GW Mid-Atlantic Equity Center

Summer Reading Summer Not

How Project READS Can Advance Equity

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James S. Kim, assistant professor of education at the Harvard Graduate School of Education, is a former history teacher who taught in an ethnically diverse middle school in Virginia. He launched Project READS (*Reading Enhances Achievement During Summer)* in 2005 to help schools and districts improve reading achievement, motivation, and attitudes of students towards reading. He has conducted experimental studies on Project READS to determine whether a voluntary summer reading intervention can improve reading achievement, particularly for minority and low-income students.

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"*Summer Reading, Summer Not: How Project READS (Reading Enhances Achievement During Summer) Can Advance Equity*"

Abstract

This paper has three goals. First, it describes the broader research on summer reading loss. Second, it discusses how research and development efforts informed the key components of Project READS (Reading Enhances Achievement During Summer), a scaffolded voluntary summer reading intervention for children in grades 3 to 5. The second part of the paper also describes results from four randomized experiments, which provide rigorous evidence on the efficacy of the READS logic model. Third, it concludes with a checklist to guide districts and schools interested in implementing and evaluating a scaffolded voluntary summer reading program like Project READS.

Background on Summer Reading Loss: The Nature of the Problem

Numerous empirical studies indicate that the achievement gap in reading forms and widens during summer vacation rather than during the school year. Social-class differences in learning outside of school appear to explain a large portion of the reading gap that exists between low-income and middle-income children in elementary school (Alexander *et al.*, 2001; Cooper *et al.*, 1996; Heyns, 1987). For example, in a pioneering study of reading gains during the summer and school year for 1,128 sixth- and seventh-grade students in Atlanta, Georgia, Barbara Heyns (1978) found that "the gap between black and white children, and between low- and high-income children widens disproportionately during the months when schools are not in session" (p. 187). Additional empirical research on school year and summer learning in New Haven, Connecticut (Murnane, 1975), Baltimore, Maryland (Alexander et al., 2001), and nationally representative samples of U.S. school children (Downey *et al.*, 2004; Phillips & Chin, 2004) have yielded findings that mirror those observed by Heyns.

Collectively, the research literature has consistently revealed seasonal patterns in children's learning: low-income and minority children fall behind their more advantaged classmates during the summer but keep up with their peers during the school year. Since parents and families are largely responsible for children's education during the summer, these findings imply that unequal opportunities to learn at home may contribute to the unequal learning gains of children from different family backgrounds.

Why do minority and low-income children fall behind in reading during the summer months? Recent studies suggest that there are quantitative differences in children's access to learning resources, such as books, and qualitative differences in children's reading experiences. Thus, variations in children's home settings may explain variations in summer learning among different groups of children. For example, Fryer and Levitt (2002) recently analyzed data from the Early Childhood Longitudinal Survey (ECLS-K), a nationally representative sample of over 20,000 children entering kindergarten in fall 1998, and found large ethnic disparities in the number of books in children's homes. On average, white families reported owning an average of 93 books compared to an average of 39 books for black families, 41 books for Latino families, and 49 books for Asian families.[i] In multivariate analyses, Fryer and Levitt found that the inclusion of a composite measure of socioeconomic status and the number of books in children's homes accounted for the entire reading gap between black and white students and most of the gap between Latino and white students in kindergarten and first-grade. In light of these findings, the authors suggested that the number of books in a child's home may be a "useful proxy for capturing the conduciveness of the home environment to academic success" (p. 11).

One way to improve the quality of children's home learning environments during the summer is to increase children's access to books and opportunities to read for leisure. Increasing the amount of leisure reading—in particular, the number of books read and time spent reading—is likely to improve the quality of their learning experiences during the summer. Heyns, for example, noted that the "single summer

activity that is most strongly and consistently related to summer learning is reading" (p. 161). Given these findings, Heyns speculated that "[w]hatever the reasons, the unique contribution of reading to summer learning suggests that increasing access to books and encouraging reading may well have a substantial impact on achievement" (p. 172).[ii] More recently, Alexander, Entwisle, and Olson (2001) found that reading during summer was positively associated with vocabulary test scores of elementary school children independent of family background. Using data from the federally mandated Prospects study of Title I, Phillips and Chin analyzed the correlates of achievement growth during the summer and found that "reading with children, encouraging them to read on their own, and providing access to a wide range of new books, improve[d] children's performance on reading comprehension and vocabulary tests" (p. 278). Taken together, these correlational findings suggest that children who read books during the summer may enjoy larger reading gains than children who do not read books during the summer.

