Cougar Readers: Piloting a Library-Based Intervention for Struggling Readers

Elizabeth M. Foster  
Franklin County Schools, USA

Nancy F. Knapp  
University of Georgia, USA

A school librarian helped struggling third-grade readers improve their test scores and learn to enjoy reading by implementing the Reading Apprenticeship intervention at her isolated rural school. She recruited twenty-one local adult volunteers to read with student partners in the school library twice a week for twelve weeks. Participants were enthusiastic, averaging more than 21 completed sessions. From pre- to post-test, students gained an average of 24.8 WPM on the DIBELS (138% of expected gain) and 9.1 months on the STAR (303% of expected gain). Teachers’ written observations also noted associated positive changes in classroom reading skills and behaviors. Recommendations for use of this intervention by other school librarians are included.

Introduction

For over two decades, research has repeatedly demonstrated the significant impact of school libraries and librarians on students’ reading achievement in schools. Numerous studies in the United States have shown that students in schools where libraries are open longer, have greater funding for print and digital resources, and employ more professional staff score significantly higher on standardized reading tests, even when student SES, overall school funding, and community education levels are factored in (see, for example, Achterman, 2009; Hamilton-Pennell, Lance, Rodney, & Hainer, 2000; Lance & Hofschier, 2012; Lance, Welborn, & Hamilton-Pennell, 1990). Krashen, Lee & McQuillan (2010) found the same relationship in their analysis of PIRLS (2006) data from 36 countries; access to larger school libraries (i.e., over 500 books) accounted for nearly as much of the variance in reading scores among countries as SES (see also, Krashen, 2011b). Yet because schools, districts and even policy makers frequently fail to recognize the contribution school librarians can make to student achievement (Knapp, 2011), school libraries increasingly face local, state, and even federal funding cuts (ALA, 2012), in part because "just reading," as opposed to receiving instruction, studying, or preparing for tests, is similarly undervalued in today’s "hyper-accountable” education climate (Krashen, 2009).

Yet, frequent reading of and response to meaningful, connected text is one of the two cornerstones of balanced reading instruction (Freppon & Dahl 1998; Pressley 2001).
Recreational reading, also known as self-selected reading or free voluntary reading (Krashen 2011a), can be defined as the voluntary reading of personally-chosen text solely for enjoyment, rather than in response to an outside requirement or school assignment. It is one of the strongest correlates to reading achievement at all levels (Alexander, 2007; Garan & Devoogd, 2008; Mol & Bus, 2011; National Endowment for the Arts, 2007), and in multiple populations, including English Language Learners, (Krashen, 2009), young teens (Howard, 2001), developmental college students (Paulson, 2006), and even deaf adults (Parault & Williams, 2010). But time allocated for such “free” reading is being increasingly edged out of the regular school day in the United States (Block & Mangieri, 2002; DeBenedictus, 2007), in part because teachers and schools feel pushed by recent federal and state-level accountability mandates (e.g., GDOE, n.d.; NCLB, 2002) to spend more time in direct instruction of basic skills that are perceived as transferring more directly into improved achievement on standardized tests (Gallagher, 2010). This loss of school time set aside for personally meaningful reading is particularly damaging to struggling readers, who often are unable or unwilling to engage in recreational reading on their own at home (Baker & Wigfield, 1999; Cunningham & Stanovich, 2003; Lipola, Salonen, & Vauras, 2000).

School librarians are ideally positioned to address this problem. Good school libraries are full of enticing books for students reading at all levels and with a wide variety of tastes and interests, and good school librarians are experts at matching books to kids (Gordon, 2010). Yet, struggling readers are often unable to read books at their interest level; they need additional support to become fully engaged in, and thus reap the full benefits of, recreational reading. This paper reports on the first author’s (Elizabeth Foster’s) implementation of the Reading Apprenticeship intervention, which is based on frequent, voluntary, supported reading, to help struggling third-grade readers at the rural, low-SES school in which she works as a librarian.

