EFFECTS OF CORRECTIVE READING AS AN INTERVENTION FOR SEVENTH GRADE ENGLISH LANGUAGE LEARNERS

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A DISSERTATION

Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Psychology (in School Psychology)

The University of Southern Maine

December, 2013

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An Abstract of the Dissertation Presented
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The purpose of this study is to determine the effectiveness of the Corrective Reading program as an intervention for three seventh grade students who are English language learners (ELL). The effectiveness of the Corrective Reading Decoding B2 program on students’ oral reading fluency was examined. A multiple-baseline experimental design was chosen for this research to examine the effects of a direct instruction reading program with three ELL students in the seventh grade. The results indicated that all three participants met their individual goals on the AIMSweb R-CBM progress monitoring fourth grade probes. In addition, all three students’ demonstrated exceptional growth in words read correctly from pre- to post-intervention using seventh grade AIMSweb R-CBM benchmark probes. All three students met the Corrective Reading goal of 105 words read correctly with less than three errors after participating in 26, 30, and 32 lessons respectively. The limitations and future research are discussed.
ACKNOWLEDGMENTS

I am thankful to Dr. Rachel Brown for her support throughout this process.

I would also like to thank:

SRA McGraw Hill
For providing the Corrective Reading program materials at no cost.

Thank you to the administration and staff at the participating school for supporting this research study and a special thank you to the three staff members who participated as interventionists.

To Alex, Sara, and Emily:
You were my inspiration to complete this journey. Love you most!

To David, Mom, and Dad
I could not have done this without you. Love you and THANKS!
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Chapter 1

LITERATURE REVIEW

Reading is an important part of elementary school curricula and serves as an important foundational skill for all other academic areas. Despite the emphasis placed on reading in the elementary years, many of America’s youth lack the necessary basic reading skills to keep pace with their peers. As a result, many students enter middle school and high school with reading skills far below that which are needed to complete the basic graduation requirements (Marchand-Martella, Martella, Orlob, & Ebey, 2000). Of course, older struggling readers (i.e., those in middle and high school) are farther behind and have more ground to cover in order to catch up to grade level. Many older struggling readers are victims of poor early reading instruction, while others may have received relatively sound instruction during their early school career, but continue to have difficulty with reading fluency, or comprehending what has been read (Roberts, Torgesen, Boardman, & Scammacca, 2008). Moats’ (2001) research shows that at any age, poor readers as a group exhibit weaknesses in phonological processing and word recognition speed and accuracy, and what complicates it even more for older readers, is that they have years of experiencing labored reading and are not familiar with the vocabulary, sentence structure, text organization, and concepts of academic language. This leads to a decline in their comprehension over time.

Considerably less is known about effective interventions for older readers with reading difficulties, particularly those who are English language learners (ELL). In 2008, approximately 10.8 million children ages 5-17 in the United States spoke a language other than English in the home (Lawrence, White, & Snow, 2011). August and Shanahan
(2006) reported that compared to their native English-speaking peers, language minority students on average have lower reading performance in English.

Research by Sharon Vaughn and her colleagues has focused on methods that can improve outcomes for struggling readers. For example, in 2010 Vaughn noted that “Recognizing the large numbers of students who need academic and behavioral intervention in our schools, educators, policy makers, and researchers called for school-wide intervention frameworks in which students’ response to quality interventions is monitored and used to inform decisions about future interventions and placement” (Vaughn et al., 2010, p. 4).

Vaughn et al. (2010) conducted a study to evaluate the outcomes of a Tier 2 reading intervention with struggling readers at the middle school level. This study was a year-long, large-scale, school-based study within a Response to Intervention (RTI) framework. There were 241 Tier 2 students and 115 comparison students. All students received the benefit of content area teachers who participated in professional development for Tier I instruction on how to integrate vocabulary and comprehension practices throughout the school day. Students who participated in the Tier 2 intervention received fluency and vocabulary instruction using the *REWARDS Intermediate* and *REWARDS Plus* program. Students who received the Tier 2 intervention outperformed those in the comparison condition on several measures, including word attack, spelling, comprehension, and phonemic decoding efficiency.

Using evidence-based interventions in an RTI model with ELL students can significantly impact these students’ educational outcomes and reduce the number of students referred for special education. Many ELL students have floundered without
appropriate intervention for a number of reasons, including low expectations for their academic performance. RTI uses a multi-tiered structure of increasingly intensive and focused instruction and intervention for servicing the needs of students with academic and behavioral concerns. Before ELL students are recommended for Tier 2 or Tier 3 interventions, teachers need to ensure that these students have had sufficient exposure to high-quality, appropriate teaching that includes academic English instruction in an environment that is supportive of their overall language development (Echevarria & Hasbrouck, 2009). Tam, Heward, and Heng (2006) conducted a study to evaluate the effects of an intervention program consisting of vocabulary instruction, error correction, and fluency building on oral reading rate and comprehension of five ELL students who were struggling readers in a primary school. A multiple baseline across students design was used to evaluate the effectiveness of the intervention. The results of this study revealed that all five students demonstrated improvements in oral reading rates during the intervention conditions. Tam et al. noted that

“The critical elements of the reading instruction program developed in this study, such as systematic and structured instruction, opportunity to read and to experience frequent success, adequate feedback and practice, and direct and frequent monitoring, constitute an effective intervention for English language learners at risk” (p. 91).