The key question, then, is whether policymakers and practitioners can design effective voluntary reading programs that can be brought to scale, address variations in children's home environments, and improve children's reading skills. Although voluntary reading programs are widely used in schools to encourage children to read, it is unclear whether these programs actually improve children's reading skills. As part of the National Reading Panel's (NRP) report, *Teaching Children to Read* (2000), a committee of reading researchers reviewed 14 studies that focused on the effects of a "widely recommended approach to developing fluent readers—encouraging children to read a lot" (p. 3-21). In these studies, students usually chose their own books, read

silently on their own, and received little or no feedback on the selection of books or the reading activity from teachers, parents, or peers. The NRP (2000) found little evidence that giving children more books and encouraging them to read more improved reading achievement. Thus, the NRP encouraged researchers to explore how to enhance the effects of voluntary summer reading.

Scaffolding Voluntary Reading of Books. Since there is little evidence that simply providing children with more books to read will improve their reading skills, we (i.e., the author and research colleagues) hypothesized that teacher and parent scaffolding may be critical to enhancing the effectiveness of a voluntary summer reading intervention. "Scaffolding...is the practice of providing just enough assistance (not too much or too little) to help students succeed" (Meichenbaum & Biemiller, 1998, p. 141). When applied to children's summer reading, the scaffolding idea suggests that parents might (1) listen to their child "tell them" about a book they read, or (2) listen to their child read a short passage out loud and encouraging their child to read text smoothly and with oral expressiveness (i.e., prosody). Oral reading may improve both fluency and comprehension through such mechanisms as improving decoding speed and increasing attention to prosody (Fuchs *et al.*, 2001). In addition, scaffolding suggests that, at the end of the school year, teachers can (1) encourage children to read aloud to their parents and teach them how to implement a simple procedure for doing so, and (2) train children to use comprehension strategies when they read silently and independently at home during the summer.

Teaching Fluent Reading and Comprehension Strategies. The NRP found that two forms of scaffolding enhanced the effectiveness of reading practice. First, the NRP found strong evidence that guided oral reading strategies, in which children receive feedback from adults or peers during oral reading of text, improved fluency and comprehension. Second, it found that comprehension strategies used by good readers—re-reading text, asking questions, making predictions, summarizing, and making connections with other texts and personal experiences—improved understanding of text. The NRP found that most studies involved older children, which implies that teachers "taught readers who had achieved decoding and other basic reading skills before they were taught [comprehension] strategies" (p. 4-51). The NRP also noted that teaching oral guided reading and comprehension strategies did not require a large investment of instructional time and both were easy to implement in classroom settings. Research on the use of multiple strategies indicated that achievement gains were similar regardless of whether teachers spent 6 or 25 classes teaching these strategies (Rosenshine & Meister, 1994).

<u>From Research to School District Policy: The Development of Project READS</u>

Starting in 2004, we created a team of researchers and practitioners who reviewed the research on summer reading loss and the NRP's research on voluntary reading to design and test a scaffolded voluntary summer reading intervention. Since 2004, we have undertaken four experimental studies to test the efficacy of a voluntary summer reading intervention for elementary school children. The first study was designed to evaluate the effects of the intervention in a multi-grade sample, allowing us

to identify the grades that should be targeted for a larger scale up study. The second study examined whether the core intervention produced positive impacts on subgroups of lower-performing and economically disadvantaged children. The third study examined whether the results could be replicated and whether the teacher scaffolding was essential to improving reading achievement. The fourth and most recent study is a planned variation of the core model, involving low-income Latino children in a high-poverty California school district. A summary of each study follows.

Study #1: Piloting READS to Determine Which Grades to Target. In the first study (Kim, 2007), we evaluated the effects of a voluntary summer reading intervention for a sample of children in grades 1 to 5. The intervention included a book matching strategy and teacher and parent support for summer reading. In late spring 2004, the children took the reading comprehension and vocabulary sections of the Stanford Achievement Test as a pretest and also completed a 20-item survey of their reading preferences. After pretesting, children were randomly assigned to a treatment condition in which they received 10 books during the summer break (i.e., last week of June to first week of September) or a control condition in which they received 10 books after the administration of the Stanford reading posttest in the fall. A fall survey administered after the posttest included questions about book ownership and summer reading activity.

