An Investigation of Teachers' Perceptions of Factors that Influence the Implementation of the READ 180 Program

Deonna Foster Wilemme

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AN INVESTIGATION OF TEACHERS' PERCEPTIONS OF FACTORS THAT INFLUENCE THE IMPLEMENTATION OF THE READ 180 PROGRAM

by

Deonna Foster Wilemme

A Dissertation

Submitted for Partial Fulfillment of the Requirements for the Degree of Doctor of Education

Major: Instruction and Curriculum Leadership

The University of Memphis

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DEDICATION

This dissertation is dedicated to my mother,

Marilyn A. Washington,

who has encouraged me to complete this degree regardless of the obstacles I faced throughout this educational journey

and to my loving grandmother,

Ruth M. Ward,

who has encouraged me to further my education, and complete what I started so that she could live to share the accomplishments with me.

Last, but not least...

To the best man I have ever known,

Jamoya A. Cox,

who is my life-long partner, best friend, and the protector of my back.

Thank you, Honey.

I have your back.

TYFLM
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I want to thank my major professor, Dr. Jerrie L.C. Scott, for her patience, understanding, and encouragement throughout my time with her. I also would like to thank the other members of my committee, Dr. Vivian G. Morris, Dr. E. Sutton Flynt, and Dr. Louis A. Franceschini III, for their support and advice.

Finally, I want to thank God for giving me the ability and confidence to begin this educational journey and the strength and tenacity to finish with my hands held high giving him all the glory.

Philippians 4:13
ABSTRACT


Over the last two decades, interests in the cyclical nature of reading failure have increased, resulting in programs designed to address the needs of adolescent students. Among many programs for older struggling readers, READ 180 is a program widely used in urban schools that addresses the needs of older struggling students. The purpose of this study was to determine what, if any, teacher and administrator practices used in the READ 180 program best support the literacy learning of older struggling readers in an urban school district that is populated predominantly by African American students.

Four research questions guided this study: (1) What are the relationships between selected demographic characteristics of READ 180 teachers and their students’ approximate grade-level gain in reading? (2) What is the relationship between teachers’ reported use of instructional practices and their students’ approximate grade-level gain in reading? (3) What is the relationship between teachers’ perceptions of READ 180’s potential for improving students’ literacy learning and their students’ approximate grade-level gain in reading? And (4) What is the relationship between teachers’ perceptions of administrative support and their students’ approximate grade-level gain in reading?

The analysis of the data yielded four major findings. There was a statistically significant difference in the age and years of teaching experience in
READ 180 of those teachers whose students scored at or above district norms and those who scored below district norms. There were no statistically significant differences between the two groups of teachers in their reported classroom practices, perceptions of the READ 180 program’s potential for improving students’ literacy learning, or perceptions of administrative support. However, from the open-ended responses, two classroom practices were identified as most useful, small-group instruction and computer-assisted instruction, while independent reading and whole-group instruction were identified as least useful. The strategies that were identified by teachers as most helpful and most needed from administrative staff were access to supplies as most helpful and scheduling and monitoring of students as most needed. The findings of the study led to implications for practicing teachers, administrators, and researchers.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td></td>
</tr>
<tr>
<td>Background of the Study</td>
<td>1</td>
</tr>
<tr>
<td>Statement of Problem</td>
<td>3</td>
</tr>
<tr>
<td>Research Questions</td>
<td>4</td>
</tr>
<tr>
<td>Significance of Study</td>
<td>5</td>
</tr>
<tr>
<td>Limitations</td>
<td>5</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>6</td>
</tr>
<tr>
<td>Organization of Study</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Review of Literature</td>
<td></td>
</tr>
<tr>
<td>The Needs of Older Struggling Readers</td>
<td>9</td>
</tr>
<tr>
<td>Instructional Programs in Reading</td>
<td>13</td>
</tr>
<tr>
<td>Computer-Assisted Instruction</td>
<td>17</td>
</tr>
<tr>
<td>READ 180 Program</td>
<td>22</td>
</tr>
<tr>
<td>Summary</td>
<td>37</td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Methodology</td>
<td></td>
</tr>
<tr>
<td>Context of Study</td>
<td>38</td>
</tr>
<tr>
<td>Participants</td>
<td>39</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>40</td>
</tr>
<tr>
<td>Data Collection</td>
<td>42</td>
</tr>
<tr>
<td>Data Analyses</td>
<td>42</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Findings</td>
<td></td>
</tr>
<tr>
<td>Teacher Characteristics and Student Gains</td>
<td>46</td>
</tr>
<tr>
<td>Instructional Practices and Student Gains</td>
<td>50</td>
</tr>
<tr>
<td>Potential for Improving Student Learning and Student Gains</td>
<td>55</td>
</tr>
<tr>
<td>Teachers’ Perceptions of Administrative Support and Student Gains</td>
<td>56</td>
</tr>
<tr>
<td>Teachers’ Open End Responses to Instructional Strategies and Administrative Support</td>
<td>57</td>
</tr>
<tr>
<td>Summary of Findings</td>
<td>64</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Discussion, Conclusions, and Implications</td>
<td></td>
</tr>
<tr>
<td>Discussion and Conclusions</td>
<td>68</td>
</tr>
<tr>
<td>Implications</td>
<td>76</td>
</tr>
</tbody>
</table>
References

Appendices

A. Copy of Consent Form  85
B. READ 180 Teacher Survey  86
C. Procedures  88
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teacher Characteristics as a Percentage of the Sample</td>
<td>41</td>
</tr>
<tr>
<td>2. Summary of Characteristics Sample, Degrees of Freedom,</td>
<td>48</td>
</tr>
<tr>
<td>and Effect Size</td>
<td></td>
</tr>
<tr>
<td>3. Summary of Classroom Practices Usage</td>
<td>52</td>
</tr>
<tr>
<td>4. Summary of Teacher Reported Instructional Strategies that</td>
<td>60</td>
</tr>
<tr>
<td>Contribute Most to Students’ Literacy Learning with READ 180</td>
<td></td>
</tr>
<tr>
<td>5. Summary of Teacher Reported Instructional Strategies that</td>
<td>61</td>
</tr>
<tr>
<td>Contribute Least to Students’ Literacy Learning with READ 180</td>
<td></td>
</tr>
<tr>
<td>6. Summary of Teacher Reported Most Helpful Ways Administrative</td>
<td>62</td>
</tr>
<tr>
<td>Staff Supported the Implementation of READ 180</td>
<td></td>
</tr>
<tr>
<td>7. Summary of Teacher Reported Ways Administrative Staff</td>
<td>63</td>
</tr>
<tr>
<td>Could Better Support the Effective Implementation of READ 180</td>
<td></td>
</tr>
</tbody>
</table>
Chapter 1: Introduction

Background of the Study

Literacy is widely accepted as the foundation of all learning (National Reading Panel, 2000). It is not surprising then that educators have taken seriously the charge to help children learn to read well and to enjoy reading widely. In keeping with the NRP’s emphasis on the use of research-based instructional strategies for helping younger students learn to read, two major factors have directed attention to reading problems experienced by older students: the No Child Left Behind (NCLB) accountability mandates and research on the growth trajectory of elementary, middle, and secondary students. Boling and Evans (2008) reported that “serious reading problems exist among adolescent learners, as evidenced by declining national reading scores and increased dropout rates” (p. 59).

Accountability mandates associated with NCLB have prompted schools to improve learning for students across the levels of elementary, middle and secondary schools (Edmunds et al., 2009). Yet, research on the growth trajectories in reading and math achievement over the past three decades indicates that students are gaining ground at the early primary school level, but holding and losing ground at the middle and high school levels (Lee, 2010). An important question to ask, then, is how the growth trajectory for younger students can be transferred to older students. The answer rests less with NCLB mandated testing of adolescent students than with instructional interventions.
In a climate where school accountability standards are being upgraded, it is understandable that more literacy programs for adolescents are emerging. With the emergence of adolescent literacy programs, more information is needed about the developmental sequence of adolescent students in general and about adolescents who struggle with reading in particular. One of the programs that has gained popularity because of its promise to elevate the literacy learning of older students who struggle with reading is the READ 180 program. Although the READ 180 program has several features that are informed by research, the research results on the efficacy of this program are quite mixed.

Some of the research shows that the READ 180 program accelerates the literacy learning of older students who struggle with reading (Gheen & Modarresi, 2009), while other studies show that the READ 180 program fails to accelerate literacy learning (Mims, Lowther, Strahl, & Nunnery, 2006). There are numerous explanations of the mixed research results; however, there is also ample evidence that more research on literacy interventions for struggling adolescent readers is needed (Edmunds et al., 2009). Many of the studies of literacy intervention for older students focus on comparisons of literacy gains for intervention and non-intervention groups, and most point to the importance of the teacher’s role in the implementation of the program to literacy gains. In hopes of providing additional information about the efficacy of the READ 180 interventions, this study focused on READ180 teachers’ perceptions of effective and ineffective aspects of the READ 180 program.
Statement of Problem

According to the National Assessment of Educational Progress (NAEP) (2000), literacy performance for middle and high school students has remained low over the past three decades, revealing that nearly 70% of students scored below proficiency in reading achievement. The students who perform below grade level in reading and writing are at risk for failure in all content subjects, and ultimately for dropping out of school (Sternberg, Kaplan, & Borck, 2007). High failure rates leave middle-school students ill-prepared for high school and high school students without the advanced reading and writing skills required for career and college success.

Many reading programs have been developed with the promise of increasing student reading proficiency levels in one academic year, including computer-assisted instruction (CAI) programs. CAI programs marketed for older struggling readers such as Lexia Strategies for Older Students (Lexia S.O.S.) (Lexia Learning, 2011) and Reading Plus (Reading Plus, 2007) indicate that their programs utilize research-based strategies and technology integration, making them extremely attractive to those who are required to use research-based instructional strategies. As federal and state funds become more scarce, the cost of these programs are becoming higher and higher. No longer can school districts afford to invest funds through trial and error on programs that lack efficacy. READ 180 is a CAI reading program for older struggling readers. Research has shown mixed results regarding Scholastic’s promise that older struggling readers who receive READ 180 instruction will gain one to two grade
levels in reading in one academic year. For example, the Gheen and Modarresi (2009) study showed some achievement for READ 180 students, while other studies showed inconclusive results such as the Kokkinis (2006) study. Although there is evidence that some teachers see their students gain two to three reading levels in one academic year, other teachers have not attained the same results. There is clearly a need for more research on this topic. This study was intended to address that need, thereby adding to the growing body of research on computer-aided support for literacy learning. More specifically, this study examined the views of a group of READ 180 teachers regarding a variety of aspects of the efficacy of the READ 180 program.

Research Questions

To guide this study, four research questions were posed:

1. What are the relationships between selected demographic characteristics of READ 180 teachers and their students’ approximate grade-level gain in reading?

2. What is the relationship between teachers’ reported use of instructional practices and their students’ approximate grade-level gain in reading?

3. What is the relationship between teachers’ perceptions of READ 180’s potential for improving students’ literacy learning and their students’ approximate grade-level gain in reading?

4. What is the relationship between teachers’ perceptions of administrative support and their students’ approximate grade-level gain in reading?
Significance of the Study

The results of this study are of grave significance to READ 180 teachers and administrators. The results of this study provides information to assist teachers in selecting the types of delivery practices to use, adopt, modify, or avoid in order to improve the literacy learning of older students who struggle with reading. This study is also of significance to school administrators. The results of the study provide information that will be useful to school administrators in their selection of computer-assisted literacy programs, as well as, their selection of teachers to implement the READ 180 program or other computer-assisted instruction programs. Finally, the study is of significance to researchers, especially those who are looking for unanswered questions about literacy development for older students, as well as, those who have an interest in examining methodological procedures of studies that show significant differences in their findings about instructional procedures that work or do not work well for middle and high school students.

Limitations

The greatest limitation of this study was that the study depended largely on self-reporting. Like other studies that draw heavily on self-reporting, it is not possible to measure the dependability of participant responses. Another limitation is that the study was limited to: (a) only one indicator of student gain in reading, the Scholastic Reading Inventory scores; (b) the use of archived data; and (c) a small number of 43 eligible participants, of which, 30 completed surveys. Together, these factors limit the extent to which the results of this study
can be generalized to other populations. Extraneous variables such as the rate of student attendance, the rate of student mobility, and interruptions that may have occurred during the school day could not be controlled. However, to control for some of the variance in teacher experience, criteria for selecting participant were strictly followed. That is, all participants were READ 180 teachers who taught READ 180 for more than one year. Also, in collecting the data, the participants’ report of student gains were taken directly from the school district’s reported SRI gains from Scholastic Education Services End of Year Gains Analysis, rather than from the reports of participating teachers.