The Intervention
The Reading Apprenticeship intervention was developed by Nancy Knapp, the second author, as a way for parents or other volunteer adults to help novice or struggling readers improve both their reading skills and their desire to read through supported, engaged reading of personally chosen texts. In a reading apprenticeship an adult “reading partner” reads with a novice struggling reader for 20-30 minutes a minimum of two-three times a week. The novice and adult partner alternate lines or pages, depending on the reading level of the text and the skill and confidence of the struggling reader; if reading skill is very low, the struggling reader can simply read all the words he or she knows, while the adult partner reads the rest. During his or her “turn” the adult partner models fluent and expressive reading and may call the novice’s attention to interesting pictures, characters, plot elements or themes in a natural way, just as any two people might discuss a book they are reading. While the novice is reading, the partner helps with the decoding of difficult words, provides explanations of unknown vocabulary or difficult passages, and in other ways scaffolds the reading experience so that the novice reader is able to accomplish the authentic task of reading a personally interesting text which would have been beyond his or her independent capabilities. For a more complete explanation of the Reading Apprenticeship process, please see Knapp (2000, 2003, 2005).
This intervention model grew out of experience interviewing, studying, and working with young struggling readers and is grounded in Vygotskian learning theory (Vygotsky, 1978; see also Collins, Brown, & Holum, 1991; Hung & Nichani, 2002; Rogoff, 1990). The model is also supported by research demonstrating that engaged reading of large amounts of text of varying styles and genres increases novice readers’ lexicons of words and word patterns (Cunningham & Stanovich, 2003; Sinatra, 1990), their knowledge of written syntax, (NEA, 2007; Penning & Raphael, 1991; Schwantes, 1991) and their familiarity with story grammars (Dimino, Taylor & Gersten, 1995; Dymock, 2007) and expository forms. The intervention has been tested in five previously reported studies, with elementary delayed readers each time showing statistically significant improvements on standardized reading tests, as well as greatly improved attitudes toward reading (Knapp, 1998, 2000, 2003, 2005; Knapp & Winsor, 1998).

The sixth study, reported in this paper, differed from the first five in several ways that have significance for the potential effectiveness of the Reading Apprenticeship intervention in the school library setting. This study was the first to use adult volunteers from the general community as reading partners; in previous studies, reading partners had been undergraduate students taking a service-learning course (Knapp, 2003, 2005), children’s own parents (Knapp, 1998, 2000), or the researchers themselves (Knapp & Winsor, 1998). If this intervention is to be useful in school libraries, it must be shown to be both feasible and effective in contexts where parents may be unable or unwilling to implement the intervention and university-based volunteers are not available. More importantly, this sixth study documents results of the intervention as implemented by Elizabeth, a regular school librarian; all the previous studies had been done under Nancy’s direct supervision, who developed the intervention. Thus, this study sought to answer the following research questions:

1. Do participating struggling readers demonstrate greater than average improvement in tested reading fluency and comprehension over the course of the intervention?
2. Do struggling readers demonstrate greater engagement and motivation to read in the classroom over the course of the intervention?
3. Can a Reading Apprenticeship intervention program be effectively organized and administered by a school librarian in the regular course of her duties, using community volunteers? If so, what are the challenges and benefits of having a school librarian run this intervention program; that is, what can be learned from this pilot to facilitate other librarians who may wish to implement a Reading Apprenticeship intervention program in their own schools?

**Methods**

**Participants and process**

At the time of the study, Elizabeth was completing an Ed. S. degree in school library media at the University of Georgia and serving in her second year as the librarian at an isolated rural elementary school approximately 90 minutes away. She had become increasingly concerned with a group of third graders at her school who would be facing the state-mandated
achievement test at the end of third grade, but who currently read at a second-grade level or less. As the librarian, she noted that few of these children checked out many books from the library, and those they were required to check out, she found out from their teachers, often went unread. In addition to the deficits in reading exposure experienced during the school year, these same children reported that they typically did not participate in summer reading programs, visit public libraries, or have personal collections of books at home. Reading was usually not an activity they saw as important to their parents and the majority of them self report very little “shared reading” time with parents or grandparents. The school subscribed to the Accelerated Reader Program (ALS, 1993), but, as others have also noted, it was exactly these children who needed encouragement to read who did not seem to benefit from or enjoy the program (“Accelerated Reader,” 2008; Krashen, 2005).