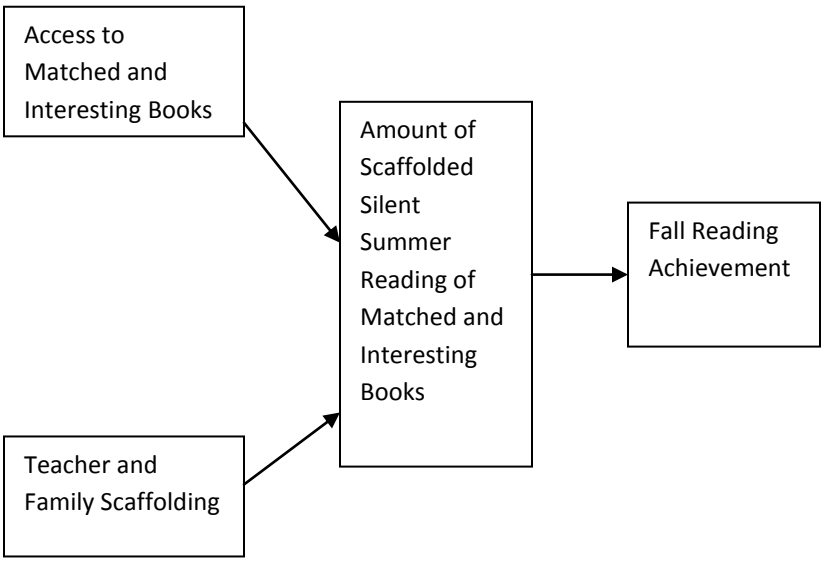
To match books to readers and to provide teacher and family scaffolding for summer reading, we used a two-step computer algorithm that identified books that matched (a) each child's reading preferences (based on the reading survey) and (b) each

child's independent reading level (based on a range of 50 Lexiles above to 100 Lexiles below the child's observed Lexile score from the reading comprehension portion of the Stanford 10 reading pretest). Teachers supported the children's summer reading by conducting a "lesson" near the end of the school year. In the lesson, the teacher explained that the children were part of a program in which they would receive 10 books during the summer or in the fall. Teachers told children that they would receive a book and a postcard with the following questions: (a) "Did you finish reading your new book?" (b) "Did you like reading this book?" (c) "Was this book easy to read?" Children were directed to answer the questions and then to mail the postcard (with pre-paid postage) to the school. Although children in the treatment group reported reading more books in the summer than children in the control group, there was no significant impact on reading comprehension scores in the fall. There was, however, suggestive evidence that children in grades 3 and above enjoyed larger gains in comprehension than children in grades 1 and 2. Due to the small sample size, however, the larger effects in the upper grades were not statistically significantly different from the smaller effects in the early grades. Nonetheless, the results provided direction for a next step that targeted upper elementary students, involved a larger sample, and include more teacher-scaffolded lessons.

Book matching and teacher and parent scaffolding. Based on the findings of the first experimental study and research on scaffolding, we proposed a theory of change to describe the components that needed to be in place to enhance the effects of voluntary summer book reading. Figure 1 displays the logic model that informed the design of the

READS intervention. The logic model indicates that both teacher scaffolded lessons and access to matched and interesting books increase summer reading and ultimately improve fall reading comprehension.

Figure 1: Logic model for the Project READS intervention



Teacher and Family Scaffolding. To provide scaffolding for children's summer reading, we asked teachers to implement several lessons at the end of the school year. Summaries of the lessons are described in Appendix 3. During the last month of school, teachers conducted reading lessons with the following components:

1. Teachers instructed children on how to use the five comprehension strategies identified by the National Reading Panel (2000) and Harvey & Goudvis (2007) as showing strong evidence of improving text comprehension. Teachers used a popular children's book, *Wreck of the Zephyr,* by Chris Van Allsburg, and then allowed children to practice these strategies on easy text.[iii] This activity

allowed children to engage in independent practice and to internalize the comprehension strategies. Children were encouraged to re-read and summarize texts, make predictions and ask questions as they read, and make connections with other books and personal experiences (i.e., "text to text, text to self connections").

2. Teachers instructed children on how to engage in paired reading, a strategy for encouraging oral reading fluency (Koskinen & Blum, 1986). In paired reading, students picked a favorite passage from a chapter book and learned how to read connected text smoothly and with expression. The goal of this activity was to improve children's reading fluency and to encourage children to view reading as a form of entertainment as well as a skill-building activity.
3. Teachers assigned homework activities in which children were encouraged to read a book independently and also with a family member and then answer questions on a reading postcard. Each postcard asked children to list the title of the book, indicate which comprehension strategies they used, and obtain a signature from a parent or family member after they completed the paired reading strategy at home.
4. Teachers administered a reading survey, which asked children about the kinds of books they enjoyed reading. These reading categories were based on fiction and non-fiction texts complied from the Scholastic's children's book collection. Each book in this collection included a reading level in Lexile units and a word count, which provides a precise measure of reader exposure to text. To

facilitate a better match between text difficulty and reader ability, the Lexile Framework (U. S. Department of Education, 2001) was used to match books to a child's independent reading level, which was based on spring reading scores.

