Just giving low-income children books to read over the summer would cost much less than summer school or a targeted summer intervention. Handing out books eliminates the need to hire teachers or tutors, transport children, and maintain facilities during the summer. Could this be the solution for the summer loss problem?

Richard Allington and his colleagues (2010) tried this. They recently reported the results of an experimental study in which low-income children got books to read in three successive summers. The 1,330 participants were predominantly black or Hispanic children who began the study in the 1st and 2nd grades at 17 high-poverty elementary schools in Florida. Children were randomly assigned to a treatment group that received 12 books in each of three summers or to a control group that received no books. The children chose the books themselves. Each spring, they were brought to a book fair where they picked from a large selection of trade books. The results of this intervention showed a small but statistically significant improvement in the children's reading skills, particularly among children at the lowest socioeconomic level.

The Allington study is exciting news for teachers and school administrators who are concerned about summer loss. It is praiseworthy for its use of experimental methods and groundbreaking in its examination of a book reading program that lasted for several summers. Because summer loss is cumulative and known to occur across the elementary years, a multi-year intervention is exactly what schools and school districts need.

But "just giving them books" may not be the best solution to summer loss, particularly when kids choose the books themselves. In another experiment (Kim and Guryan 2010), 400 lowincome Latino children who had just completed 4th grade were allowed to choose 10 books for summer reading at a book fair. But, in this study, there was no difference in fall reading achievement between children who received the books and a control group of children who received no books. A plausible explanation is that many children choose books that are too hard for them to read. Indeed, 67% of the children picked books with a mean readability level above their independent reading level. Other studies have found that struggling readers are likely to select books they can't read, leading to frustration (Donovan, Smolkin, and Lomax 2000). Similarly, children may pick books that are well below their reading level and thus fail to gain in reading level, vocabulary, or reading rate (Carver and Liebert 1995).

Allington and his colleagues allowed children to choose their own books because they thought that children who picked their own books would be more motivated to read. But although research does show that choosing their own books increases children's motivation to read, it also suggests that the best way to motivate kids is to let them read books they find interesting.

Matched and Interesting Books

One of us (Kim 2007) studied a voluntary summer reading program in which 1stthrough 5th-grade children got books that



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were matched to their interests, as determined by a 20-item survey, and their reading levels, as determined by the Stanford Achievement Test. Children were randomly assigned either to receive 10 books during summer vacation or to receive 10 books after the Stanford test was given again in the fall. Although children in the first group reported reading significantly more books in the summer and owning more books than the other children, both groups had similar reading scores on the fall achievement test.

Scaffolding Summer Reading

Children who are at risk for summer reading loss may need help to ensure that they read the books they're given and that they do so in ways that are likely to build decoding skills, fluency, and comprehension. We believe that these supports should include evidence-based instructional strategies that teachers use during the school year, like guided oral reading to practice fluency and instruction in comprehension strategies. At the same time, however, summer reading programs need to be inexpensive and easy to implement.

In an experiment we conducted in 2008, teachers provided support, or *scaffolding*, for children's summer reading by conducting several lessons at the end of the school year. In these lessons, the teachers taught the children

comprehension strategies that they could use at home during the summer when they were reading silently and independently. Teachers also provided oral reading fluency practice. They encouraged children to read aloud to their parents over the summer, and they showed them a simple procedure for doing so. In addition, parents were asked to listen as their sons and daughters told them about a book they had read during the summer, to listen as a short passage from the book was read out loud, and to provide feedback on the degree to which it was read smoothly and with expression. This was accomplished by mailing letters to the parents that requested their assistance in listening to the child read, along with postcards to be used to record their ratings of the child's fluency.

The participants in our study were 3rd, 4th, and 5th graders from two schools with predominantly black, Hispanic, and Asian populations and moderately large percentages of children receiving free and reduced-price meals (an average of 38%). Children were randomly assigned to one of four groups: 1) a control group that received no books, 2) a group that received eight books during the summer, 3) a group that received eight books in the summer and fluency lessons at the end of the school year, and 4) a group that received eight books in the summer and fluency and comprehension strategy lessons at the end of the school year. Just like the 2007 study, the books were matched to the children's interests and reading levels.