Elizabeth had been looking for something she could do to help these children and also raise her school’s third-grade test scores, when she heard Nancy speak on the Reading Apprenticeship intervention. She contacted Nancy, and they agreed that she could try the intervention at her school. Nancy would serve as a consultant and would give the initial one-hour training to volunteers, but would not be able to recruit volunteers, collect data or supervise the actual reading; Elizabeth would do all of these things as part of her job as school librarian. Thus, in addition to potentially helping struggling third-grade readers in Elizabeth's school, this project would also serve as a pilot test of whether the Reading Apprenticeship intervention could be practically and effectively implemented by a school librarian under ordinary school conditions.

During the first weeks of January, Elizabeth solicited the names of potential student participants from the third-grade teachers at her school. The primary criterion for participation was that the students be in need of Intensive or Strategic remediation, as measured and defined by the DIBELS (Good, Kaminski, Simmons, Kame'enui, 2001) test administered by the school in early January. Teachers submitted the names of 21 third-graders, and Elizabeth was then able to recruit 21 adult volunteers (4 M, 17 F; age range 20s-60s) from a local church to serve as adult partners. Parents and adult volunteers signed permission forms, while student participants provided verbal assent to participation in the project and the associated research. Nancy met once with all the adult partners for training, and obtaining permission forms and scheduling took another two weeks, but by the end of January, Elizabeth was able to match each volunteer with one student participant, and partners began to read together for 30 minutes twice a week, on two different days, depending on both student and volunteer schedules and availability. This meant that most afternoons there would be from one to five pairs of partners reading in the school media center, a sight which at first drew interest, and some envy, from other students, but which eventually became commonplace to both students and teachers at the school.

**Data Sources**

**Test Data.** Pre- and post-intervention, as part of the normal school testing procedures, student participants were given the DIBELS (Good, Kaminski, Simmons, Kame’enui, 2001), by far the most commonly used test of reading fluency in U.S. schools. The primary measure used in this test is the number of correct words per minute (WPM) read in a leveled passage. They were also given the STAR test (Advantage Learning Systems (ALS), 1997), a computer-adapted test of
reading comprehension (overall reliability = .94) which is adjunct to the Accelerated Reader program used in many U.S. schools. Test data are available for 18 of the 21 participating students, including 10 males and 8 females, 6 students in the school’s Early Intervention Program (EIP), 5 special education students and one student just starting to learn English as her second language (ESOL). While no parent registered any objections to the project, parents of three students failed to return permission slips for the research component of the project, and thus those three students are not included in this report.

**Teacher observations.** At the end of the intervention, teachers were given a form on which to report changes, whether positive or negative, they had observed in students’ reading skill or attitudes or classroom reading-related behaviors. A limitation of these data is, of course, that the teachers were not blind to the students’ participation in the intervention. However, it should be noted that at least two of the five referring teachers were at first rather skeptical of the intervention’s potential effectiveness, especially when balanced against the classroom instruction time that each participating student would miss. Teacher-reported observations are available for 15 of the participating students and are summarized in Appendix A.

**Other data.** Comments from volunteers, parents, teachers, and students were also solicited, and the first author kept a project journal to record challenges, difficulties, solutions, and serendipitous benefits as the project unfolded.