Study #2: Scaling up Scaffolded Voluntary Reading and Evaluating Effects on Lower-Performing and Disadvantaged Subgroups of Children. In the second study, we conducted a multi-site field trial involving over 500 students in 10 elementary schools to examine the effects of the intervention on underperforming subgroups of students (Kim, 2006). In this study, all participating teachers attended an after-school workshop led by a veteran English language arts teacher, who helped design the lesson plans on oral reading and comprehension strategies. During the last month of school in June, classroom teachers instructed children on how to use comprehension strategies during independent reading of books and encouraged them to read aloud from their favorite passages with their parents and family members. In addition, to increase children's motivation to read, teachers also explained that all children would receive 8 free books, either in the summer or fall, and encourage children to have fun reading and using the strategies they learned in class. To implement the research design, children were randomly assigned to receive books in the summer or fall. Children in the treatment group were sent books during the summer, and students in the control group were sent books in the fall after posttests had been administered.

All children were pre- and posttested on the Iowa Test of Basic Skills (ITBS). The estimated treatment effects on the ITBS were largest for black students (*ES* = .22), Latino students (*ES* = .14), less fluent readers (*ES* = .17), and students who reported

owning fewer than 50 children's books (*ES* = .13). These impact estimates were similar to effect sizes from other experimental evaluations of summer programs.[iv] Thus, the main findings suggest that a voluntary summer reading intervention may represent a scalable policy for improving reading achievement among lower-performing students.

Study #3: Replicating READS and Isolating the Effects of Key Intervention Components. In a third concurrent study (Kim & White, 2006), we sought to examine which components of the intervention were driving the reading gains. This sub-study was carried out in two different elementary schools and involved 24 teachers and 400 students in Grades 3, 4, and 5. Following the design used in the Tennessee class size experiment, both students and teachers were randomly assigned to one of four experimental conditions: (1) control group, (2) matched books, (3) matched books plus oral reading scaffolding, and (4) matched books plus oral reading and comprehension strategies scaffolding.

During the last month of school, participating teachers followed scripted lessons based on their experimental conditions and developed different reading activities and postcards for each classroom. As a result, control group 1 students did not participate in any activities related to the voluntary reading curriculum. Students in the matched books group 2 were told to read for fun in the summer. Students in the matched books plus oral reading scaffolding group 3 received additional lessons on oral reading fluency. Students in the fourth group learned how to practice oral reading and comprehension strategies, and were encouraged by their teachers to read during the summer. Children in the full treatment condition (group 4) scored significantly higher on the ITBS posttest

than the control group (group 1). The effect size of .16 (standard deviations) was in line with the impact estimates from the main study (i.e., study #1). However, there was no significant difference in posttest scores of students who received only matched books (group 2) and students in the control group (group 1).

These results suggest that voluntary summer reading interventions can be effective when teachers instruct children on how to read orally with a family member and use comprehension strategies during independent silent reading. The results also suggest that simply giving children more books to read is an ineffective strategy for improving reading gains. In other words, children do not appear to benefit from a voluntary reading intervention when there is no instruction or support provided by adults, including teachers, parents, and family members. Although the intervention is simple and easy for teachers and parents to implement, it is unclear whether the results are generalizable across school districts and how characteristics of different setting might mediate student outcomes.

Study #4: The READS Family Literacy Study. In summer 2007, we conducted a planned variation study to evaluate the effects of READS in a family literacy study in a high-poverty, southern California school district (Kim & Guryan, 2010). There were two planned variations that were evaluated in the California family literacy study.

(1) In the first variation, two veteran teachers who had taught in the district for over 5 years identified 140 titles from the Scholastic children's book catalogue. The books were drawn from a variety of genres and reading levels. The teachers identified several high-interest series books, books about famous athletes, historical figures (e.g.,

Abraham Lincoln, Leonardo Da Vinci), and natural science (e.g., sharks, science experiments). Children participated in school book fairs in which they were allowed to self-select their books. The goal of the book fair was to enhance children's intrinsic motivation to read by allowing children to look at the book titles, to preview portions of the book, and to self-select books to read.