**Definition of Terms**

**Lexile.** A Lexile is a metric measurement to evaluate both reading ability and text difficulty. The Lexile Framework allows educators to forecast the level of comprehension a student will experience with a particular text, and to evaluate curriculum needs based on each student’s ability to comprehend the materials.

**READ 180 Software.** READ 180 Software refers to the installed program on READ 180 computers that assist students while they are working on the computers during one of the READ 180 rotations. It is referred to as computer-assisted instruction.

**Scholastic Reading Inventory (SRI).** SRI is the Scholastic Reading Inventory. All students in READ 180 take the SRI three times a year. The SRI gives every student a Lexile score that is averaged after the third SRI to give the students a Lexile again for the school year.
**Mean Lexile Gain.** The mean Lexile gain is the average gain that students earned on the SRI. This mean Lexile is also converted into an approximate grade-level gain. The mean Lexile gain is calculated by averaging every student’s gain from the first SRI to the last SRI.

**Approximate Grade-Level Gain.** The approximate grade level-gain is the conversion of the mean Lexile gain to an equivalent grade level.

**READ 180 Teacher.** A READ 180 teacher is operationally defined for this study as a teacher that teaches one or several READ 180 classes, participates in training on the READ 180 program, at least one READ 180 institute, workshop, and network meeting during the school year.

**Computer-Assisted Instruction (CAI).** CAI refers to instruction presented on a computer as support for learning, or in this case, literacy learning.

**Organization of the Study**

Chapter 1 frames the topics that are treated in this presentation of the study. Chapter 2 provides a review of research related to the areas investigated in this study: the needs of older students who struggle with reading; the effectiveness of instructional programs for older struggling readers; the effectiveness of literacy-based computer-assisted instructional programs; and the research on READ 180 programs. Chapter 3 presents a detailed accounting of the methods used in this study, including a description of the participants, the methods of collecting data, and the methods of analyzing data.
Chapter 4 presents the results of the study relevant to student gains and other key aspects of the study participants’ (teachers) responses: (a) characteristics of the teachers; (b) teachers’ reported use of instructional practices; (c) teachers’ perceptions of READ 180’s potential for improving students’ literacy learning; and (d) teachers’ perceptions and views of administrative support. Chapter 5 presents the conclusions of the study in relation to each of the research questions posed in this study, as well as, implications of the findings for teachers, administrators, and researchers.
Chapter 2: Review of Literature

The purpose of this chapter is to review literature on effective reading instruction for middle and high school students who struggle with reading. Special attention is given to research on the READ 180 program, the program that is the focus of the present study. The READ 180 program is designed to address the literacy needs of students in middle and high school who struggle with reading. The chapter begins with a discussion of the needs of older students who struggle with reading. It then moves to the topic of effective instruction for older students who struggle with reading. It ends with a chronological review of research relevant to the READ 180 program.

The Needs of Older Struggling Readers

According to Roberts, Torgesen, Boardman, and Scammacca (2008), one of the main reasons that older students struggle with reading is that their early reading instruction has been poor. They go on to note that if provided with additional sustained instruction in small groups, many will be able to approach the mastery of reading skills appropriate for their grade levels. Of course, the older and further behind the students are, the more intense and longer the specialized reading instruction needs to be. Focusing on evidence-based instructional practices, Roberts et al. set out to discover what can and should be done to support the needs of struggling readers in upper elementary, middle school, and high school. From the perspective of Roberts et al., the older student who struggles with reading needs systematic, long term instructional support that is delivered in small groups.
The National Reading Panel (2000) identified five areas essential to effective early reading instruction: (1) phonemic awareness, (2) phonics, (3) fluency, (4) vocabulary, and (5) comprehension. Many older struggling readers who have been exposed to strong early reading instruction continue to have problems with fluency, vocabulary, and comprehension, the cornerstones of late reading instruction. There is emerging evidence that individual differences in the motivation to read for understanding play an important role in the development of comprehension skills, the major focus of instruction for older struggling readers (Guthrie & Humenick, 2004). Thus, Roberts et al. adjusted the NRP’s essential reading areas for earlier readers to represent five essential areas of needs for older struggling readers: (1) word study, (2) fluency, (3) vocabulary, (4) comprehension, and (5) motivation.

Word Study, the first of the essential elements of reading for older readers includes morphology, the analysis of the meaningful parts of the words such as prefixes, suffixes, inflectional endings, and roots, orthography, the spelling patterns of English, and structural features that are associated with predictable speech patterns (Roberts et al., 2008). During word study, students are taught to divide difficult words into smaller familiar units, either syllables or morphemes. They use their prior knowledge of morphemes and syllables, the smaller chunks of words, to identify syllable types and divide words into morphemes, both of which enable readers to decode multi-syllabic words by blending the parts of the word together. Although word study instruction is useful, it is not sufficient by itself to address the needs of older students who struggle with reading.
The second of the five essential skill areas that older readers need to understand is fluency. Fluency, which includes accuracy in identifying words in text, is important to comprehension. Begany et al. (2010) explained the importance of fluency measures that affect elementary students and later affect older students: Reading fluency is a critical component of effective reading instruction for students of early elementary age. However, national data suggest 40% of U.S. fourth-grade students are non-fluent readers. Implementing evidence-based, time efficient, and procedurally standardized instructional strategies may help address the problem (p. 137). Although fluency does not directly enhance comprehension, it can be an indicator of how well a text is comprehended. As such, fluency plays a facilitative role in the reading of older students. Fluent readers are able to recognize words without having to stop to decode, which can be a laborious task. An older student who struggles with reading needs to be provided practice with reading text, which in turn, helps them develop automaticity in decoding words and aids the comprehension of texts. The older student who struggles with reading needs to develop fluency skills, as well as, expand their vocabulary knowledge.

Vocabulary, the third essential area for instruction of older students, focuses on understanding the meaning of words, especially those that are likely to be encountered across a variety of subjects. Beck, McKeown, and Kucan (2002) suggest that there are three tiers of words: Tier one words are those most familiar to students from everyday speech. Tier two words are those that are used in special ways across academic subjects. Tier three words are those used
specifically in different academic subjects. Beck et al. assert that practitioners should give special attention to Tier two words that appear frequently in different subject areas. Direct instruction of Tier two words is widely offered as the most promising means of addressing the needs of older students who struggle with reading, followed by Tier three words.

Comprehension is the fourth essential skill area needed by older readers. Some of the ways that instruction can address the comprehension needs of older students are by activating prior knowledge, assisting with previewing texts for both external and internal organizational cues, using graphic organizers for visual representations, summarizing, and using fix-up strategies to help students understand when comprehension fails and how to fix comprehension failures. 

According to the National Reading Panel (2000), reading comprehension is very important to the development of reading skills and therefore to students’ ability to obtain an education. By providing practice, feedback, and scaffolding activities, teachers can help students learn how to comprehend text in a systematic way. Comprehension strategies can be taught in combination or individually if students have adequate support and practice opportunities. Small-group instruction can facilitate acquisition of specific strategies. Older students who struggle with reading need instruction and support to help them learn which strategies to use, when to use them, and why.

Motivation, the fifth essential instructional area for older students, focuses on making reading enjoyable. Research shows that struggling readers typically lack motivation (Morgan & Fuchs, 2007). Students who are not interested or
engaged in the text are less likely to put forth the effort needed to comprehend texts deeply. Practitioners must find ways to motivate and engage struggling readers. Practitioners can engage students in several ways: provide interesting content goals for reading, support student independence in reading, provide interesting text, and increase social interaction related to reading. Motivated students will read, comprehend deeply, and ultimately become more proficient readers. Lenters (2006) described how resistant readers eventually become struggling readers. Lenters believed that one way of helping students find their inner motivation is by the teacher showing them that there are many incentives for reading. Lenters stated that “for struggling readers this connection may be vital as protection from the debilitating effects of giving up on reading altogether” (p. 142). It can be assumed that the needs of older students who struggle with reading are varied and potentially extensive, and could include one or any combination of word study, fluency, vocabulary, and comprehension with motivation being important to all areas of instruction.

**Instructional Programs in Reading**

According to Cantrell, Almasi, Carter, Rintamaa, and Madden (2010), research on the effectiveness of reading interventions for adolescents has shown evidence of being beneficial. Studies of effective programs for struggling adolescent readers have been conducted from a variety of perspectives: mixed-method models that include whole-group instruction, small-group instruction, and computer-assisted individualized learning. Slavin, Cheung, Groff, and Lake (2008) added that the largest effects were for instructional-process programs that
included cooperative learning to focus on changing teacher and student behaviors during daily lessons.

A study organized by the U.S. Department of Education’s (ED) Office of Vocational and Adult Education (OVAE) was conducted during the 2005-2006 school year. The purpose of the study was to discover the impact that two interventions had on ninth-grade students’ reading comprehension skills through the end of their ninth-grade year. The Enhance Reading Opportunity Study (ERO) investigated the effectiveness of two intervention programs, Reading Apprenticeship Academic Literacy and Xtreme Reading. Both programs focused instruction in the following areas: (1) student motivation and engagement; (2) reading fluency; (3) vocabulary; (4) comprehension; (5) phonics and phonemic awareness; and (6) writing. Thirty-four high schools in 10 school districts with 2,916 students and 34 teachers were included in the study. Teachers were trained by the developers of each ERO program in a five-day summer training institute. They also received a minimum of two coaching visits during the year.

Student participation in the study was based on reading comprehension scores that were between two and five years below grade level. Baseline scores indicated that students were reading between fourth-and seventh-grade levels. Students that met the criterion were randomly assigned to use either the Reading Apprenticeship Academic Literacy program or the Xtreme Reading program. Approximately 55% of the study participants were enrolled in one of the two programs; the other students made up the control group and were enrolled in various elective courses. Students were given a reading comprehension test and
survey at the beginning and end of ninth grade. The test used to measure comprehension was the Group Reading Assessment and Diagnostic Examination (GRADE). Classroom observations were used to measure implementation fidelity. Classes accommodated between 10 and 15 students. Classes were designed to meet 45 minutes every day or 75 to 90 minutes every other day. Most classes began six weeks into the school year. Eleven schools used the Reading Apprenticeship Academic Literacy and 13 used Xtreme Reading.

One of the key findings of the study was that on average, the supplemental literacy programs improved student reading comprehension test scores in all participating schools; however, 76% of the students were still reading two or more years below grade level at the end of ninth grade. The impacts on reading comprehension were larger for the 15 schools where (1) the ERO programs began within six weeks of the start of the school year and (2) implementation was classified as moderately or well aligned with the program model as compared with impacts for the schools where at least one dimension was not met. Challenges of the study were specifically discussed. Nineteen of the 34 schools were problematic because of poorly aligned implementation fidelity or because they started the interventions late in the year. Seven high schools experienced poorly aligned implementation, although they started within the first six weeks of school. Thus, findings revealed that the ERO programs helped improve student reading comprehension test scores. Reading Apprenticeship Academic Literacy includes small groups. In Reading

15
Apprenticeship Academic Literacy, students collaborate in small groups to read, help each other solve reading problems, and debrief their work together. Small groups are also used in metacognitive conversation for students to share their reading processes. Xtreme Reading includes a broad continuum of literacy instruction provisions of which intensive small-group literacy instruction for those students most deficient in literacy skills.

Small-group instruction is a method proven to help raise student achievement (Alexander, 1979; Slavin, 1996). Burnette (1999) demonstrated that small-group reading instruction is more effective than whole-group instruction, which means that students benefit more from working in smaller groups than in larger groups or whole class when learning to read. Small-group instruction has a powerful effect in improving students’ reading abilities (Taylor, Pearson, Clark, & Walpole, 2000).

Tyner (2004) comprehensively elaborated on the small-group construct within the context of a differentiated model for beginning and struggling readers. Tyner’s Small-Group Differentiated Model includes students grouped according to reading and word study levels and the use of numerous leveled books (Tyner, 2009). A critical component of a comprehensive reading model is small-group, differentiated reading instruction. Small groups should be used for initial instruction, as well as, reading intervention. Struggling readers need more time in a smaller instructional group than other students (Tyner, 2009).

In addition to small-group instruction, implementation of computer-assisted instruction (CAI) has been found to enhance student achievement;
however, again the research results are mixed. Even computer-assisted instruction designed to provide drills, gives students the opportunity for remediating skills that have not been mastered (West & Graham, 2005). Multimedia software is designed to accommodate a variety of learning styles, and videodiscs strengthen basic skills.

**Computer-Assisted Instruction**

A computer-assisted literacy program that addresses many of the five areas of need of older struggling readers discussed above is the Learning Strategies Curriculum (LSC). LCS is an intense supplemental reading program that emphasizes comprehension and strategy use. It was created specifically for struggling adolescent readers. The LSC program was designed to develop adolescent students’ abilities to use multiple strategies flexibly, in particular, capacities in the process of word identification, visual imagery, self-questioning, vocabulary, paraphrasing, and sentence writing.