**Results**

**Participation**

Table 1 (below) shows the number of reading sessions attended and pre- and post-test scores for the 18 participating students whose parents returned research permission slips. These students attended an average of more than 21 out of 24 possible sessions. Nine of the 18 students, or 50%, attended every session, while only three students attended fewer than 75% of their sessions.
**Testing Gains**  
**Fluency.** Overall, students gained an average of 24.8 WPM in fluency between pre- and post-intervention administrations of the DIBELS, as a group exceeding the standardized expected gain of 18 WPM by 38%, and WPM gain was positively and moderately correlated ($r = .55$) to the number of sessions each student attended (see Figure 1 for a graphical representation of this correlation).
The range of gains was from -1 to 47 WPM, with 14 out of 18 students meeting or exceeding the standardized expected gain of 18 WPM between January and April for regular (not struggling) third graders. Five students moved up one or more categories in Fluency Status on the DIBELS (e.g., from Intensive to Strategic) with three students achieving third-grade Benchmark status for the first time. Students who began at the Intensive level gained an average of 23 WPM, compared to students who began at the Strategic level, who gained an average of 26.6 WPM, and the one student who started at the Benchmark level who gained 21 WPM. Differences between these groups in average WPM gain were non-significant and there was no clear pattern of differences in fluency gains by initial fluency level. Likewise, while male students gained an average of 27.6 WPM and female students averaged only a 21.4 WPM gain, this difference was also non-significant. However, the difference in average WPM gain between students registered in special education and other student participants was significant at the $p \leq .01$ level. Students registered in special education gained only 10.8 WPM on average, with four out of the five SPED students gaining less than the standard 18 WPM expected, while all other students combined (including EIP students) gained an average of 30.2 WPM, with no non-SPED student gaining less than the standard 18 WPM expected of average readers.

**Comprehension.** Participating students gained an average of 9.1 months of reading comprehension skill as measured by the STAR test during the 12 weeks of the intervention. This average gain represents nearly a year's growth (on the STAR, 10 months = 1 academic
year). It is triple the expected rate of growth over 12 weeks, and matches, within one month, the mean comprehension gains reported in previous studies of this intervention that used the STAR test to measure comprehension (Knapp, 2000, 2003, 2005). Like gains in fluency, comprehension gains on the STAR test were positively and moderately ($r = .60$) correlated to the number of sessions a student attended (see Figure 2 for a graphical representation of this correlation).

![Figure 2. Graphs of number of sessions attended and STAR gain/loss (in GLE months), by students attending most to fewest sessions.](image)

The range of gain was -1 month to 2 years, 7 months, and 13 out of 18 students exceeded the 3-month gain that would be expected of regular (not struggling) third graders. Unlike results in fluency, there was a clear pattern of differential results on the STAR test based on students’ initial reading skills (as characterized by their initial DIBELS status). Students who began at the Intensive level on the DIBELS gained an average of only 6.9 months of comprehension skill on the STAR test, still more than double the average expected 3-month gain, but much less than the 1 year, 2 month average gain shown by students who began at the Strategic level, and very little compared to the 2 year, 2 month gain recorded for the one student who started at the Benchmark level. However, due to high levels of within group variation, these differences were not statistically significant. Neither were differences by gender, although again male students seemed to gain slightly more on average in comprehension (10.9 months) than female students, who averaged exactly 8 months of gain. Students registered in special education, however, showed small if any gains on the STAR test, averaging only a 2-month gain, with the same four
out of five SPED students showing less than the expected 3-month gain in 12 weeks, while all other students combined (including EIP students) gained an average of 1 year, 2 months, with only one of these gaining less than the expected 3 months, and this difference was again statistically significant ($p \leq .05$).

**Changes in classroom reading behavior**
Teachers’ comments on observed changes in 15 of these 18 students (2 students moved just prior to the final day of school, and the teacher of one student failed to turn in any comments) highlight the day-to-day significance of the student test score gains reported above and also describe important changes in students’ classroom behaviors and enjoyment of/attitude toward reading. Several common themes in these comments are explored below, but an idea of effects on individual students can be gained (and compared to tested results from Table 1, if desired) by reading the summary of teachers’ comments attached as Appendix A.