(2) Second, we collaborated with an expert in family literacy, Dr. Linda Clinard, to evaluate the effects of a family literacy intervention that was added to the READS intervention. In the family literacy intervention, parents were trained in their native language to ask comprehension questions about their children's books. The goal of the family literacy intervention was to teach parents to use the same reading comprehension strategies that their children had learned during the June reading lessons with their teachers.

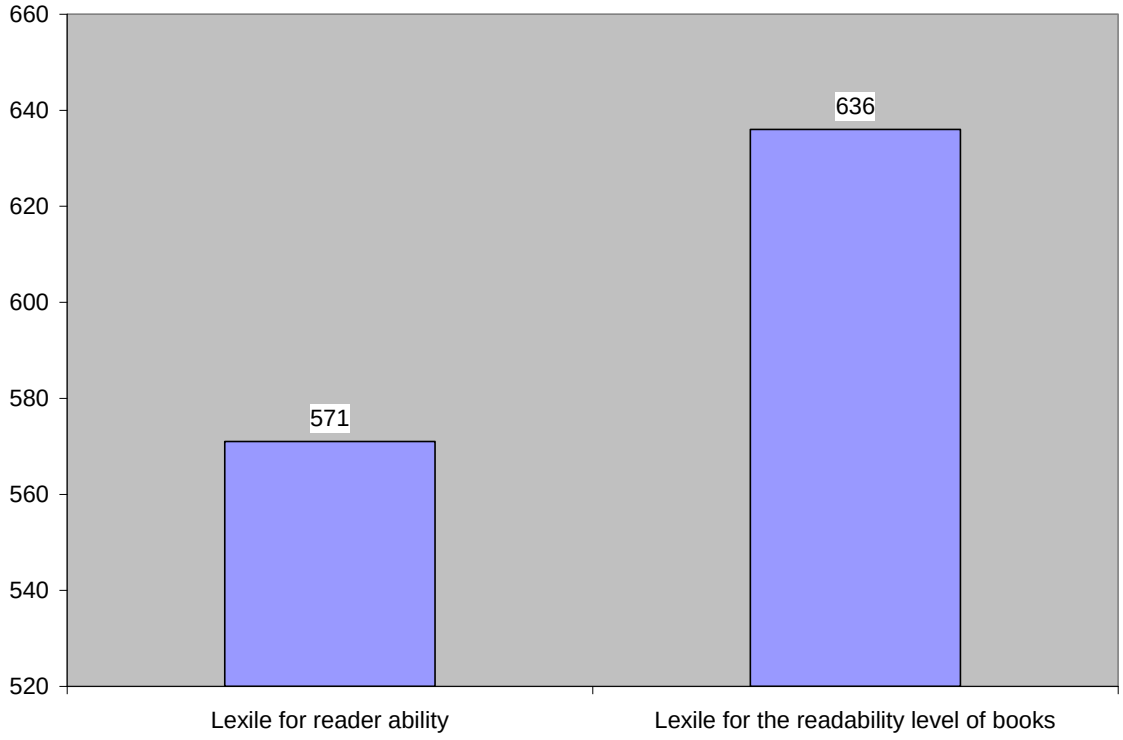
To test the effects of the two planned variations to READS, we conducted a randomized experiment. The children were in fourth grade when the study began and over 90% of the children were Latino/a, reported that Spanish was the primary language spoken at home, and received a free lunch subsidy. During the last month of their fourth-grade year, a total of 370 children were randomly assigned to (1) a treatment group in which children received 10 self-selected books during summer vacation, (2) a family literacy group in which children received 10 self-selected books and were invited with their parents to attend 3 literacy events, or (3) a control group.

Although children in the treatment and family literacy groups reported reading more books than those in the control group, there was no positive impact on reading

comprehension scores, as measured by the Gates-MacGinitie Reading Test. There are two findings from the implementation data that help address why the intervention did not improve children's reading ability. The first finding was related to participation rates in the family literacy events. More than half (55%) of the children in the family literacy group attended no summer literacy events. Consequently, the majority of the children and their parents were not exposed to the family literacy curriculum, perhaps attenuating the impact of the intervention on children's reading comprehension scores.

The second finding was related to the mismatch between the reading level of the children and the difficulty of their books. The implementation data indicated that many children selected books that were too difficult for them to read. As shown in Figure 2, the mean reading level for the children in the sample was 571 Lexiles. This score corresponds to a mean grade equivalent score of 3.4, which is approximately the 24th percentile. In other words, the mean reading level of the children was similar to the median reading level of a child in the fourth month of third grade. This piece of information clearly suggests that the sample of children in our study was performing below the national norm. The mean Lexile score for the 10 self-selected books was 636, about 70 Lexile points above the mean reading level of the children. Comparison of Lexiles for children and their books indicate that most children self-selected books above their independent reading level.