In their study of LSC, Cantrell et al. (2010) focused on the cognitive reading development of struggling adolescent readers in sixth and ninth grades who participated in the LSC program for one year. The purpose of the study was to investigate the impact of LSC on adolescents’ reading comprehension.

Participants in the LSC study by Cantrell et al. (2010) were 25 teachers and 655 students (302 sixth graders and 353 ninth grades). Participants were selected based on their performance on the Group Reading and Diagnostic Evaluation (GRADE). All students in the schools were provided whole-group instruction, but only randomly selected groups of struggling readers received the
targeted intervention. As a supplement to the regular school day, the LSC students received an extra 50-60 minutes per day over the course of a year. Twenty-four of the 25 teachers received intervention training from a certified LSC professional development specialist. Teachers received training on two strategies during the summer prior to the start of the school year, and in six half-day sessions across the school year, they were taught the other strategies.

The study used a pre-post test design. The students were given a pre-test. During instruction, students received feedback from the teachers. Verbal commitments were made by the students and teachers to use the strategies. Lessons often included explicit focus on integrating two or more strategies. A Metacognitive Awareness of Reading Strategies Inventory (MARSI) was used as a student self-report measure designed specifically to assess middle and high school students’ perceived use of reading strategies during the academic year. Classroom observations of the intervention were conducted by research assistants trained to recognize the six LSC strategies and eight stages of the LCS intervention. Teacher interviews served as a secondary data source to gain information about the lesson and other aspects of the use of the strategies; however, data from the interviews were not formally analyzed.

The results of the study by Cantrell et al. (2010) were mixed. The results indicated that the LSC intervention had a statistically significant positive effect on sixth grade students’ reading comprehension over the course of a year. Students who were not in special education achieved higher outcomes than students who were in special education. The intervention had no significant
impact on ninth grade students’ reading comprehension, nor on their reported use of strategies over the course of a year. Accounting partially for these mixed results, according to the researchers, was the fact that sixth-grade teachers had more years of teaching, higher education levels, and more reading certificates than the ninth-grade teachers. Regarding training, the researchers pointed out that to become an effective teacher of the strategies was a lengthy process and that teachers may need years of experience to effectively implement the strategies in this program with confidence. The researchers suggested that while motivation was not a specific variable of the study, it is important to address issues of motivation and engagement when providing reading interventions for adolescent struggling readers. Some of the same factors can be seen in computer-assisted instructional programs.

Macaruso and Rodman (2009) conducted a study in St. George, Utah to explore the possibility that a phonics-based computer-assisted instruction (CAI) program may help struggling older readers. Lexia Strategies for Older Students (Lexia S.O.S) is a computer-assisted instruction program designed to advance word identification skills in older readers. The early levels of Lexia S.O.S. focus on the application of specific phonological awareness and phonics skills. Advanced levels focus on morphological units and Latin-Greek roots. Students advance in levels as they master the previous levels.

The study by Macaruso and Rodman (2009) examined the benefits of Lexia S.O.S. The study was conducted in a middle school using three classes. One teacher and 42 students in grades 6 and 7 participated in the study. Criteria
for participation in the computer-assisted instruction program were low scores on the Developmental Reading Assessment and teacher referrals. The teacher randomly selected two classes as the treatment group; the other class was designated as the control group, resulting in 27 in the treatment group and 15 in the control group. The treatment group received instruction in Lexia S.O.S. Instruction in Lexia S.O.S. occurred two-three times a week for 20-30 minutes. The control group received instruction in the core curriculum program, Language, without the benefit of Lexia S.O.S.

Results revealed that CAI program can be beneficial in strengthening the decoding skills of older, struggling readers. Although the pretest means showed that both groups had limitations in reading, and both groups made gains from the pre-test to the post-test on the majority of subtests. However, on the word-attack and letter-word recognition subtests, students in the treatment group showed significantly larger gains than those in the control group. The students who received lower pretest scores made greater gains than students with higher pretest scores. Overall, the CAI program was beneficial in helping older struggling readers.

Miami-Dade County Public Schools in conjunction with Reading Plus (2007) conducted a study of Reading Plus in two regions of the Miami-Dade County Public Schools system. Reading Plus is a CAI program that provides foundational skill building activities along with structured silent reading practice. Features of the program include matching text readability to each student’s reading level, matching sustained reading time to each student’s attention span,
frequent exposure to Tier II words, and differentiating instruction. A placement test was used to identify appropriate instructional activities.

The purpose of the Miami-Dade study was to determine the relationship between student participation in the Reading Plus intervention program and student achievement on the Florida Comprehensive Assessment Test (FCAT) in Regions II and III of the school district. Two other purposes of the study were to determine the effectiveness of the program for diverse student populations and to determine directions for future deployment of the program. The study was conducted in 98 schools with 9,531 in the intervention group and 19,196 students in the control group, students not receiving Reading Plus. Only students in grades 5-9 who scored non-proficient on the 2006 Reading portion of the FCAT were assigned to the intervention group. Scores on the Reading portion of the 2006 and the 2007 FCAT were used to compare improvements in reading proficiency. Students in the intervention group were scheduled to use Reading Plus for either two 45 minute sessions per week or three 30 minutes sessions per week. Most of those in the control group received instruction in either READ 180 or the Renaissance Learning’s Accelerated Reader program.

The Miami-Dade study found that students who participated in the Reading Plus intervention program made statistically significantly greater learning gains than the non-participants, regardless of grade level. Specifically, more than 40% of participating students who scored the lowest level (achievement Level 1) on the 2006 FCAT improved one or more achievement levels on the 2007 FCAT. Conversely, only 23% of non-intervention students
who scored at achievement Level 1 on FCAT in 2006 improved one or more achievement levels.

Most of the studies examined above were designed to determine if student gains were higher for students participating in a CAI intervention than for students not participating in a CAI intervention program. Results were mixed: some studies indicated that CAI interventions yielded higher gains than non-CAI interventions, while others indicated no significant differences in the performance of students who received CAI interventions and those who did not receive CAI interventions. It is important that the distinguishing difference between students receiving CAI interventions was not the use or non-use of CAI, but the experience and certification of the teachers. Strikingly, the research methods used in the studies discussed above varied considerably. We turn next to research conducted on the READ 180 program, the CAI program that was investigated in the present study.

The READ 180 Program

READ 180 began its implementation in 1999, yet independent research on the program remains scarce. According to Wu and Coady (2010), not all the assertions regarding the efficacy of READ 180 by Scholastic are based on empirical research. Indeed much of the published research on READ 180 is evaluative in nature and focus largely on aspects of claims made about the impact of the program on student learning and READ 180 implementation components and procedures (Shawgo, 2005). Findings of the research that have been reported are, at best, mixed. This discussion of READ 180 begins with a
description of the READ 180 program, followed by a detailed description of some of the research conducted over the years on the READ 180 program.

**Description of READ 180.** READ 180 is a computer-assisted literacy program designed to raise the reading level and test scores of struggling readers in grades 4 through 12. For struggling readers, the inability to read and write results in other problems such as lack of prerequisite skills to achieve in other content areas, defiance, avoidance, and failure. READ 180 uses a mixed-method approach (Slavin et al., 2008) to literacy instruction, and is designed to help struggling readers improve their word reading efficiency, reading comprehension, vocabulary, and oral reading fluency. The mixed-method that READ 180 uses includes technology integration, which allows students to work on their ability levels, leveled (self-selected) independent reading materials, and differentiated small-group instruction. This program purports to answer the questions of what educators can do to help older struggling readers.

The READ 180 program uses a comprehensive literacy approach to reading instruction. The interventions focus mainly on vocabulary development, comprehension skills, and fluency skills. It is also a CAI program that provides students with opportunities to use the computer as an instrument for daily reading instruction. READ 180 classes are scheduled for 90 minutes per day. The 90-minute time period consists of a 20-minute block of whole-group direct instruction and a 60-minute rotation pattern. During the rotations, students spend 20 minutes in small-group direct instruction, 20 minutes in modeled and independent reading of leveled books, and 20 minutes on computers
(individualized instruction) where they use the READ 180 software. The last 10 minutes are set aside for summary and wrap-up activities.

Instructional formats include Whole-Group Direct Instruction, Small-Group Direct Instruction, Individualized Instruction and Independent and Modeled Reading, READ 180 Software (individualized CAI), and Wrap-Up. Whole-Group instruction happens during the first 20 minutes of the class period. During this time, students are provided with instruction from their READ 180 materials and multimedia presentations such as videos that support lessons in the READ 180 materials. In Small-Group Direct Instruction students are grouped by abilities, and the teacher differentiates instruction by using the data about the students to make decisions about information to introduce, review, and re-teach. The teacher also uses appropriate instructional strategies provided in the rBook Teacher’s Edition, rBook Flex Teacher’s Edition, Resource for Differentiated Instruction, and other resources provided by Scholastic that have potential to increase student achievement in reading. During Individualized Instruction, students use the READ 180 computer software and work independently on topics generated by the READ 180 software. For each topic, the student works in several zones: reading, word (vocabulary), spelling, and/or success zones. By interacting with the Software, students are expected to build background knowledge, develop and practice word recognition and reading fluency, build vocabulary, develop and apply comprehension strategies, and develop and apply spelling and proofreading skills.
During Modeled and Independent Reading, students independently read a book. Students have several books to choose from, but are encouraged to choose books on their independent reading level, as indicated by their Lexile score. During or after reading, students complete Quick Writes (written comprehension exercises) or summaries of books using graphic organizers or writing prompts. The shortest period of time is during Wrap-Up. This time reinforces the idea of the classroom as a community. A brief review is conducted and/or a preview for the next session, or homework is assigned. Students follow the same rotations every day.

The READ 180 program uses a combination of screening, progress monitoring, and outcomes assessments. In response to struggling readers need for intensive, individualized instruction to address their unique reading problems, the Lexile scores are generated based on the results from the electronic Scholastic Reading Inventory (SRI). The idea here is to allow students to use the computer as a tool to help them move towards reading levels appropriate to their grade placement. Based on the results of the SRI, students are placed automatically in one of four reading levels.

It is easy to see why the READ 180 program is appealing to schools. One could say that READ 180 is widely accepted as a micro panacea intervention for older struggling readers. According to the Scholastic, Inc. website, the program has been purchased by over 7,000 schools in the United States (Scholastic, 2009). As early as 2008, Slavin et al. pointed out that there was a dearth of rigorous studies of READ 180 by independent evaluators. A chronological
description of READ 180 research will reveal what has been learned over time about READ 180.

**READ 180 Research.** During the 2004-2005 school year, research on READ 180 was conducted by Southard, Tozoglu, and Dean (2005) in Florida’s Leon County School (LCS). The purpose of the study was to examine how READ 180 was used in schools, resource barriers and successes, and the reading progress of students who received READ 180 instruction. Five schools were included in the study: three middle schools, and two high schools, covering grades 6, 7, 8, and 10. Eight teachers and 233 students participated in the study. A criterion for student participation in READ 180 program was a low score on the Florida Comprehensive Achievement Test (FCAT). The data sources for the study included teachers’ and administrators’ responses to surveys and focus group interviews. FCAT reading scores from 2003-2004 were compared to those for 2004-2005. From the data, the reading progress of 8th and 10th grade students participating in READ 180 was compared to the reading progress of 8th and 10th graders who did not participate in READ 180.

One major finding of the LCS study (Southard et al., 2005) was that 55% of the students met Scholastic’s criteria that students are expected to grow approximately 75-100 Lexiles per year. Secondly, although students showed some growth according to Scholastic’s criteria, there was not a statistically significant gain in the mean scores of the READ 180 eighth graders. In contrast, the gains for the non-READ 180 eighth and tenth graders were statistically
significant. Thirdly, results showed that implementation and students’ progress varied across schools.

Of special note, impediments to successful implementation were identified. Some technical problems occurred that prevented students from working with the technology effectively. Many teachers did not have the proficiency level needed to fully implement the READ 180 program. High school teachers and one middle school teacher did not have prior experience using READ 180, making them novice users. An important challenge for the study itself was the limited amount of data available to researchers for cross-group comparisons, reflecting a problem with record-keeping. The majority of participating teachers felt that participation in the READ 180 program improved students’ motivation to learn, as well as, their classroom behaviors. Overall, teachers in the study had very positive perceptions of READ 180’s potential for enhancing literacy learning.