**Enjoyment of reading intervention.** Teachers chose to comment on nine out 15 students’ enjoyment of the Reading Apprenticeship process itself. Comments included:

Adam\(^1\) was not willing to do any reading outside class until he was able to work with a reading partner. He now looks forward to reading time.

As with many of these students, Charlie now loves to read with his partner.

[Debby] looks forward to mentor days with great anticipation and excitement.

Sally is willing to read with partner, but will not take books home. Looks forward to partner reading time.

Quincy is a special needs child who is often difficult to test because she does not “like” to do those things. While the formal test results . . . show very little gain on the STAR test and an actual loss on the DIBELS, Quincy was much more interested in reading when she had a reading partner. She loved to “tell” the story from the pictures, and was just beginning to pick out several words on each page that she wanted to read at the end of the year.

**Gains in observed literacy skills.** In their comments, teachers noted gains in five out of 15 participating students’ classroom literacy skills that mirrored and validated the gains shown on standardized tests; comments included:

Discussions with her reading partner have made a great deal of difference in how Glynda pays attention to what she reads and thinks about it. Her comprehension is vastly improved.

\(^1\) All student names are gender-appropriate pseudonyms, keyed to their letter identification (i.e., “Adam” is Student A).
[Hortencia's] language is much less of a barrier for understanding.

[Ian’s] fluency is improved, but greatest difference is comprehension.

Fred speaks in a slow drawl, which may well affect his words read per minute. His interest in reading, willingness to read, and vocabulary comprehension as measured by the STAR test improved dramatically this year. Having a reading partner mentor who made reading important for him was a huge part of that change. Fred was dismissed from the SST process at the end of the school year due to his progress.

**Improved attitude/motivation toward reading.** Teachers also noted improvements in six out of 15 students’ attitudes toward reading in general, beyond the Apprenticeship situation. Comments included:

Billy made tremendous gains in enjoyment of reading this year. He was never willing to try reading a chapter book before, but has discovered a whole new world of possibilities and is getting ready to fly!

[Jim’s] attitude about reading is much different.

Kasey never thought it was “cool” to read before. He is starting to show off a little because he is more comfortable with himself as a reader. He is also starting to choose books based on personal interest rather than just grabbing one when he goes to the library.

Finally, teachers noted positive changes in general classroom behavior in seven out of 15 students. Comments included:

Charlie has glasses, but [was] often unwilling to wear them at school. Until he began reading with his reading partner, no one knew that he needed glasses and he was not wearing them in class. His reading partner helped him to get frames that matched his own, and the glasses made a tremendous difference in his comfort with reading.

The difference in Debby’s perception of herself, her role in the class, and her attitude about life in general is dramatic. Behavior problems that often were exhibited during reading time before are totally gone.

Very shy – working with reading partner has helped bring [Mike] out in classroom discussions.

[Eustace is a] Special needs student. Hugely motivated by one-on-one reading time. Much more willing to work in reading instruction time.
Len’s mother and grandmother came to school wanting to meet the reading mentor. They said that he had never had a good school year before, but was looking forward to coming to school this year for the first time. The tension he had shown when it was time to read was much less, and he was teaching them to read with him “the way [Ms. H] reads with me” and asking to read together.

**Discussion**

**Overall effectiveness of the intervention**

This pilot study was very successful overall. The data reported above strongly confirm the effectiveness of the Reading Apprenticeship intervention for these struggling elementary-school readers, even when implemented in an isolated rural school without the direct supervision of the intervention developer or the extra resources of a university-based community. According to regularly administered pre- and post-intervention standardized testing, participating students exceeded normally expected gains in fluency by 38% and more than tripled expected gains in reading comprehension. On each measure, 13 or 14 out of 18 students showed gains above the norm. These results are even more significant in light of the well-known Matthew effect in reading (Juel, 1988; Stanovich, 1986), which predicts that struggling readers typically will gain less than the average reader in a given time period, falling further and further behind as the years go by.