We found that children who received books but no instruction did not make greater springto-fall gains in reading achievement than the control group, even though the books were matched to their interests and reading skills. However, children who received books and fluency and comprehension lessons made significantly greater spring-to-fall gains. Most notably, our intervention occurred over just one summer, but its effect was as large as the effect in Allington's study, in which children received books for three summers in a row. One of us (Kim) also conducted a similar experiment in the same school district that produced an even larger effect size for black children.

Solutions That Work

Clearly, we need to make sure that children have books to read over the summer. But that's not enough. In our view, the missing ingredients for an inexpensive, cost-effective summer reading program are: 1) providing books that are individually matched to children's interests and reading levels, and 2) teacher and parent scaffolding that encourages sound comprehension and fluency practices and plenty of parent/child interaction.

We agree with Allington that summer book reading programs need to be extended across multiple summers. Why not make these programs as effective and inexpensive as possible? It's not expensive to match books to children's interests and reading levels. Nor is it costly to enlist teachers and parents to help with scaffolding. Teachers can easily conduct lessons at the end of the school year and administer a survey of reading preferences. Postage costs for



It's not expensive to match books to children's interests and reading levels. Teachers can easily conduct lessons at the end of the school year and administer a survey of reading preferences. Postage costs for the parent letters and postcards are minimal.

the parent letters and postcards are minimal. Many districts already give tests that measure reading ability, and this data can be used to improve summer reading programs.

One important question that our experiments raise is whether teacher scaffolding that continues during the summer might have even more positive effects on reading achievement. We are currently studying this in a North Carolina school district. As we continue our work, we hope to find increasingly more cost-effective strategies for solving the problem of summer reading loss.

REFERENCES AND FURTHER READING

Alexander, Karl L., Doris R. Entwisle, and Linda S. Olson. "Lasting Consequences of the Summer Learning Gap." *American Sociological Review* 72 (2007): 167-180.

Allington, Richard. L, Anne McGill-Franzen, Gregory Camilli, Lunetta Williams, Jennifer Graff, Jacqueline Zeig, Courtney Zmach, and Rhonda Nowak. "Addressing Summer Reading Setback Among Economically Disadvantaged Elementary Students." *Reading Psychology* 31 (2010): 411-427.

Borman, Geoffrey D., and N. Maritza Dowling. "Longitudinal Achievement Effects of Multiyear Summer School: Evidence from the Teach Baltimore Randomized Field Trial." *Educational Evaluation and Policy Analysis* 28 (2006): 25-48.

Carver, Ronald P., and Robert E. Liebert. "The Effect of Reading Library Books at Different Levels of Difficulty upon Gain in Reading Ability." *Reading Research Quarterly* 30, no. 1 (1995): 26-48.

Cooper, Harris, Kelly Charlton, Jeff C.Valentine, Laura Muhlenbruck, and Geoffrey D. Borman. "Making the Most of Summer School: A Meta-Analytic and Narrative Review." *Monographs of the Society for Research in Child Development* 65 (2000): 1-127.

Donovan, Carol A., Laura B. Smolkin, and Richard G. Lomax. "Beyond the Independent-Level Text: Considering the Reader-Text Match in First Grader's Self-Selections During Recreational Reading." *Reading Psychology* 21, no. 4 (2000): 309-333.

Kim, James S. "Effects of a Voluntary Summer Reading Intervention on Reading Achievement: Results from a Randomized Field Trial." *Educational Evaluation and Policy Analysis* 28 (2006): 335-355.

Kim, James S. "The Effects of a Voluntary Summer Reading Intervention on Reading Activities and Reading Achievement." *Journal of Educational Psychology* 99 (2007): 505-515.

Kim, James S., and Jonathan Guryan. "The Efficacy of a Voluntary Summer Book Reading Intervention for Low-Income Latino Children from Language Minority Families." *Journal of Educational Psychology* 102 (2010): 20-31.

Kim, James S., and Thomas G. White. "Scaffolding Voluntary Summer Reading for Children in Grades 3 to 5: An Experimental Study." *Scientific Studies of Reading* 12 (2008): 1-23.

White, Thomas G., and James S. Kim. "Teacher and Parent Scaffolding of Voluntary Summer Reading." *The Reading Teacher* 62 (2008): 116-125.

White, Thomas G., and James S. Kim. "Can Silent Reading in the Summer Reduce Socioeconomic Differences in Reading Achievement?" In *Revisiting Silent Reading: New Directions for Teachers and Researchers*, ed. Elfrieda H. Hiebert and D. Ray Reutzel, 67-94. Newark, Del.: International Reading Association, 2010.



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