Based on the findings of the LCS study by Southard et al. (2005), it was suggested that schools closely follow the recommendation of Scholastic for implementing the program in order to get better results. It was also suggested that very low-level students should not be included in the READ 180 program, for students who lack basic decoding skills are not likely to be successful in the program. A third suggestion was that teachers use the Scholastic Management System (SMS) to monitor and record student progress regularly. To improve their implementation of the program, teachers were advised to participate in follow-up training in specific areas of READ 180. To reduce the number of
technical and logistical problems, schools needed more support from Scholastic and school administrators. In particular, it was recommended that Scholastic and school administrators make equipment and resources available to teachers on site and on demand.

During the 2005-2006 school year, Kokkinis’ (2006) conducted research in Charleston County School District (CCSD) on the READ 180 program. The purpose of the study was to examine implementation practices and student outcomes resulting from using the READ 180 program. This study also sought to identify best practices and common challenges associated with READ 180.

Fourteen schools participated in the CCSD study (Kokkinis, 2006): 3 elementary schools, 10 middle schools, and 1 high school represented by 20 teachers and 422 students. All teachers had received some formal training from Scholastic and nearly all teachers had received the recommended two days of training. To ensure that students had enough time to demonstrate growth, and teachers had enough time using READ 180 to respond about utilization experiences, this evaluation study was limited to schools that had used READ 180 at the start of the 2005-2006 school year. The data collection procedures included classroom observations, teacher responses to a survey, program usage patterns, a review of student performance on the Scholastic Reading Inventory (SRI), observation summaries, and external data such as state standardized test scores.

The observation summaries from the CCSD study (Kokkinis, 2006) indicated that more than half of the teachers were not effectively implementing all
components of READ 180. Second, teachers with academic preparation in reading instruction felt more confident implementing several components of READ 180 than did teachers with limited or no preparation. Many teachers seemed ill prepared and "off-model," which made it extremely difficult to examine implementation practices. Some teachers used READ 180 materials, particularly the computer component of READ 180, to augment their reading instruction. In one middle school, students remained in READ 180 until they demonstrated enough growth to be moved back into the general reading class.

The findings of the CCSD study (Kokkinis, 2006) regarding READ 180 are similar to the findings of other schools districts across the country. Similar to other studies, strengths were the structured differentiated instruction, individualized instruction through small-group and CAI. Differentiated instruction and individualized instruction happened through CAI, as well as, small-group instruction. Common challenges for implementing READ 180 in detail were cited, such as a myriad of technical problems, misplaced students in the READ 180 program, lack of ongoing support from Scholastic, and the failure of teachers to utilize the READ 180 resources to create reports and to create flexible groups for small-group instruction. Given the numerous challenges, the study left many unanswered questions about how to implement the READ 180 program with fidelity. It is fair to say that the results of the CCSD study (Kokkinis, 2006) were inconclusive.

The Center for Research in Educational Policy (CREP) at the University of Memphis conducted an evaluation study of the effectiveness of READ 180 for
African American students in schools of the Little Rock (Arkansas) School District for the 2005-2006 school year (Mims et al., 2006). The study had three purposes: to assess the effects of READ 180 on improving the academic achievement of African American students, to examine READ 180’s implementation processes and practices, and to document the perceptions of students, teachers, principals, and district and school personnel involved with READ 180. Ten schools in Little Rock, Arkansas participated in the study, 5 middle and 5 high schools, grades 6 through 12. The participants included approximately 1,000 READ 180 students and 23 READ 180 teachers. This mixed-method study collected data using direct classroom observations, surveys, focus groups, interviews, and student academic achievement data.

The results of the study questioned the efficacy, its effectiveness and its impact on student literacy achievement, of the READ 180 program. Based on the findings of the study, the researchers concluded that the “preponderance of evidence suggests that the READ 180 program has not been effective in improving or remediating the academic achievement of African American students” (p. 5). In other words, the African American READ 180 students consistently scored lower on both the Iowa Test of Basic Skills and the school district’s Benchmark Literacy exam than African American students in the control group. Regarding READ 180’s implementation processes and practices, classroom observations results revealed that there was a low occurrence of teachers utilizing the fluency, vocabulary, text comprehension, or writing strategies recommended by Read 180. Only 62% of teachers substantially
adhered to the recommended 90-minute cycle of instruction. Regarding computer use, most African American students (15/17) used READ 180 software to work on reading comprehension, vocabulary, and spelling activities. All African American students demonstrated a high level of attention, interest, and engagement when using the READ 180 software, while non-African American students demonstrated slightly lower overall levels of attention, interest, and engagement.

In the CREP study (Mims et al., 2006), perceptions of students, teachers, principals, and district and school personnel of strengths, weaknesses, and needed improvements of the program varied for the different groups. Based on discussions with focus groups, READ 180 teachers felt that the program improved students’ literacy skills, quality of work, achievement and engagement in learning. All considered strengths of the program to be student motivation, the program’s support of progress and success, improvements in student reading, the repetition and rotation activities. Suggested improvement included reduced technical difficulties, increased class time, more user-friendly reports, and reduced class size. Importantly, all teachers wanted the READ 180 program to be continued. Students considered the following to be strengths of READ 180: increased time spent reading, improved reading skills, using the computer, and working in small groups. The majority of administrators indicated a positive overall impression of the potential of the READ 180 program to improve literacy.

The CREP study by Mims et al. (2006) suggested several modifications that would improve the effectiveness and efficacy of the READ 180 program.
Modifications included: a greater adherence to READ 180 guidelines, more and better use of student performance data to meet the individual needs of the students, and more READ 180 teachers able to implement the recommended literacy strategies in their classrooms. These suggestions mirror those of other studies of the READ 180 program. Like other studies, the need for further research was emphasized.

Research on READ 180 was conducted on Pinellas County Schools (2006) from elementary through high school. The purpose of the study was to investigate the level of implementation of the READ 180 program. To that end, the intention of the study was to provide formative information to administrators about implementation problems with the READ 180 program and suggestions for changes that would allow full implementation of the program in all the schools. Twenty-one elementary schools, 46 secondary schools, and 128 labs (READ 180 classrooms) were included in the study. The criteria for participation in READ 180 were reading scores at least two grade levels lower than their grade placement as measured by the Scholastic Reading Inventory and low scores on the Florida Comprehensive Assessment Test.

The data sources for the study were lab observations, interviews with principals, and responses to an online survey completed by all READ 180 teachers. The purpose of the principals’ interview was to gather information about principals’ perceptions, challenges, as well as, their overall contributions to their schools instructional program. The online survey provided information about teachers’ perceptions of the implementation level in each of their labs.
The findings of the Pinellas County Schools (2006) study revealed interesting issues regarding technology. First, many elementary school labs were not fully implemented and that there was some “encroachment” into the READ 180 program due to the Project Focus. Second, READ 180 software was considered an impediment to teachers fully implementing the program. Third, the labs were being used for retained students who were required to comply with a different reading model. As for secondary schools, the findings indicated that only a small number of secondary READ 180 classes were fully implemented. Similar to elementary, teacher interviews indicated that 90% of teachers said that their labs had issues with technology. Secondary teachers had issues with the placement of students. The researchers emphasized that the READ 180 program is not designed to be used as a discipline program.

In the principal interviews, elementary principals identified the following concerns regarding the implementation of the program: technology support, Project Focus, and scheduling. Secondary principals identified the following concerns regarding the implementation of the program: technology and technology related problems, obtaining qualified teachers, student placement and behavior and attendance issues. Also the majority of the principals identified the need to have a reading teacher as the READ 180 teacher, with additional skill sets in technology and classroom management skills. While secondary principals felt that since READ 180 was good for low-level readers who want to improve their reading, READ 180 may not be best for students who are extremely low readers. All principals agreed that there was an improvement in
reading ability for all those in the program. When principals were asked to give advice to other principals who are considering the program, they indicated that choosing the correct teacher was paramount, followed by technology and training.

Based on the findings of the Pinellas County Schools (2006) study, the following recommendations were offered for elementary schools: ensure adequate technical support; utilize READ 180 resources with students who are able to use the program; provide a mechanism for teachers to address deviations from the program; and ensure that READ 180 teachers are reading teachers. Recommendations for secondary were: ensure adequate technical support, reinforce the need to follow the READ 180 program structure; ensure that READ 180 teachers are reading teachers; ensure that students are being placed in the program according to their needs for the program; and transfer students out of the program that are consistently disruptive.

Problems with program implementation were specifically discussed. Technical problems occurred that prevented students from working with the technology effectively. Stakeholders such as school teachers, reading coaches, Title I facilitators, and the principals provided data. Also using Reading Coaches and Title I Facilitators to observe and collect data was a limitation. Another limitation was that the protocols from Scholastic were tailored to the needs of Pinellas County.

During the 2007-2008 school year, Charlotte-Mecklenburg Schools’ (CMS) Center for Research and Evaluation (CRE) (2008) conducted a study to
determine the efficacy of the implementation of the Read 180. The CMS (2008) study replicated the Pinellas County Schools (2006) study, discussed above. The purpose of the study was to determine whether classrooms with higher degrees of fidelity to the READ 180 model had greater gains in reading achievement than classes with low degrees of fidelity. Participants in the study were 5 teachers and 366 students from 1 middle school and 3 high schools. The areas assessed on the observation rubric were resources, facilities, support and instruction, assessment, and planning. The study found no statistically significant differences between READ 180 and non-READ 180 students. This study, revealed no significant change in the student Lexile scores across the 3 administration periods during the 2007-2008. The results across all high schools found no statistically significant differences in student achievement (as measured by End-of-Course scores) between READ 180 and non-READ 180 students. However, these results were inconclusive due to flawed procedure for implementing the READ 180 program in all of the schools studied, except one. Furthermore, this study mirrored many of the same fidelity issues as were found in the of the READ 180 program in Leon County Schools by Southard et al. (2005).

In 2009, a study conducted by Gheen and Modarresi (2009) examined the literacy achievement of low achieving middle schools students in the Montgomery County Public Schools (MCPS) in Maryland. The purpose of the study was to determine if there was a difference in the reading performance of a) students who were enrolled in READ 180 for 90 minutes with students enrolled in
READ 180 for fewer than 90 minutes, and b) students enrolled in READ 180 for 
90 minutes with students not enrolled in READ 180. All students were enrolled in 
grades 6, 7, and 8. A total of 714 students were enrolled in READ 180 for fewer 
than 90 minutes, and total of 3,481 students were not enrolled in READ 180. 
Fifty percent of the total group was randomly selected as the control group with 
the remaining participants serving as the experimental group. Student scale 
scores from the spring 2008 Measure of Academic Progress-Reading (MAP-R) 
and the Maryland School Assessment (MSA) were compared for each group. 

The MCPS study by Gheen and Modarresi (2009) found that overall 
students in READ 180 had slightly higher end-of-year reading scores than the 
non-READ 180 students. The largest average gains were found for students 
enrolled in READ 180 classes that met for the recommended 90 minutes daily. 
The study showed incremental results that favored students enrolled in READ 
180 classes. READ 180 students using the 90 minute implementation model and 
non-READ180 students had higher scores on the Maryland School Assessment 
than students in READ 180 fewer than 90 minutes daily. Overall, the results from 
this study were more favorable for READ 180 students than many other studies. 
Recommendations for strengthening the effectiveness of READ 180 were to 
polarize program enrollment for grade 6 students and identify ways to collect 
information on literacy achievement for students in grades 9 through 12.
Summary

The five essential areas that older struggling readers need for literacy success were identified: (1) word study, (2) fluency, (3) vocabulary, (4) comprehension, and (5) motivation. Several of the literacy programs reviewed addressed one or more of these areas of need. Studies of non-computer based literacy programs were most consistent in their identification of teacher knowledge and small-group instruction as areas that profoundly affect the literacy learning of older students who struggle with reading. Results of studies of computer-assisted instruction in literacy showed that that CAI programs in general tend to have a positive effect on the literacy performance of adolescent students who struggle with reading. The results of studies of READ 180 were mixed. In one study, READ 180 students outperformed their non-READ 180 counterparts. In other studies, non-READ 180 students outperformed their READ 180 counterparts. There was some consistency in the elements of READ 180 that were considered strengths and weaknesses. Consistent strengths were computer-assisted instruction and small-group instruction. Consistent weaknesses were technical problems and poor implementation for various reasons. There were also consistencies in the recommendations for improving READ 180: ensure technical support and ensure that READ 180 teachers receive sufficient professional development and are ready to teach READ 180. Collectively, the studies clearly indicate several areas that warrant further study: qualifications of teachers that teach older struggling readers and alignment of SRI score and state.
Chapter 3: Methodology

Context of Study

This study investigated factors that influence reading proficiency growth of struggling middle and high school readers as a result of their participation in a computer-assisted instruction (CAI) literacy program, READ 180. The CAI program used in this study was the READ 180 program, a literacy program that purports to increase the performance of struggling readers. As a measure of student performance, the study used archived data from the school district’s End of Year Gains Analysis for June 2010. The data were reported by Scholastic Education Services annually for the school districts that use the READ 180 program. The approximate grade-level gains were computed and reported for each school, including, Lexile scores, which were taken from the Scholastic Reading Inventory (SRI) tests. The SRI uses a common metric—a Lexile measure to evaluate both reading ability and text ability. Although there is not a direct translation from a specific Lexile measure to a specific grade level, approximate grade levels are provided for use in selecting the appropriate levels of books that students are assigned to read.