Thought harder to measure, the changes noted in students motivation to read and classroom reading behaviors are in the long run no less important than the improvements in their test scores. Elizabeth’s project journal and the teacher observations confirm that most participating students quickly became enthusiastic about reading with their adult partners, with many students transferring this new enjoyment of reading into positive changes in personal or classroom reading habits as well. The adult volunteer partners were equally enthusiastic, as evidenced by their exemplary record of attendance. Partner pairs missed on average fewer than 3 out of 24 possible reading sessions, and most of these were due to the child’s, rather than the adult’s, absence, while fully half the pairs did not miss a single session. But many adult partners went far beyond this initial commitment; as the first author recorded in her project journal summary:

> Concern for our struggling readers became a priority for the mentors and their church. Saturday morning prayer sessions [at the church] were planned and focused on the needs of our students. Participating mentors reported bonding with their assigned students. During visits, the mentors engaged in conversations with students about their likes and dislikes and their hobbies, as well as talk about reading. Students [received] special recognition in honor of birthdays, good grades, and many other causes for celebration. One of the mentors shared his artistic talent and drew pictures for the kids that were carried home and posted as great treasures. Although “reading” was the “treatment” for our study, the human connection was a huge bonus.

**Comparative effectiveness for different groups of students**
By number of sessions. Correlations between the number of reading sessions students attended and their gains in fluency and comprehension were positive and moderate, but these correlations should be viewed cautiously. It is possible, indeed likely, that students who missed a greater number of reading sessions (mainly due to student school absences) had other difficulties which also contributed to slower growth in reading over the 12 weeks of the intervention. Nevertheless, these observed relationships tend to reinforce the evidence offered by overall test gains for the effectiveness of this intervention.

By initial reading skill and gender. While differences were non-significant, there is a tendency in the test score data that suggests that students who came to the intervention “further behind” in reading skills (as evidenced by classification in the Intensive vs. Strategic category on their DIBELS pre-test) may have gained slightly less in fluency and comprehension, and similarly, that females may have gained slightly less than males. While it is worth pointing out that all these groups gained significantly more than the expected gain for average readers on both measures, these results indicate that questions about possible differential effectiveness of the Reading Apprenticeship intervention for these different groups should be addressed in a larger scale-up study.

By special education placement. Participants classified as special education students clearly benefitted least from the intervention in this study, showing much lower gains than all other students combined. Four out of five special education students showed the lowest gains in both fluency and comprehension of all participating students, well below the normative gains expected on both the DIBELS and the STAR tests, sometimes showing no or even slightly negative changes over the 12 weeks of the intervention. Information on students’ special education status was not reliably available in previous Reading Apprenticeship studies, and the small size of the sample in the current study precludes drawing any specific conclusions from these results. It may be that students with a specific reading disability and/or mental impairment (information on the exact disability resulting in special education placement for each student was not available) cannot benefit as others do from the Reading Apprenticeship intervention, requiring instead a much more structured and intensive type of intervention; or it may be that they simply require a longer period of intervention to show progress. It should be noted that participating students in special education attended only 17.3 total reading sessions on average, while participants not in special education averaged 23 out of a possible 24 sessions, so the problem may not be that the intervention period was much too short, but rather that the circumstances of these students hampered their regular attendance, which in turn negatively impacted their progress. Most probably the truth lies in some combination of these hypotheses, but future studies of this intervention including or even focusing on special education students will needed to reliably address this issue.

Feasibility of the intervention in the ordinary school setting
This study also demonstrated that the Reading Apprenticeship intervention can, in fact, be successfully implemented by a school librarian in an ordinary elementary school without extra resources. Elizabeth did not find that adult volunteers were to obtain, even in her rural area, and they were very reliable; all but four students met with their adult partners to read 20 or more times during the 12 weeks of the intervention, and, as mentioned above, missed reading
times were more often attributable to the absence of the student than that of the adult partner. A key element in making this scheduling work was the flexibility of the teachers in allowing students to leave their classes to read whenever adults could schedule free time from work, rather than requiring all volunteers and students to read at a single time (e.g., between 10:00 and 11:00 on Tuesdays and Thursdays). Elizabeth found the task of initially matching students’ available times to those of adult volunteers somewhat daunting at first, but once it was accomplished, the schedule ran with unexpected smoothness. Another key factor was the her decision to take 5-10 minutes each day after morning attendance to notify adult volunteers, by phone or email, when their student partners were absent; this prevented the volunteers from making what was often a 20-30 mile round trip to the school for no purpose.