Figure 2: The mean Lexile level for reader ability (sample of children) and for the readability level of the 10 self-selected books



The results from the California family literacy study underscore the importance of remaining faithful to the core logic model described in Figure 1. The first component of our logic model indicates that children must have access to matched books—i.e., books that are appropriately matched to children's reading level and interests. In the California family literacy study, there was a mismatch between readers and texts. If children do not have opportunities to read books matched to their reading level, they are unlikely to experience comprehension gains during summer break. The second component of our logic model highlights the importance of teacher and family scaffolding. In the California study, virtually all parents were non-native English speakers, making it especially important to provide additional scaffolding that supports

home literacy activities during the summer. Parents may need books in their native language and opportunities to learn comprehension strategies to support their children's independent reading activities.

The four experimental studies of READS highlight the conditions under which a scaffolded voluntary summer reading intervention may enhance children's comprehension gains. Following is a summary of the lessons learned from the studies.

1. *Target children in grades 3 and above who have learned to read and decode unfamiliar words.* The first study of READS indicated that the positive effects of voluntary summer book reading were concentrated with children in grades 3 and above. If educators are interested in implementing a voluntary summer reading program for younger children, additional scaffolding is needed. For instance, teachers may have to read the books to children and help children decode unfamiliar words, or even call children in the summer to help them read the books. In addition, younger children may need opportunities to read decodable text that strengthen their decoding ability and reading fluency.
2. *Target lower-performing subgroups of students and schools.* The second study of READS indicated that the positive effects were concentrated with black students, Latino students, less fluent readers, and children with fewer books at home. Collectively, this finding indicates that a cost-effective approach to READS may entail targeting historically under-served and under-performing subgroups of children who have fewer opportunities to learn and who are most at-risk of falling behind in reading during summer break. Because it is often difficult to target specific

students, school districts may want to target schools—for instance, Title I schools—that enroll a large percentage of lower-performing children.

3. *Teacher and family scaffolding is critical to enhancing the effects of voluntary summer reading.* The third study indicated that both teacher-directed lessons in comprehension strategies and access to matched and interesting books are necessary to improve children's reading achievement. Without teacher-scaffolded lessons, there was no impact of voluntary summer book reading. In other words, giving children more books to read in the summer is unlikely to improve reading achievement. Rather, teachers play a critical role in providing lessons right before summer that increase children's motivation to read and that scaffold children's independent reading at home during the summer months.
4. *Fidelity of implementation to the core logic model is critical.* The fourth study indicated that many low-performing children selected books that were too difficult for them to read during the summer and that a majority of children did not attend the family literacy events during the summer. As READS is implemented at different sites, educators are likely to modify the intervention to fit the goals of each local district and school. Local adaptations of READS, however, should adhere to the core goals of the logic model. For instance, one partner district is modifying the book fairs used in the California family literacy study to ensure a good match between readers and texts. Children will be grouped by reading level and attend leveled book fairs where all the available books are at the students' independent reading level. In this way, children will still be able to see book titles, to preview books, and to select

their own books to read for the summer. However, the scaffolded book fair is designed to ensure that children are selecting books at their independent reading level. This design adheres to the goals of the logic model while adding a variation to the book matching strategy. Another partner school is implementing a parent involvement program in which parents of READS students attend an orientation at school before summer as well as an event during the summer. The goal of the orientation is to help parents understand the goals of READS and to provide guidance on helping their children read their books.

A Helpful Checklist for Implementing READS

For school and district leaders wishing to implement READS, a scaffolded voluntary summer reading intervention, there are several key questions that can guide implementation. Using this checklist of questions, educators could design and evaluate a scaffolded summer reading intervention.

(1) How will you know if you are implementing the core READS model with high fidelity? What are two or more sources of data for matching children to appropriately challenging books?

☐ Do you have Lexile levels for children and books? The Lexile framework places readers and texts on a common scale, facilitating efforts to match readers to appropriately challenging books. Many state and nationally-normed tests provide Lexile scores for children, including the Stanford Achievement Tests, Scholastic Reading Inventory, and the California and North Carolina end-of-grade tests. If your district or school already uses one of these assessments, you can easily obtain a Lexile level for each student. In addition, most children's books now report a Lexile level (www.lexile.com).