The participating teachers worked in a mid-south urban school district. Specifically, the study sought to determine how READ 180 teachers whose middle and high school students scored at or above the districts’ approximate grade-level in reading differed from teachers whose middle and high school students scored below the districts’ grade-level gain. The study compared teachers’ demographic characteristics, reported classroom practices, perceptions
of the READ 180 program’s potential on students’ literacy learning, and perceptions of administrative support of the READ 180 program with their students’ approximate grade-level gain in reading. Therefore, four research questions were posed:

1. What are the relationships between selected demographic characteristics of READ 180 teachers and their students’ approximate grade-level gain in reading?

2. What is the relationship between teachers’ reported use of instructional practices and their students’ approximate grade-level gain in reading?

3. What is the relationship between teachers’ perceptions of READ 180’s potential for improving students’ literacy learning and their students’ approximate grade-level gain in reading?

4. What is the relationship between teachers’ perceptions of administrative support and their students’ approximate grade-level gain in reading?

Participants

Participants for this study included 30 READ 180 teachers. Teachers were selected to participate in the study based on two criteria. First, participants had to be a returning READ 180 teacher. Second, teachers had to have taught during the 2009-2010 school year. In order to identify teachers that met the two criteria, the researcher obtained from Scholastic Education Services the names of schools with READ 180 classes in the 2009-2010 school year. The researcher called each school to ask if there were any READ 180 teachers returning for the 2010-2011 school year. All teachers that met the above criteria were invited to
participate in the study. Forty-three teachers met the criteria; however, 38 volunteered to participate. Of the 38 that volunteered to participate, 30 completed and returned the survey. As seen in Table 1, 60% of the teachers that completed the survey had students with an approximate grade-level gain at or above the districts’ approximate grade-level gain in reading. Of the teachers represented in the survey, 56.7% were 38 years old or older, 76.7% were African American, and 66% had 4 or fewer years of READ 180 teaching experience.

**Instrumentation**

The data set for this study consisted of the responses by 30 READ 180 teachers to a three-part READ 180 Teacher Survey (see Appendix B): Demographic Information elicited personal and professional characteristics; Part A elicited responses to classroom practices items on a likert scale; Part B elicited responses to READ 180 potential and administrative support items on a likert scale; and Part C consisted of constructed responses to questions posed about major factors represented in an open-ended response format. The survey was a modified version of the one used by the school district to assess the effectiveness of the READ 180 program. The modifications in the school district’s form represented salient factors found in research. The constructed responses were designed to assist in identifying factors that might be of importance to teachers; therefore, teachers were able to provide qualitative responses in the event that the desired responses were not listed on the survey. It was important that the survey elicited information about factors that represented both research, as well as, teachers’ practice-based experiences.
Table 1

*Description of Participants by Demographic Characteristics*

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>n</th>
<th>%</th>
</tr>
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<tbody>
<tr>
<td><strong>Student Achievement</strong></td>
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<td></td>
</tr>
<tr>
<td>At or above Norm</td>
<td>18</td>
<td>60.0</td>
</tr>
<tr>
<td>Below Norm</td>
<td>12</td>
<td>40.0</td>
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<tr>
<td><strong>Age</strong></td>
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<td></td>
</tr>
<tr>
<td>Thirty-eight or older</td>
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<td>56.7</td>
</tr>
<tr>
<td>Thirty-seven or younger</td>
<td>13</td>
<td>43.3</td>
</tr>
<tr>
<td><strong>Ethnic Group</strong></td>
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<td></td>
</tr>
<tr>
<td>African-American</td>
<td>23</td>
<td>76.7</td>
</tr>
<tr>
<td>Others</td>
<td>7</td>
<td>56.7</td>
</tr>
<tr>
<td><strong>Years of Teaching Experience</strong></td>
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<tr>
<td>Ten or fewer years</td>
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</tr>
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<td>More than ten years</td>
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<td>43.3</td>
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<tr>
<td><strong>Years of READ 180 Teaching Experience</strong></td>
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<td></td>
</tr>
<tr>
<td>Four or fewer years</td>
<td>20</td>
<td>66.7</td>
</tr>
<tr>
<td>Five or more years</td>
<td>10</td>
<td>33.3</td>
</tr>
</tbody>
</table>
Data Collection

All those who volunteered to participate were sent a consent form (see Appendix A), a survey form (see Appendix B), and a procedure form (see Appendix C). The approximate grade-level gain in READ 180 for the 2009-2010 school year was sent to teachers for their school so that they were able to accurately respond to the question about scores on the survey. To ensure anonymity, teachers were directed to complete the survey form and mail it to the chair of the dissertation committee, who then passed the information to the researcher. No teacher or school names were on the surveys.

Data Analyses

The study was designed to be a mixed quantitative/qualitative study because the survey required responses that yielded a numerical value, as well as, constructed responses. The constructed responses were analyzed to provide more detailed explanations of the quantitative results. To answer the first research question, teachers’ responses from the demographics section of the survey were compared to their students’ approximate grade-level gain in READ 180. A chi-square test of independence was used to determine whether there was a significant difference between the expected frequencies and the observed frequencies in one or more categories. This allowed the researcher to determine if there were statistically significant relationships between teachers’ demographic characteristics and their students’ approximate grade-level gain in reading relative to the district norm. To answer the second research question, which looked at relationships between teacher reported instructional practices and their
students’ approximate grade-level gain in reading, responses to the classroom practices section of the survey were compared to the teachers’ students’ approximate grade-level gain in READ 180. This allowed the researcher to determine if there were statistically significant relationships between the teachers’ overall reported instructional practices and their students’ approximate grade-level gain in reading. An independent t-test was used to compare the means between the two groups of teachers on continuous dependent variables.

Research question 3 addressed a possible relationship between teachers’ perceptions of READ 180’s potential for improving students’ literacy and their students’ approximate grade-level gain in reading. To answer research question 3, teachers’ responses to the question on the survey that asked about their perceptions of the READ 180 program’s potential for improving literacy learning was compared to students’ approximate grade-level gain. An independent t-test was used to compare the means between the two groups of teachers on the dependent variable. The statistical analysis helped to determine if there was a statistically significant relationship between the teachers’ perceptions of READ 180’s potential for improving literacy learning and students’ approximate grade-level gain in reading. The fourth question examined a relationship between teachers’ perceptions of administrative support and their students’ approximate grade-level gain in reading. To answer research question 4, an independent t-test was used to compare the means between the two groups of teachers on the dependent variable. The statistical analysis helped to determine if there was a statistically significant relationship between the teachers’ perceptions of
administrative support and their students’ approximate grade-level gain in reading. Responses to the four constructed response items on teachers’ perceptions of instructional practices and administrative support were analyzed and helped to determine if teachers’ perceptions of instructional practices and administrative support affected their students’ approximate grade-level gain in reading relative to the district norm.
Chapter 4: Findings

This study investigated teachers’ perceptions of their usage of READ 180 instructional practices, the efficacy of READ 180, and administrative support for READ 180. The study was guided by four research questions:

1. What are the relationships between selected demographic characteristics of READ 180 teachers and their students’ approximate grade-level gain in reading?

2. What is the relationship between teachers’ reported use of instructional practices and their students’ approximate grade-level gain in reading?

3. What is the relationship between teachers’ perceptions of READ 180’s potential for improving students’ literacy learning and their students’ approximate grade-level gain in reading?

4. What is the relationship between teachers’ perceptions of administrative support and their students’ approximate grade-level gain in reading?

This chapter presents the findings of the study including descriptive statistical analyses of the procedures, chi-square tests of independence, independent t-tests, and constructed responses as described in Chapter 3. This chapter is divided into five sections. Four of the five sections report findings relevant to the four research questions: Teacher Characteristics and Student Gains, Instructional Practices and Student Gains, Potential for Improving Student Learning and Student Gains, and Teachers’ Perceptions of Administrative Support and Student Gains.
Lastly, the fifth section, Teachers’ Open End Responses to Instructional Strategies and Administrative Support, describes the mediating variable cross-correlation. Although no statistical analysis was conducted, a manual cross-correlation of themes among the two groups of teachers was conducted by the researcher. This section presents the procedures and results used to determine the mediating effect, if any, of the constructed responses, teachers’ perceptions of instructional strategies and administrative support, in relation to their students’ approximate grade-level gain in reading. Several charts are presented and analyzed to determine if there is any substantial evidence that supports the statistical findings in the study. This section is qualitative in nature and elicited information on the instrument.

**Teacher Characteristics and Student Gains**

In response to the first research question, What are the relationships between selected demographic characteristics of READ 180 teachers and their students’ approximate grade-level gain in reading?, the findings in this section provide information about the relationships between teacher demographics and student gains.

The correlations were derived through the use of SPSS 14.0, including computation of the significance level after conducting a chi-square test. The chi-square test was used to determine whether there was a statistically significant difference between the expectant frequencies and observed frequencies in one or more categories. The categories were analyzed using the chi-square test of independence to show if there was a difference among the two groups of
teachers and the students’ approximate grade-level gain in reading relative to the
district norm. Specifically, the sample size, degrees of freedom, and effect size
are presented and discussed for statistically significant variables. The sample
size was defined as the number of scores (N); degrees of freedom was defined
as number of independent scores that go into the estimate minus the number of
parameters estimated as intermediate steps in the estimation of the parameter
itself \( \chi^2(1) \); and effect size (\( \phi \)) was defined as a measure of the strength of the
relationship between two variables in a statistical population, or a sample-based
estimate of that quantity.

To compare teacher demographics to student gains, a cross-tabulation of
frequencies was calculated for students’ grade-level gain scores and of the
teachers’ demographic characteristics: (a) students’ approximate grade-level
gain; (b) age; (c) ethnic group; (d) years of teaching experience; and (e) years of
READ 180 teaching experience. As shown in Table 2, results of the statistical
analyses revealed that there were statistically significant relationships between
selected demographic characteristics of READ 180 teachers and their students’
approximate grade-level gain in reading. Using a chi-square test, it was possible
to determine whether there was a significant difference between the expected
frequencies and the observed frequencies in one or more categories.
Table 2

*Comparison of Student Gains by Demographic Characteristics*

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>At or Above Norm</th>
<th>Below Norm</th>
<th>( \chi^2(1) )</th>
<th>( \phi )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( n )</td>
<td>%</td>
<td>( n )</td>
<td>%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thirty-eight or older</td>
<td>13</td>
<td>43.3</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Thirty-seven or younger</td>
<td>5</td>
<td>16.7</td>
<td>8</td>
<td>26.7</td>
</tr>
<tr>
<td><strong>Ethnic Group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>13</td>
<td>43.3</td>
<td>10</td>
<td>33.3</td>
</tr>
<tr>
<td>Others</td>
<td>5</td>
<td>16.7</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td><strong>Years of Teaching Experience</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ten or fewer years</td>
<td>10</td>
<td>33.3</td>
<td>7</td>
<td>23.3</td>
</tr>
<tr>
<td>More than ten years</td>
<td>8</td>
<td>26.7</td>
<td>5</td>
<td>16.7</td>
</tr>
<tr>
<td><strong>Years of READ 180 Teaching Experience</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Four or fewer years</td>
<td>9</td>
<td>30.0</td>
<td>11</td>
<td>36.7</td>
</tr>
<tr>
<td>Five or more years</td>
<td>9</td>
<td>30.0</td>
<td>1</td>
<td>3.3</td>
</tr>
</tbody>
</table>

\*\( p < .05 \).
Results revealed that teachers 38 years old or older had a higher frequency of students at or above the districts’ approximate grade-level gain in reading than their counterparts. Conversely, teachers 37 years old or younger had higher frequency of students below the districts’ approximate grade-level gain in reading than their counterparts. The significant results for age as it relates to students achievement was \( \chi^2(1) = 4.43, p < .05, (\phi) = 0.38 \). Concerning teacher age and student achievement, the chi-square value w/1 degree of freedom was 4.43. The result was statistically significant at .05 \( (p < .05) \). The effect size \((\phi)\) associated with this result was 0.38, indicating a moderate effect.