Most importantly, beyond these organizational skills, Elizabeth’s journal shows that her role as the school librarian was central to the success of this project. As the school librarian, she structured the welcoming and comfortable library environment to which students came to read with their adult partners. Since most students started as not only struggling, but reluctant, readers, Elizabeth’s professional expertise in suggesting books that correlated with students’ personal interests and reading skills was essential, especially in the initial stages of the intervention. Finally, by staying after school and specifically encouraging participating students and their parents to use the media center at this time, Elizabeth was instrumental in translating students’ enthusiasm for reading during the intervention into additional free reading at home, encouraging students to develop a lifelong habit that can affect their eventual reading skills far more than any 12-week intervention. In previous studies of the Reading Apprenticeship, while Nancy was the main mover and supervisor, she has always chosen to work closely with the on-site librarians; this study clarifies the essential role of the librarian in the effectiveness of this intervention.

**Conclusion & Implications**

This study corroborates the results of five previous studies (Knapp, 1998, 2000, 2003, 2005; Knapp & Winsor, 1998) demonstrating the powerful potential of the Reading Apprenticeship intervention to help struggling elementary school readers make significant, tested gains in both reading fluency and comprehension. Positive changes in participating students’ motivation to read and classroom behaviors, noted by teachers, parents, and Elizabeth, as the school librarian, suggest that these gains are likely to be preserved, and also bode well for these students’ futures as lifelong readers. This study also highlights the key role played by the school librarian in the success of this sort of free-reading intervention and the mostly untapped potential of the school library and librarian to help struggling readers begin to succeed in and enjoy reading.

In addition to the above conclusions, the results of this study suggest the following theoretical and practical implications for further research:

- Not all, perhaps not even most, struggling early readers may have significant phonological or other processing deficits of the sort requiring intensive remediation by professionals. That so high a proportion of the lowest-scoring third graders in one low-SES school could make such sizable tested gains in a relatively short period of time, simply by reading large amounts of personally chosen text with the help of caring adults
drawn from the general population, lends support to alternative hypotheses that attribute many early reading difficulties (though certainly not all) to factors other than cognitive deficits: factors such as lack of exposure to reading in the home, or lack of actual or perceived access to engaging reading materials, and/or increasing avoidance and dislike of reading in the face of initial failure to progress (Johnston, 1985; Lipola et al., 2000; Krashen, 2011). These are factors that, as the AASL has noted, school librarians can definitely address and work effectively with teachers and parents to remedy (AASL, 2009).

- Programs for early reading instruction, and especially remedial reading interventions, may benefit by broadening their emphases beyond merely training testable reading skills. Again, the success of this intervention, and the terms in which teachers have described its spillover into the classroom, suggest that remedial programs should go beyond the currently common intensive focus on phonics and specific reading strategies to include elements that encourage personal responses and relationships around reading and foster students’ engagement with individually interesting reading materials of many kinds, again a task falling well within the range of school librarians’ professional training and expertise.

- If such elements as individual interests and personal relationships are vital facilitators of individual reading development (Alexander, 2007), then it also follows that scientific research in this area must seek better ways to measure these elements, whether quantitatively or qualitatively, and researchers and policy makers should include such outcomes in the design and evaluation of new programs, instead of focusing solely, as most do now, on relatively small average gains on standardized tests measuring a somewhat narrow and often artificial set of skills.

Further studies addressing these implications are clearly needed, and just as clearly, school librarians need to be centrally involved in the design and implementation of such studies.