☐ Do you employ a text leveling system? Leveling systems typically grade the difficulty of books on a larger number of text dimensions (e.g., syntax, semantics, length). For example, the Scholastic guided reading levels range from A to Z and yields a holistic measure of text difficulty. Many districts also administer benchmark assessments in

literacy, yielding student reading levels ranging from A to Z. Information on the reading levels of texts and children can provide another useful tool for making decisions about "just right books"—i.e., books that are closely matched to a child's independent reading level.

- ☐ Can you employ a simple strategy like the 5-finger rule? Here, a child actually chooses a book and then identifies a 100 word passage. If she can read 96 to 100 words accurately, the book may be a good match. If a child makes 5 or more errors (1 finger is raised for each word that is inaccurately read), then the book is probably too difficult.

- ☐ Do you have two or more measures to match books to readers? Every measure of a child's independent reading level and the level of text is subject to measurement error. In other words, no measure is perfect. Therefore, try to implement two or more measures to improve the match between readers and text.

What are two sources of data for checking on fidelity of implementation in classrooms and homes?

- ☐ Who will observe the READS lessons (see Appendix A.1 for READS lessons) to see if they are implemented with fidelity? A simple observation rubric can be used to assess the fidelity of READS lessons. This rubric can easily be used to determine if the READS lessons are being implemented across classrooms with fidelity to the model.

- ☐ Who will collect postcard data? A simple measure of fidelity is tracking the number of postcards that each child returns during the summer.

- ☐ Can you administer a fall survey? In our previous work, we asked children about their summer reading activities. Since self-reported data is subject to social desirability biases, information from a posttest survey should be used in conjunction with other data (e.g., postcards) to obtain better information on whether children read their books during the summer.

- ☐ Are there other fidelity data you wish to collect? In more recent work, we also interviewed children and parents about their summer reading activities. Open-ended questions (e.g., What are some books you read this summer?) can provide additional insights into children's summer reading activities.

(2) How will you evaluate READS to determine if it is working, not working, or in need of modification?

- ☐ A first option is to use an experimental design. If you have limited funding and large numbers of children who might benefit from READS, conduct a lottery. In other words, a fair method for allocating a scarce resource like READS is to randomly select children for the program. A lottery procedure also yields a fair comparison of how READS children perform versus children who do not receive READS. Because the procedure for selecting children was random, the two groups of children (READS v. no READS) are likely to be similar, on average, on both observed and unobserved characteristics.

- ☐ A second option is to use a correlational design. If you collect implementation data from observations of teacher lesson, student postcards, and surveys and interviews with students and parents, this information can be used to explain variability in student outcomes. Better implementation of each aspect of READS may be associated with better student outcomes.

- ☐ A third option is to use a descriptive design. For example, if you decide to call parents and students during the summer, you could create an in-depth description of the children's summer reading activities. You might learn, for example, how often parents and children read together, if they are learning new words, and if READS books are encouraging more trips to the public library or local book store.

- ☐ A final option is to conduct a mixed-methods design that includes some or all of the design ideas listed above.

Ultimately, the READS program is as an intervention and evaluation. We invite more districts to join us in studying how the READS program can address summer reading loss.

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Appendix: Project READS Tools and Resources

A.1: Project READS Lessons: The following 3 lessons are to be presented during the last month of school (3 lessons in 1st week, and repeat 3 lessons in 2nd week). Each lesson should take about 30-45 minutes to present. Please review the supply and preparation notes at least a day before the lesson.

Lesson #1 All Teachers follow this script: "Boys and girls, we are part of a special reading study. Some of you will get eight books in the summer and some of you will get eight books in the fall. But regardless of when you get your books, we want to teach you some simple reading strategies to help you enjoy the books. We'll practice some reading skills in class and also for homework. We want you to have a lot of fun with the activities."

The goal of this lesson is to review five research-based comprehension strategies, give students an opportunity to practice them and familiarize students with the postcard they may receive over the summer. This will be the longest lesson.

Supplies needed: Wreck of the Zephyr picture book, sticky notes, collection of picture books for students (fiction & nonfiction), transparency of postcard, and blank copies of postcard for students

Preparation: Teacher should read picture book and note with a sticky note where to stop to model each of the five strategies during the read aloud; make transparency of postcard; make copies of blank postcards for students

Lesson #2 The goal of this lesson is to review the five comprehension strategies, teach students how to reread for fluency improvement, and practice completing the postcard questions. This lesson has a homework assignment. An incentive should be offered for completion of this homework. One suggestion is to offer a treat (sticker, popsicle, lollipop, extra recess) for each homework returned.