There was also a statistically significant difference in the years teachers taught READ 180. Teachers who taught READ 180 five or more years had a higher frequency of students at or above the districts’ approximate grade-level gain in reading than their counterparts. Conversely, teachers who taught READ 180 four or fewer years had a higher frequency of students below the districts’ grade-level gain in reading than their counterparts. The statistically significant results for years teachers taught READ 180 as it relates to student achievement was \( \chi^2(1) = 5.63, p < .05, (\phi) = 0.44 \). Concerning teacher years of READ 180 experience and student achievement, the chi-square value w/1 degree of freedom was 5.63. The result was statistically significant .05 \( (p < .05) \). The effect size \((\phi)\) associated with this result was 0.44, a moderate effect. The other two demographic categories, ethnic group and years of teaching, did not show any statistical significance differences between the groups of teachers; there was
no statistically significant difference in their students’ approximate grade-level gain in reading.

In sum, the findings regarding the relationship between teacher demographics and student gains were higher for teachers 38 years old and older and teachers who had taught Read 180 five or more years. Teachers in these two categories had a higher frequency of students at or above the districts’ approximate grade-level gain in reading than their counterparts.

**Instructional Practices and Student Gains**

To answer the second research question, What is the relationship between teachers’ reported use of instructional practices and their students’ approximate grade-level gain in reading?, a statistical analysis was conducted to determine the relationship of teachers’ reported use of instructional practices (classroom practices) and student gains. An independent t-test was used to compare the mean scores of teachers whose students scored at or above district norms to those of teachers whose students scored below the school district norms. The correlations were derived through the use of SPSS 14.0, including computation of the significance level after conducting an independent t-test. An independent t-test was used to compare the means between the two groups of teachers on continuous dependent variables of the instrument (READ 180 Teacher Survey) for classroom practices. The set of descriptive statistics derived via the independent t-test statistical analysis and includes the sample size, mean, standard deviation, and effect size are presented and discussed for variables with a robust effect size. Sample size was defined as the number of scores (N);
mean was defined as the sum of the scores divided by the number of scores (M); standard deviation (SD) was defined as the positive square root of the variance; and effect size (g) was defined as a measure of the strength of the relationship between two variables in a statistical population, or a sample-based estimate of that quantity.

As shown in Table 3, there was no statistically significant difference between teachers’ reported use of instructional practices and their students’ approximate grade-level gain in reading.
<table>
<thead>
<tr>
<th>Items</th>
<th>At/Above District Norm</th>
<th>Below District Norm</th>
<th>t</th>
<th>E.S. (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items</td>
<td>n</td>
<td>M</td>
<td>SD</td>
<td>n</td>
</tr>
<tr>
<td>1. Provide 20 minutes of whole-group instruction.</td>
<td>18</td>
<td>3.83</td>
<td>.514</td>
<td>12</td>
</tr>
<tr>
<td>2. Allow all students to participate in small-group instruction for 20 minutes.</td>
<td>18</td>
<td>3.89</td>
<td>.323</td>
<td>12</td>
</tr>
<tr>
<td>3. Differentiate instruction during small-group instruction.</td>
<td>18</td>
<td>3.67</td>
<td>.485</td>
<td>12</td>
</tr>
<tr>
<td>4. Provide 10 minutes for wrap-up at the end of the class.</td>
<td>17</td>
<td>3.41</td>
<td>.712</td>
<td>11</td>
</tr>
<tr>
<td>5. Allow all students to read independently for 20 minutes.</td>
<td>18</td>
<td>4.00</td>
<td>.000</td>
<td>11</td>
</tr>
<tr>
<td>6. Conference individually with all students about their progress in READ 180.</td>
<td>18</td>
<td>3.61</td>
<td>.608</td>
<td>12</td>
</tr>
<tr>
<td>7. Conference individually with all students about SRI procedures.</td>
<td>18</td>
<td>3.56</td>
<td>.705</td>
<td>11</td>
</tr>
</tbody>
</table>

(table continues)
Table 3 (con’d)
Comparison of Classroom Practices of Two Groups of Teachers

<table>
<thead>
<tr>
<th>Items</th>
<th>At/Above District Norm</th>
<th>Below District Norm</th>
<th>t</th>
<th>E.S. (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M</td>
<td>SD</td>
<td>n</td>
</tr>
<tr>
<td>8. Conference individually with all students about SRI results.</td>
<td>18</td>
<td>3.61</td>
<td>.608</td>
<td>12</td>
</tr>
<tr>
<td>9. Use video, audio, multimedia, and other computer-assisted</td>
<td>18</td>
<td>3.78</td>
<td>.548</td>
<td>12</td>
</tr>
<tr>
<td>instruction to enhance learning other than READ 180 materials.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale Mean (Item 1. to Item 9.)</td>
<td>18</td>
<td>3.71</td>
<td>.356</td>
<td>11</td>
</tr>
<tr>
<td>10. READ 180’s potential for improving students’ literacy learning</td>
<td>18</td>
<td>3.61</td>
<td>.502</td>
<td>12</td>
</tr>
<tr>
<td>11. The administrative support received for implementing the READ 180 program was</td>
<td>18</td>
<td>3.61</td>
<td>.608</td>
<td>12</td>
</tr>
</tbody>
</table>
Although there is no statistically significant difference in teachers’ reported use of instructional practices and their students’ approximate grade-level gain in reading, there was a robust effect size for items 4 and 5 and a less robust effect size was shown for item 9.

Item 4 revealed that teachers who reported that they provided 10 minutes for wrap-up at the end of the class period was more characteristic of the teachers with students’ approximate grade-level gain at or above the district’s approximate grade-level gain in reading than for teachers whose students’ scored below the norms for approximate grade-level gain. The effect size for item 4 as it relates to students achievement was E.S. (g) 0.53, indicating that there was more variance within the at or above group than any other item, which contributed to the effect size. The effect size for item 5, the use of independent reading, was more consistent for the group of teachers whose students scored at or above the grade-level norms than for teachers whose students’ scored below the norms for approximate grade-level gain. Teachers with students’ approximate grade-level gain at or above the district’s approximate grade-level gain in reading reported that they always allowed their students to read independently for 20 minutes. The effect size for item 5 as it relates to student achievement was E.S. (g) 0.67. Although item 9, the use of video, audio, multimedia, and other computer resources, had a less robust effect size than items 4 and 5, teachers whose students scored at or above district norms reported more consistent uses of technology-based support devices other than READ 180 than their counterparts.
Notice that the effect size for item 9 as it relates to student achievement was E.S. (g) 0.35.

In sum, then, the findings with regard to question 2, relationships between teachers’ reported uses of instructional practices are that no statistically significant relationships were found, but that teachers whose students scored at or above the district norms tended to be more consistent in their use of independent reading and technology-based supports than those whose students scored below district norms.

**Potential for Improving Student Learning and Student Gains**

To answer the third research question, What is the relationship between teachers’ perceptions of READ 180’s potential for improving students’ literacy learning and their students’ approximate grade-level gain in reading?, a statistical analysis was conducted for Read 180 potential, as identified by item 10 in Table 3. An independent t-test was used to compare the mean scores of the two groups of teachers on the dependent variable. As indicated in Table 3, there was no statistically significant difference between teachers’ perceptions of READ 180’s potential for improving students’ literacy learning and their students’ approximate grade-level gain in reading. Although there is no statistically significant difference between teachers’ perceptions of READ 180’s potential for improving students’ literacy learning and their students’ approximate grade-level gain in reading, there was a robust effect size for item 10.

Teachers whose students scored at or above the district norms tended to be more consistent than their counterparts in their perceptions that READ 180
had potential for improving students’ literacy learning. The effect size for item 10 as it relates to students achievement was $E.S. (g) 0.43$. Thus, the major finding was that while there was no statistically significant difference in the perceptions of teachers whose students scored at or above school district norms and those whose students scored below school district norms, there was a tendency for the teachers whose students scored at or above district norms to have more positive perceptions of the potential for READ 180 to affect student achievement than their counterparts.

**Teachers’ Perceptions of Administrative Support and Student Gains**

To answer the fourth research question, *What is the relationship between teachers’ perceptions of administrative support and their students’ approximate grade-level gain in reading?*, an independent $t$-test was used to compare the means of the teachers whose students scored at or above district norms and teachers whose students scored below the district norms. The correlations were derived through the use of SPSS 14.0, including computation of the significance level after conducting an independent $t$-test. The independent $t$-test was used to compare the mean scores between the two groups of teachers on the dependent variable. The descriptive statistics derived via the independent $t$-test statistical analysis and includes the sample size, mean, standard deviation, and effect size are presented and discussed for variables with a robust effect size.

As indicated in Table 3, there was no statistically significant difference between teachers’ perceptions of administrative support and their students’ approximate grade-level gain in reading. Although there was no statistically
significant difference between teachers’ perceptions of administrative support and their students’ approximate grade-level gain in reading, there was a robust effect size for item 11. Responses by teachers whose students scored at or above the district norms were more consistent than their counterparts. Teachers who reported more positive perceptions of administrative support were consistent among teachers with students’ approximate grade-level gain at or above the district’s approximate grade-level gain in reading. The effect size for item 11 as it relates to students’ achievement was E.S. (g) 0.43.

**Teachers’ Open End Responses to Instructional Strategies and Administrative Support**

To further examine participants’ perceptions about instructional strategies and administrative support, teachers were asked to respond to four queries: (1) list two instructional strategies that you feel contribute most to students’ literacy learning with READ 180; (2) list the two instructional strategies that you feel contribute least to students’ literacy learning with READ 180; (3) list two most helpful ways that your school administrative staff supported you in the implementation of the READ 180 program; and (4) list at least two ways that your administrative staff could better support the effective implementation of the READ 180 program. Qualitative analyses were conducted to determine how teachers responded for the above requests. By coding the responses by topic, it was possible to identify recurring themes in the responses of the two groups of teachers. Themes were considered common if teachers from more than one group listed them in their constructed responses. The frequencies of recurring
themes were then computed to show the high frequency themes for each group and for the total group.

Differences emerged that were not revealed through previous statistical analysis. Eight common themes emerged for instructional strategies that contributed most to students' literacy learning: small-group instruction, computer software/technology, oral cloze, vocabulary instruction, think-pair-share, differentiated instruction, graphic organizers, and sentence starters. Four common themes emerged for instructional strategies that contributed least to students' literacy learning: independent reading, whole-group instruction, wrap-up, and audio tapes. Five common themes emerged for ways administrative staff was most helpful: provided required supplies, appropriate scheduling, appropriate selection of students, allowed teacher input, and allowed few interruptions. Four themes emerged for how administrative staff could better support the READ 180 program: appropriate selection of students/monitoring, provide required supplies, professional development for administrative staff and others, and only teach READ 180 for 90 minutes.

As shown in Table 4, the high frequency patterns for the total group were small-group instruction, computer-assisted instruction, and oral cloze, respectively. Noteworthy is the evidence that 50% of the 30 teachers listed small-group instruction as one of the instructional strategies that contributed most to students' literacy learning with READ 180. The two groups varied in their identification of instructional practices that contributed most to students' literacy learning. Those teachers whose students scored in the at or above district
norms identified small-group instruction, oral cloze, and vocabulary instruction as the instructional patterns they considered to have the greatest impact on students' literacy development. On the other hand, teachers of students who scored below district norms overwhelming considered small-group instruction (92%) and computer-assisted instruction (58%) as the instructional strategies that most influence students' literacy learning. These mixed results are due partially to the small number of responses by teachers in the at or above district norms group with a range of 1-4 responses to the questions, as compared to a range of 1-11 responses by the below district norms group. The differences in the range of responses make it difficult to arrive at a fair comparison of the views of the two groups. Therefore, based on responses by the total group, it is fair to say that the top strategies considered to have the greatest influence on students' literacy learning are small-group instruction and computer-assisted instruction.
Table 5 presents the results for instructional strategies considered to have the least effect on students’ literacy learning. Only five common themes emerged. Of the five, independent reading was considered to have the least influence on student growth by the total group, as well as, by individual groups. Twenty-six percent of the 30 teachers that responded listed independent reading as one of the instructional strategies that contributed least to students’ literacy learning with READ 180. Forty-two percent of the teachers with students in the below group and 16% of teachers with students in the at or above group listed independent reading as one of the instructional strategies that contributed least to students’ literacy learning with READ 180. Again, the range of responses by
both was quite small, 1-3 for the teachers in the at or above district norms group and 1-5 for teachers in the below district norms group.