Most importantly, the success of this relatively simple, low-cost, volunteer-based intervention in a regular school setting offers hope that, with the help of school librarians, it may be within the means of many schools to help more of their struggling readers; to reduce or even reverse the typical downward educational spiral noted by so many scholars in the field (Bast & Reitsma, 1998; Goodlad, 1984; Juel, 1988; Purcell-Gates & Dahl, 1991, Stanovich, 1986) and bring these students back into the “Reading Club” (Smith, 1988).

References
Wisconsin Rapids, WI: ALS.


**Author Notes**

Elizabeth Foster has been a primary school teacher librarian since 2006. She holds degrees in early childhood education and instructional technology. Her research centers on the role of the teacher librarian in reading improvement.

Nancy Flanagan Knapp is an Associate Professor in the Career and Information Studies department at the University of Georgia where she teaches classes in learning, motivation, and literacy. Her research focuses on ways that teachers, librarians and parents can work together to help struggling readers learn and love to read.
Appendix A. Teacher End-Of-Year Observations Summarized By Student

**Student A:** Adam was not willing to do any reading outside class until he was able to work with a reading partner. He now looks forward to reading time. The reading aloud has doubled his oral reading rate, which should begin to show up in comprehension.

**Student B:** Billy made tremendous gains in enjoyment of reading this year. He was never willing to try reading a chapter book before, but has discovered a whole new world of possibilities and is getting ready to fly!

**Student C:** Charlie has glasses, but [was] often unwilling to wear them at school. Until he began reading with his reading partner, no one knew that he needed glasses and he was not wearing them in class. His reading partner helped him to get frames that matched his own and the glasses made a tremendous difference in his comfort with reading. As with many of these students, Charlie now loves to read with his partner. He is just on the threshold of [read]ing independence.

**Student D:** The difference in Debby’s perception of herself, her role in the class, and her attitude about life in general is dramatic. Behavior problems that often were exhibited during reading time before are totally gone. She looks forward to mentor days with great anticipation and excitement.

**Student F:** Fred speaks in a slow drawl, which may well affect his words read per minute. His interest in reading, willingness to read, and vocabulary comprehension as measured by the STAR test improved dramatically this year. Having a reading partner mentor who made reading important for him was a huge part of that change. Fred was dismissed from the SST process at the end of the school year due to his progress.

**Student G:** Discussions with her reading partner have made a great deal of difference in how Glynda pays attention to what she reads and thinks about it. Her comprehension is vastly improved.

**Student H:** Language is much less of a barrier for understanding. Attitude about reading is much different.

**Student I:** Fluency is improved, but greatest difference is comprehension.

**Student J:** Attitude about reading is much different. “Jim” looks forward to reading partner time.
**Student K:** Kasey never thought it was “cool” to read before. He is starting to show off a little because he is more comfortable with himself as a reader. He is also starting to choose books based on personal interest rather than just grabbing one when he goes to the library.

**Student L:** Len’s mother and grandmother came to school wanting to meet the reading mentor. They said that he had never had a good school year before, but was looking forward to coming to school this year for the first time. The tension he had shown when it was time to read was much less, and he was teaching them to read with him “the way [Ms. H] reads with me” and asking to read together.

**Student M:** Very shy – working with reading partner has helped bring him out in classroom discussions.

**Student Q:** Quincy is a special needs child who is often difficult to test because she does not “like” to do those things. While the formal test results . . . show very little gain on the STAR test and an actual loss on the DIBELS, Quincy was much more interested in reading when she had a reading partner. She loved to “tell” the story from the pictures, and was just beginning to pick out several words on each page that she wanted to read at the end of the year.

**Student S:** Sally is willing to read with partner, but will not take books home. Looks forward to partner reading time.

**Student U:** Special needs student. Hugely motivated by one-on-one reading time. Much more willing to work in reading instruction time.

Teacher comments on Students O, P & T are missing.