Supplies: The Wreck of the Zephyr, transparency of page 19 from Zephyr, student picture books used in Lesson 1, transparency of postcard, student postcards filled out in Lesson 1

Preparation: Review read aloud passage and practice reading poorly, flat and smooth. Make copies of blank postcards for homework assignment.

Lesson #3 The goal of this lesson is to model the comprehension and fluency activities learned the previous 2 days. The teacher will model what students should do when they receive a book this summer. Repeat homework assignment.

A.2: Summer Reading Postcard

(1) What's the title of the book you got? Book Title:

_____

(2) Did you finish reading this book? □ Yes □ No, I stopped on page

_____

(3) How much time did you spend reading this book? □ 0-10 minutes □ 11-30 minutes □ 31 minutes to 1 hour □ more than 1 hour

(4) What did you do to better understand this book? (check all that apply)

□ I **re-read** parts of this book. □ I **made predictions** about this book.

□ I **asked questions** about this book. □ I **summarized** parts of this book.

□ I **made connections** (text to text, text to self).

(5) After you read the book, tell someone in your family what the book was about. Pick a part of the book (about 100 words) to read aloud 2 times. Ask him/her how you improved the second time you read the section and ask for his/her signature. (check all that apply)

□ Did I read more **smoothly?** □ Did I know more **words?** □ Did I read with more **expression?**

(6) Family Member's Signature:

_____

Optional comment about this child's reading**:**

_____

Mail this postcard to us as soon as you can.  We're excited to send you your next book.

A.3: Summer Reading Letter to Parent/Family Member (English and Spanish translation)

Dear Parent (Family Member),

Please encourage your child to read this book and complete the postcard. It will help your child if he or she reads out loud to you, or to an older brother or sister. After you listen to your child reading out loud a second time, tell him or her how they improved. There is also a place for your signature. Please sign the postcard indicating that you listened to your child read a part of the book.

The postcard does not require a stamp; all you need to do is put it in the mail. It is important to return the postcard even if your child has not finished the book. After the postcard has been returned, you may certainly encourage your child to finish the book, read it again, or re-read favorite parts of it.

The information on the postcard will help us understand the results and improve the program next year. Thank you for your time and effort towards making your child's summer reading a successful experience.

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[i] Descriptive statistics on ownership of books are from Fryer and Levitt (2002). Means and standard deviations (SD) for the number of books by ethnicity are as follow: White, mean = 93 books, SD = 65, Black, mean = 39, SD = 42, Latino, mean = 41, SD = 48, Asian = 49, SD = 56.

[ii] Heyns's (1978) analysis involves only the word knowledge subject of the Metropolitan Achievement Test because it has numerous psychometric and practical advantages over the other subtests: "Word knowledge was the most reliable subtest for both black and white students and the most highly correlated with the principal component extracted from a factor analysis of all nine subtests. The correlations between pretests and posttests for both the school year and the summer were larger for this test, and the relationships more nearly linear. This test also had the strongest correlation with IQ scores, and the highest relationship to measures of parental socioeconomic status. Virtually all students managed to complete this test, perhaps because it was the first test of the day. The raw scores based on word knowledge were most consistent when comparing derived measures, such as grade equivalent scores. Word knowledge was also the only test to yield significant gains during both the school year and the summer for both white and black sample children. For these reasons, and for simplicity of exposition, the detailed analysis to follow relies on this test as the measure of achievement" (p. 29).

[iii] Books are taken from Level "L" of the Scholastic Guided Reading series, which is equivalent to books at the beginning Grade 3 reading level.

[iv] In a meta-analysis of summer school programs, Cooper et al. (2000) found that random assignment studies of remedial programs yielded an average effect size of .14, which is similar to the magnitude of

the positive effects observed in the current study. Cooper et al. also found that summer programs had larger effects on the achievement of students from middle-class families (*ES* = .46 to .56) than students from disadvantaged backgrounds (*ES* = .20 to .24). A recent evaluation of the BELL summer program revealed effect sizes ranging from .08 to .14 (Gates-MacGinitie reading test), and a three-year longitudinal evaluation of the Teach Baltimore reported effect sizes near .30 (Comprehensive Test of Basic Skills/4th Edition) for participating students who had above average attendance rates. The effect sizes from the current study ranged from .10 to .20 on a standardized reading test (Iowa Test of Basic Skills) and are similar to recent evaluations of more intensive voluntary summer programs involving elementary school students.