Table 5

*Comparison of Open Ended Responses on Least Useful Classroom Strategies by Two Groups of Teachers*

<table>
<thead>
<tr>
<th>Instructional Strategies</th>
<th>At or Above n</th>
<th>%</th>
<th>Below n</th>
<th>%</th>
<th>Total n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Reading</td>
<td>3</td>
<td>16.0</td>
<td>5</td>
<td>42.0</td>
<td>8</td>
<td>26.0</td>
</tr>
<tr>
<td>Whole-Group Instruction</td>
<td>2</td>
<td>11.0</td>
<td>1</td>
<td>11.0</td>
<td>3</td>
<td>10.0</td>
</tr>
<tr>
<td>Wrap-Up</td>
<td>1</td>
<td>.05</td>
<td>1</td>
<td>11.0</td>
<td>2</td>
<td>.06</td>
</tr>
<tr>
<td>Audio Tapes</td>
<td>1</td>
<td>.05</td>
<td>1</td>
<td>11.0</td>
<td>2</td>
<td>.06</td>
</tr>
</tbody>
</table>

In response to the open-ended questions about most and least valued types of administrative support, responses for the total group indicated that the most highly valued support came in two areas - provided supplies (50%) and scheduling (30%). Differences between the two groups were that for those whose students scored at or above district norms, appropriate scheduling was considered the most valued administrative support (50%), followed by provided supplies (33%), whereas both types of support were equally valued by the group whose students scored below district norms (50% for each). See Table 6 for results of these analyses. Again, though, the small range of responses, 1-6 for the at or above district norms group and 1-7 for the below district norms group.
makes it difficult to clearly differentiate between the responses of the two groups. However, as shown in Table 6, teachers that responded valued administrative support with supplies and with scheduling equally.

Table 6
Comparison of Open-Ended Responses on Most Helpful Administrative Support

<table>
<thead>
<tr>
<th>Areas of Support</th>
<th>At or Above</th>
<th>Below</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Provided Required Supplies</td>
<td>6</td>
<td>33.0</td>
<td>5</td>
</tr>
<tr>
<td>Appropriate Scheduling</td>
<td>9</td>
<td>50.0</td>
<td>2</td>
</tr>
<tr>
<td>Appropriate Selection of Students</td>
<td>2</td>
<td>11.0</td>
<td>4</td>
</tr>
<tr>
<td>Allowed Teacher Input</td>
<td>3</td>
<td>16.0</td>
<td>1</td>
</tr>
<tr>
<td>Allowed Few Interruptions</td>
<td>2</td>
<td>11.0</td>
<td>2</td>
</tr>
</tbody>
</table>

In response to the query about ways that administrative support could have better supported the effective implementation of READ 180 the combined responses of teachers identified appropriate selection of students/monitoring as the most neglected area of support (30%), followed by provisions of supplies (26%), and followed by professional development of administrative staff (23%). While responses by teachers in the below district norms group were about the same for each of the areas (30%), the responses of those in the at or above district norms group varied: selection of students (33%), provided supplies (27%)
and professional development for administrators (22%). However, the range of responses was still quite small with 3-6 for the at or above district norms group and 0-3 for the below district norms group. Thus, the results for the whole group serves as the best indicator of participants’ views about the types of administrative support that would better support the implementation of the READ 180 program, i.e. appropriate selection of students (30%), followed by provisions for supplies (23%), followed by professional development for administrators (23%). Table 7 presents the results of this analysis.

Table 7

*Comparison of Open-Ended Responses on Needed Improvements in Administrative Support*

<table>
<thead>
<tr>
<th>Areas to be Supported</th>
<th>At or Above</th>
<th>Below</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Appropriate Selection of Students/Monitoring</td>
<td>6</td>
<td>33.0</td>
<td>3</td>
</tr>
<tr>
<td>Provide Required Supplies</td>
<td>5</td>
<td>27.0</td>
<td>3</td>
</tr>
<tr>
<td>Professional Development for Administrative Staff and Others</td>
<td>4</td>
<td>22.0</td>
<td>3</td>
</tr>
<tr>
<td>Only Teach READ 180 for 90 Minutes</td>
<td>3</td>
<td>16.0</td>
<td>0</td>
</tr>
</tbody>
</table>

Responses to the open-ended segments of the survey indicated that the strategy considered most valuable for students’ growth in literacy is small-group instruction, while the one considered least valuable is independent reading. The
administrative support considered most valuable for promoting student literacy learning was the availability of supplies, while the least valued strategy was the selection of students/monitoring. Regarding administrative support, the types of support considered to be most helpful were providing supplies and appropriate scheduling. Interestingly enough, one of the types of support considered to be most needed for effective implementation of READ 180 was also considered to be most helpful, provided supplies. The type of support considered to be the most needed for effective implementation of READ 180 was appropriate selection of students/monitoring. In short, what was considered most helpful was also considered most needed.

Summary of Findings

The findings of this study yielded useful information about teachers’ perceptions of the READ 180 program. Regarding relationships between teacher demographics and student gains, the variables of age and length of time teaching READ 180 were the distinguishing characteristics between teachers whose students scored at or above the district norms and those whose students scored below the district norms. Regarding relationships of teachers’ reported uses of READ 180 instructional strategies and student gains, there was no statistically significant difference between the two groups of teachers; however, the two instructional practices that emerged as being used consistently by teachers whose students scored at or above the district norms were independent reading and small-group instruction. Regarding the potential of READ 180 to support the literacy development of students, there was a tendency for the
teachers whose students scored at or above district norms to have more positive perceptions of the potential for READ 180 to affect student achievement than their counterparts. Regarding administrative support, teachers whose students scored at or above district norms were slightly more positive and considerably more consistent in their responses than those teachers whose students scored below district norms.

The open-ended responses yielded more specific information of relevance to the instructional strategies and administrative support. The instructional strategies considered most valuable by the largest percentage of participants were small-group instruction and computer software/technology (computer-assisted instruction), while the two instructional strategies considered least valuable were independent reading and whole-group instruction. The types of administrative support considered most helpful by the largest percentage of participants were provided supplies and appropriate scheduling. The two ways that their administrative staff could better support the effective implementation of the READ 180 program were appropriate selection of students/monitoring and provide supplies.

It is apparent that teachers of students who score at or above school norms have more positive perceptions of the READ 180 program than those whose students score below the district norms. However, the distinguishing characteristics were not sufficiently different for most of the variables studied to be considered statistically significant. The two exceptions came in the demographics: teachers in the age range of 38 and above and teachers who
had taught READ 180 for five or more years were decidedly the ones most likely to have students who score at or above district norms. The major findings of this study are treated more fully in the discussion of Conclusions and Implications in Chapter 5.
Chapter 5: Discussion, Conclusions, and Implications

The purpose of this study was to determine what, if any, teacher and administrator practices best support the literacy learning of older struggling readers. As an intervention program that purports to improve the literacy skills of middle and high school students, the READ 180 program was considered to be ideally suited to the purpose of this study. The basic underlying assumption of this study was that differences in the perceptions of READ 180 teachers whose students scored at or above district norms and those whose students scored below district norms would provide an indication of which teaching and administrative practices were most or least likely to yield higher literacy gains for middle and high school students enrolled in READ 180 programs. Thus, four research questions were posed to guide this study:

1. What are the relationships between selected demographic characteristics of READ 180 teachers and their students’ approximate grade-level gain in reading?

2. What is the relationship between teachers’ reported use of instructional practices and their students’ approximate grade-level gain in reading?

3. What is the relationship between teachers’ perceptions of READ 180’s potential for improving students’ literacy learning and their students’ approximate grade-level gain in reading?

4. What is the relationship between teachers’ perceptions of administrative support and their students’ approximate grade-level gain in reading?
In this chapter, conclusions drawn from the findings of this research are reported by research questions. Implications drawn from the conclusions are then discussed in relation to teaching practices, administrative support, and research needed to further address the problem of enhancing literacy learning among older students who struggle with reading.

Discussion and Conclusions

What are the relationships between selected demographic characteristics of READ 180 teachers and their students’ approximate grade-level gain in reading?

The first major finding of this study was that the demographic factors of age and length of time teaching READ 180 were the distinguishing characteristics between teachers whose students scored at or above the district norms and those whose students scored below the district norms. There were statistically significant differences in the age and length of time teaching READ 180 for teachers whose students scored at or above district norms and those whose students scored below district norms. More specifically, teachers in the age range of 38 and above and teachers with five or more years of experience in READ 180 tend to have the greatest effect on student literacy development in the READ 180 program. This finding regarding teaching experience in a particular area is well supported by the research of others.

Teacher experience proved to be an important factor in several studies. Results from the Learning Strategies Curriculum (LSC) study by Cantrell et al. (2010) indicated that the LSC had a statistically significant positive effect on
sixth-grade students’ gains in reading comprehension, though gains for ninth-grade students were not statistically significant. The distinguishing characteristics of the two groups of teachers were that sixth-grade teachers had more years of teaching and more reading certificates than the ninth-grade teachers. Consequently, Cantrell et al. (2010) concluded that years of teaching and training in reading were highly related to student achievement. They go on to suggest that teachers may need several years of experience to effectively implement the literacy strategies with confidence.

In the study by Pinellas County Schools (2006), READ 180 principals identified the need to have a reading teacher as the READ 180 teacher. Also, when principals were asked for advice for other principals of READ 180 schools, they said that choosing the correct teacher was paramount. Similarly, an important finding of research by Kokkinis (2006) of READ 180 in Charleston County School District was that teachers with more academic preparation in reading felt more confident implementing READ 180 whole-group instruction and small-group instruction than teachers with limited or no preparation. In the CREP study of the Little Rock School District conducted by Mims et al. (2006), nearly all principals had positive perceptions of the READ 180 program; moreover, one reported that the benefits of the program were dependent on the classroom teacher, leading to the recommendation that the Little Rock schools pay closer attention to preparing READ 180 teachers to utilize literacy instructional strategies such as fluency, vocabulary, text comprehension, higher order questioning, and writing.
Thus, the above studies point to the importance of teacher preparation to success in implementing the READ 180 program. Specifically, teachers who are assigned to teach READ 180 to adolescents who struggle with reading should be well trained, prepared, and confident in using the strategies utilized in the program, all qualities that experienced reading teachers are most likely to have. The answer to the first research question is that for the participants in the present study, the most important relationships between teacher characteristics and students’ literacy performance are the age and experience of the teachers. As indicated by other studies, teaching experience may encompass qualities such as prepared, certified, and confident.

*What is the relationship between teachers’ reported use of instructional practices and their students’ approximate grade-level gain in reading?*

The second major finding of this study was that there was no statistically significant difference between the reported usage of instructional strategies by those teachers whose students scored at or above the districts norms and those whose students scored below the district norms. However, responses to the open-ended questions provided additional information about specific strategies considered most valuable by a high percentage of participants who responded to the open-ended questions. For the total group of participants, the instructional strategies considered most valuable were small-group instruction and computer software/technology (computer-assisted instruction), while the two instructional strategies considered least valuable were independent reading and whole-group instruction.
Support for the importance of small-group instruction is found in the study of Charleston County School District by Kokkinis (2006). The study concluded that major strengths of READ 180 was that it provided differentiated instruction and individualized instruction through small-group instruction and computer-assisted instruction. In the CREP study of the Little Rock School District conducted by Mims et al. (2006), teachers listed small-group instruction as one of the major strengths of the READ 180 program. In that same study, when asked how much students learned from teacher directed small-group work, most students reported “a lot”. Alexander (1979) and Slavin (1996) both said that small-group instruction is a method proven to help raise student achievement.

Roberts et al. (2008) assert that by providing older struggling readers with additional sustained instruction in small groups, many will be able to approach the mastery of reading skills appropriate for their grade levels. A critical component of Tyner’s Small-Group Differentiated Model includes a comprehensive reading model with small-group differentiated reading instruction (Tyner, 2009).

As for the computer-assisted instruction identified in the present study, support is found in the Mims et al. (2006) study. Their classroom observation data revealed that computers were used for instructional delivery of the READ 108 software in 94.1% of the time. In addition, when students were asked what would make READ 180 better, students responded more time on the computer. In that same study, when asked how much students learned from computer activities, most students reported “a lot”. Furthermore, all African American
students demonstrated a high overall level of attention, interest, and engagement when observed using the READ 180 computer program. Student engagement was also associated with computer-assisted instruction across grade levels in study of Charleston County School District (Kokkins, 2006).

The finding that independent reading was considered one of the least useful READ 180 strategies by the total group can be questioned, for the small number of teachers in the at or above grade level norms group reported that they always allowed their students to participate in 20 minutes of independent reading. Also, in the CREP study of the Little Rock conducted by Mims et al. (2006) reported that teachers in their study had a very positive view of independent reading. These teachers felt that independent reading was worthwhile because students enjoyed choosing their own books and reading at their own pace. Of the effective practices treated in the National Reading Panel Report (2000), there was little empirical evidence of the value of independent reading, perhaps a reflection more of the lack of research than on research findings that showed inadequacies in the strategy itself.