Kamps et al. (2007) examined the effects of a Tier 2 reading intervention for ELL students in the first and second grade. A total of 164 males and 154 females participated in the study with 149 students being English-only students and 170 who were ELL students. Of the 170 ELL students, 99 were Spanish speaking. The remaining 71
students’ primary language included Somali, Sudanese, and Vietnamese. Students in the Tier 2 intervention received a direct instruction approach with three different curricula. Each of these curricula provided structured and sequenced scripted lessons with a heavy focus on phonemic awareness, including phonics instruction, and a philosophy of teaching to mastery (Kamps et al., 2007). Kamps et al. (2007) used Dynamic Indicators of Basic Early Literacy Skills (DIBELS) and the revised version of the Woodcock Reading Mastery Test (WRMT-R) to collect baseline and progress monitoring data during instruction. Results indicated greater outcomes for ELL students receiving a Tier 2 direct instruction approach delivered in small groups as compared to students receiving English as a second language (ESL) services. The authors reported that the results from their study suggested that more targeted reading intervention is needed in addition to ESL services. The authors recommended continued investigation of Tier 2 interventions with a focus on direct instruction and evidence-based interventions for ELL students.

Recent research-based recommendations for instruction and academic interventions for ELLs has provided evidence to support the use of explicit, intensive instruction and/or intervention in phonemic/phonological awareness and phonics (Francis, Rivera, Lesaux, Kieffer, & Rivera, 2006). Once ELLs can recognize words automatically, the focus can shift to overall meaning. Linan-Thompson, Vaughn, Prater, & Cirino (2006) identified ELL students in the first grade who were at-risk for reading difficulties. Participants were randomly assigned to intervention or control groups. Intervention students received supplemental reading intervention for 50 minutes daily, in small groups for seven months. Results indicated that “ELLs at risk for reading disabilities who are provided with explicit, systematic, and intensive interventions make
substantive gains that distinguish them from control students and leave them less at risk for referral to special education” (p. 397). Linan-Thompson et al.’s findings complement prior research and support the use of direct and systematic instruction for students who are ELLs.

The research on instruction for ELL students has revealed that many of the same programs that have been found effective for English-only students are the same programs that have been found to be successful with ELLs (Slavin & Cheung, 2004; Calderon, Slavin, & Sanchez, 2011; Moats, 2001; Francis et al., 2006). The key features of effective reading instruction for ELLs and English only students include systematic and explicit direct instruction methods focusing on the five key components of reading identified by the National Reading Panel (National Reading Panel [NRP], 2000), including phonemic awareness, alphabetic principle, fluency, vocabulary, and comprehension. The ability to decode words is a necessary condition for effective comprehension among all students, yet not all students will develop these skills without explicit instruction. Reading intervention that is grounded in research passes on to older readers the skills they may have missed in primary grades and can bring them to grade level in one to two years (Moats, 2001).

One direct instruction program that is grounded in research is the Corrective Reading program. The Corrective Reading program is a comprehensive intervention program for students in grades 3 through 12. It targets students who are reading one or more years below grade level. It can be implemented individually, in small groups, or whole group format. The Corrective Reading program has a decoding strand and a comprehension strand. The decoding strand incorporates word attack skills and the
comprehension strand focuses on increasing comprehension skills. Each lesson is 45 minutes in length and intended to be delivered four to five times per week.

The three goals of the Corrective Reading program are to increase accuracy, develop fluency skills, and build reading comprehension (McGraw Hill, 2008). Drakeford (2002) found that poor readers lack motivation and meaningful reading experiences. Corrective Reading is one method that has been used to increase literacy skills in poor readers (Bradford et al, 2006; Malmgren & Leone, 2000). Drakeford (2002) implemented the Corrective Reading program with six incarcerated African-American students. Students were separated into two groups of three students each, based on the results from the Corrective Reading placement test. This study explored whether an intensive reading program could positively affect reading fluency rate, reading placement level, and attitude toward reading. The reading instruction was delivered three days per week for 1 hour per day over an 8-week period. Results showed that the reading fluency of all participants improved following the implementation of the Corrective Reading program. Student growth ranged from six months to a year following the 8-week intervention period. Teachers also noted improvements in the students’ attitude toward reading.

Given that students with disabilities are particularly vulnerable to reading difficulties, utilizing best practices for reading is critical (Coutinho, 1986). One of the key components for attaining reading success, for both students with and without disabilities, is the ability to read fluently to support comprehension (NRP, 2000). A study completed by Lingo, Slaton, Bott, and Jolivette (2006) further supports the findings that the Corrective Reading program is effective in improving reading comprehension (Bradford
et al., 2006; Strong et al., 2004). Seven ethnically diverse middle school students from two special education classrooms in an urban, southeastern public middle school participated in the study. Baseline data were collected on each student’s oral reading fluency of *Corrective Reading* passages and from grade level passages. Data analysis revealed significant gains in the reading abilities of the participants following the three-month *Corrective Reading* program intervention.