Whole-group instruction, the second of the least favored strategies, was not identified as a highly valued strategy in the READ 180 research reviewed here. In recent years, common wisdom holds that whole-group instruction has been largely over-used. Furthermore, the way that whole-group instruction is used in the READ 180 program as a way to give students guidance about their daily assignments to small-group activities could account partially for teachers not openly identifying whole-group instruction as a useful instructional strategy.
The conclusion, then, is that teachers in the at or above grade-level gain group and those in the below grade-level gain group were not significantly different in their reported usage of READ 180 strategies. However, small-group instruction and computer-assisted instruction were clearly the most highly valued instructional strategies for the teachers in this study. Further investigations of the role of independent reading and whole-group instruction are needed.

**What is the relationship between teachers’ perceptions of READ 180’s potential for improving students’ literacy learning and their students’ approximate grade-level gain in reading?**

There was no statistically significant difference in the perceptions of teachers whose students scored at or above district norms and those who scored below the district norms. However, regarding the potential of READ 180 to support the literacy development of students, there was a tendency for the teachers whose students scored at or above district norms to have more positive perceptions of the potential for READ 180 to affect student achievement than their counterparts. Other research has found that both teachers and administrators believe that READ 180 has great potential for improving literacy learning. In the study by Mims et al. (2006), a supplemental evaluation question was asked about READ 180 teachers’ perceptions regarding program implementation, impacts, strengths, and weaknesses. Overall, READ 180 teachers believed that the program had a positive impact on students by improving students’ literacy skills, motivation, self-worth, confidence, and engagement in learning. In the Leon County Schools study conducted by
Southard et al. (2005), the majority of participating teachers felt that participation in the READ 180 program improved students’ motivation to learn, as well as, their classroom behaviors. Overall, teachers in the Leon County schools had very positive perceptions of READ 180’s potential for enhancing literacy learning. Although there was no statistically significant difference in the perceptions of the literacy enhancing potential of READ 180, teachers whose students scored at or above district norms were more positive than their counterparts. This brings up the age-long question of how expectations affect student achievement. An assumption can be made that teachers’ perceptions of a program’s potential for student learning may be very important to how the program is implemented and how students achieve. Although there are studies that demonstrate ways that teacher expectations influence student learning, this very important issue is beyond the issues covered by the present study. What can be concluded for this study is that there was no relationship between teachers’ perceptions of the literacy learning potential of READ 180 and student gains.

**What is the relationship between teachers’ perceptions of administrative support and their students’ approximate grade-level gain in reading?**

There was no statistically significant difference in the perceptions of administrative support by the two groups of teachers in this study. However, teachers whose students scored at or above district norms were slightly more positive and considerably more consistent in their perceptions than those teachers whose students scored below district norms. Responses to the open-ended questions led to the identification of particular areas of administrative
support that teachers felt were most helpful and most needed to more effectively implement the READ 180 program. The two areas considered most helpful were provided supplies and appropriate scheduling. Two of the areas identified as most needed were appropriate selection of students and provisions for supplies.

In support of the views of teachers in this study, other research has found similar responses. In the 2005-2006 CREP Little Rock School District study (Mims et al., 2006) a supplemental evaluation question was about READ 180 teachers’ perceptions regarding program implementation, impacts, strengths, and weaknesses. Overall, READ 180 teachers agreed that the READ 180 program was supported and liked by school principals; however, teachers also indicated a need for formal guidelines to be followed when placing students into the READ 180 program. In the Pinellas County Schools study (2006), teachers indicated that students with behavior problems were placed in READ 180 classes, not necessarily students who were a good fit for the program and would benefit most from the program. In that same study, we had the benefit of information about the views of administrators. The interview with principals revealed that placement of students was among their greatest challenges.

The conclusion reached in the present study is that different views about administrative support were not related to student gains. However, collectively the two groups of teachers, those whose students scored at or above district norms and those whose students scored below district norms, identified availability of resources/supplies and the placement/monitoring of students as areas of most useful and most needed administrative support. Given the
consistency with which other studies identified similar areas of concerns regarding program administration, one can assume that these administrative practices are gravely important to the successful implementation of the READ 180 program.

The Center for Research in Educational Policy (CREP) at the University of Memphis provided a final technical report of the evaluation study results of the Little Rock School District’s 2005-2006 READ 180 program conducted by Mims et al. (2006). This study had marked similarities to the CREP evaluation. Both studies had a similar population of students, African Americans. Also, both studies used a teacher survey as a vital part of discussing teachers’ perceptions of READ 180. Results of the two studies were also quite similar, except that the Little Rock study was more broadly based and showed more statistically significant results than this one. Even so, based on the findings of this study, several implications can be made.

Implications

Based on the conclusions of this study, implications can be readily identified for teachers, administrators, researchers, and CAI program designers.

Teachers. For practicing educators, results of the study were expected to enable them to determine which of the recommended READ 180 practices to use, adapt, or modify in order to improve the literacy learning of their students. This study identified differentiated small-group instruction and computer-assisted instruction as the most useful of the recommended READ 180 strategies. Most notably, both differentiated small-group instruction and computer-assisted
instruction should be considered for use to facilitate the learning of older students who struggle with reading in reading classes. Both can also adapted for use within the language arts, as well as, across subject areas. The implications are that teachers will do well to consider ways that these two basic strategies can be adapted or modified for use with older students who struggle with reading, including African American students who are among the highest populations of students at-risk of repeating a cycle of failure in urban school districts.

**Administrators.** For practicing administrators, the implications of this study are that the selection of the READ 180 program for older students who struggle carries with it certain responsibilities. The selection of teachers to implement the READ 180 program constitutes one of the primary responsibilities of school administrators. The implication of this study is that criteria for selecting teachers should include teacher age, teachers in their mid-thirties, and years of teaching, at least five years. Simply put, administrators should avoid assigning novice first and second year teachers to READ 180 classes. Related to selecting teachers is the training of teachers specifically with respect to implementing the READ 180 program. In this case, teachers in this study indicated that they met the minimum requirements for training. Consideration needs to be given to how much and what kind of training teachers, as well as, administrators need.

A second primary responsibility of administrators has to do with selection criteria for students. It is easy for a program like READ 180 to become a ‘dumping’ ground for behavior problems or for students who lack the minimal literacy skills to do well in the program. The implication of this study is that,
teachers’ concerns over the timely and fair selection of students is of utmost importance to the success of the program. Equally important is the monitoring of student progress, a challenge that is often related to the failure to keep updated assessment records, which can be problematic, even with the support of Scholastic.

A third major responsibility of administrators has to do with managing resources. Given the evidence that teachers consider providing supplies as the most helpful way their administrative staff supported and can better support the effective implementation of READ 180, attention to resources is a ‘must’. This too is a challenge, for additional resources are likely needed to ensure that the appropriate supplies are not only ordered but made easily accessible to teachers. Not having the resources needed to implement the program can certainly be morally and practically debilitating to teachers.

Researchers. The expectation was that researchers would benefit from insights gained from this study. In looking at the various research methodologies found in the research, especially READ 180 research, cross-study comparisons were somewhat difficult. What this study has demonstrated is that different research methods can yield similar results. The implication of this study is two-fold. First, the study, like others, have pointed to several unanswered questions about how issues about relationships between implementing strategies and student gains. While this study used student scores from SRI data as a measure of student gains in literacy, other studies have used standardized test scores as a measure of student gains; still others have used both SRI data and
standardized test data to represent student gains. The implication is that more research is needed to determine a) if there is a relationship between Scholastic performance indicators and standardized test scores as performance indicators; b) if either is a better representation of student gains; and c) under what conditions multiple indicators of student gains are needed. Answers to the above questions are especially important, for they could well account for the extent to which different methods influence levels at which one can arrive at statistically significant results.

Many questions about the impact of teacher delivery strategies remain unanswered. For further research, this question revealed the need for research on each of the READ 180 strategies relevant to student literacy gains. Because this study focused on implementation practices, indicators of growth from the data generated by Scholastic were used. Yet, external indicators of gains such as standardized test scores have been used in other studies. The question remains as to whether summative results from standardized tests or formative data, like that provided by Scholastic, or a combination of the two can best inform instruction and provide the best information. However, the following is for further research and to provide a better suited combination of the relationship between Scholastic scores and standardized test scores. Are both equally good representations of student gains? Or put another way, what is the difference between what formative data (Scholastic data) and summative or achievement data can tell us about literacy learning?
Finally, from the perspective of program design, in the book *What Research Say About Reading Instruction*, chapter one, What Reading Research Says: The Promises and Limitation of Applying Research to Reading Education, Shanahan (2002) makes a distinction between research-based programs and research-informed programs. Research-informed, which refers to the study of practices individually is different from research-based, which refers to the study of the practices as part of the program. From this perspective, READ 180 fits into the category of research-informed. More research is needed on the READ 180 practices as a set. This, then, is the most promising direction for future research.

A recommendation for CAI program designers is that they align their product’s measurement of student growth and assessments with state standardized tests and/or Common Core Standards. This will indeed assure educators that when students show growth on the product’s assessment, they will also show growth on state standardized tests or End-of-Course exams.
References


Appendix A

Informed Participant Consent Document

By signing this document, I am indicating my consent for the use of assessment materials and participation of the study for READ 180 experience that will be conducted during fall 2010 semester for a research project of Ms. Dee Foster Wilemme.

I understand the study provides research. I have been informed that I will be used as a part of this study.

My participation in this research is completely voluntary. I understand that I may agree to withdraw from participation at any time without penalty. There are no known risks expected from participating in this research study or being a part of the READ 180 data analysis. Records will be maintained within the limits allowed by law. There will be no identifying information used in this research.

I understand that I may seek answers to questions regarding this research from Ms. Dee Foster Wilemme, 2601 Ketchum Road, Southeast Region Memphis, Tennessee 38114, and (901) 416-7412. For answers to questions about research subjects' rights, you may contact the Chair of the Institutional Review Board for the Protection of Human Subjects at @ IRB@memphis.edu.

I have been advised that The University of Memphis and/or Memphis City Schools does not have any funds budgeted for compensation for injury, damages, or other expenses in connection with this research study.

I have read and understand the explanation provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study.

____________________________________  ______________
Participant’s Signature  Date

____________________________________
Participant’s Signature
Appendix B

READ 180 Teacher Survey

Demographic Information

Please place a check by each item that best characterizes you personally and professionally.

1. Your students’ scores on the third SRI for 2009-2010 were:
   - ____ above district norms
   - ____ at district norms
   - ____ below district norms

2. Age:  
   - ___20-25
   - ____26-31
   - ____32-37
   - ____38-43
   - ____44-49
   - ____50+

3. Ethnic Group:  
   - ___African American
   - ____Asian American
   - ____Hispanic/Latino
   - ____Native American
   - ____Pacific Islander
   - ____White
   - ____Other

4. Years of Teaching:  
   - ___1-5
   - ____6-10
   - ____11-15
   - ____16 Years or More

5. Years as READ 180 Teacher:  
   - ____1-2
   - ____3-4
   - ____5 Or More

Part A: Classroom Practices Information

Please place a check in the column that best describes your implementation practices for READ 180?

<table>
<thead>
<tr>
<th>Classroom Practices</th>
<th>Often</th>
<th>Sometimes</th>
<th>Seldom</th>
<th>Almost Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Provide 20 minutes of whole-group instruction.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Allow all students to participate in small group instruction for 20 minutes.</td>
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<td></td>
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<tr>
<td>3. Differentiate instruction during small-group instruction.</td>
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<tr>
<td>4. Provide 10 minutes for wrap-up at the end of the class.</td>
<td></td>
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<tr>
<td>5. Allow all students to read independently for 20 minutes.</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Conference individually with all students about their progress in READ 180.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Conference individually with all students about SRI procedures.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Conference individually with all students about SRI results.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>9. Use video, audio, multimedia, and other computer assisted instruction to enhance learning other than READ 180 materials.</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Part B: Administrative Support and READ 180 Potential

Please place a check in the column that best describes your experience.

<table>
<thead>
<tr>
<th>Administrative Support</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. READ 180’s potential for improving students’ literacy learning was</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. The administrative support received for implementing the READ 180 program was</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part C: Constructed Responses
If additional space is need, please attach extra paper with comments.

1. List the two instructional strategies that you feel contribute most to students’ literacy learning with READ 180.

2. List the two instructional strategies that you feel contribute least to students’ literacy learning with READ 180.

3. Please list the two most helpful ways that your school administrative staff supported you in the implementation of the READ 180 program.

4. Please list at least two ways that your administrative staff could better support the effective implementation of the READ 180 program.
Appendix C

Procedures

✗ Sign the participant consent form

✗ The survey will only take approximately 5-10 minutes.

✗ Please use the approximate grade-level gain for your school or your students to answer the first question.

✗ Please complete the entire survey.

✗ Please use the stamped envelope to mail the survey to the following address today:

Attention: Dr. Jerrie Scott
University of Memphis
Department: Instruction and Curriculum Leadership
Office Building: Ball Hall 400B
Memphis, TN 38152

Thank you for your participation.