Students who need to learn English enter U.S. classrooms at many different ages and levels of language development. Francis et al. (2006) provided practical guidelines for the education of English language learners of different ages, including research-based recommendations for teaching adolescent ELL students who are new to U.S. schools. The research revealed that adolescents with word-reading difficulties need targeted and explicit instruction to promote their reading skills because “Effective interventions for adolescents who struggle to decode words are similar to those found with younger children in that they provide systematic and explicit instruction in the code of English reading” (Francis et al., 2006, p. 22). The authors reported that the research suggests that the most effective instruction for adolescents who struggle with decoding words should be conducted in small groups or in a one-on-one setting in order to be intensive, as well as to avoid whole class instruction that is not necessary for all students.

The research on effective reading instruction for students who are ELL consistently suggests that direct and systematic methods are the most effective. Other research has suggested that *Corrective Reading* is one type of effective direct and systematic reading program. The purpose of the current study is to determine the
effectiveness of the *Corrective Reading* program for selected seventh grade students who are English language learners (ELL).
Chapter 2

METHOD

Research Design

A multiple-baseline experimental design (MBD) was chosen for this research to examine the effects of a specific direct instruction reading program, Corrective Reading-Decoding, with three ELL students in the seventh grade. The research on reading has found that reading skills are unlikely to return to baseline with the withdrawal of the intervention and therefore a multiple-baseline design is appropriate for this study because it enrolls students based on the response of prior students, thus removal of the intervention is not required. This design included three students who are English language learners (ELL) participating in a direct instruction decoding intervention over multiple weeks. Following a brief baseline phase during which each student participated in the same classroom reading instruction, the first of the three students received systematic and explicit decoding intervention while the other two students remained in the baseline phase. After the first student demonstrated consistent improvement in oral reading fluency during the decoding intervention, the second student began receiving the systematic and explicit decoding intervention while the third student remained in an extended baseline phase. Once the second student demonstrated consistent improvement in oral reading fluency during the decoding intervention, the third student began receiving the systematic and explicit decoding intervention. At the end of the intervention phase all three students were administered a post-test grade level AIMSweb Reading-Curriculum Based Measure (R-CBM) probe. This MBD allowed for an investigation of the effectiveness of the Corrective Reading-Decoding program based on the same
behavior (number of words read correctly) and in the same setting (in the same classroom during the reading intervention period) with three ELL students.

Participants

The subjects were three seventh grade ELL students (two girls and one boy) who attended a public middle school in the Northeast U.S. These students were identified as significantly below grade level in decoding skills. The school’s enrollment was 730 seventh and eighth grade students, 21% of whom were identified as ELL. Most of the ELL students were from Somalia, including the participants in this study. The participants were general education students in an ELL classroom, receiving their reading instruction from an ELL-trained classroom teacher. These students were not diagnosed as having any disabilities and all participated in the same supported reading and English classroom. Each of these students scored an average of 3.0 to 4.0 on the Assessing Comprehension and Communication in English State-to-State for English Language Learners (ACCESS) testing, which places them as Level 2 students on the ACCESS test. ACCESS is a large-scale English language proficiency test for kindergarten through twelfth grade students and provides a general estimate of students’ English language skills. All study procedures were reviewed and approved by a University institutional review board (IRB).

Parent permission and student assent for the nominated students were obtained. The district’s Somali interpreter and the researcher met individually with the nominated participants’ parents and explained the details of the study; the parents were asked to give oral consent. The students whose parents gave consent were invited to participate and an
oral assent process was used with the students. Those students for whom permission and assent were obtained were the subjects for this study.

Materials

A direct instruction (DI) reading intervention was used in this study. Corrective Reading is a comprehensive intervention program for students in grades 3 through 12 who have reading skill deficits. It targets students who are reading one or more years below grade level. It can be implemented individually, in small groups, or in a whole-group format. Each lesson is 45 minutes in length and intended to be delivered four to five times per week. The three goals of Corrective Reading are to increase accuracy, develop fluency, and build reading comprehension (McGraw Hill, 2008). Corrective Reading has a decoding strand and a comprehension strand. The decoding strand incorporates word attack skills. There are four levels to the decoding strand of Corrective Reading. Decoding A is appropriate for students who are extremely deficient in decoding skills. Decoding B1 is appropriate for most problem readers in grades 3 through 12 and those students who often guess at words, as well as those who have difficulty recognizing high frequency words in a sentence context. Decoding B2 is appropriate for students in grades 4 through 12 who have some decoding problems, who do not read at an adequate rate, who still tend to confuse words with similar spellings, and who tend to make word guessing mistakes. Decoding C is appropriate for students who have mastered many basic reading skills but who have trouble with multisyllabic words and typical textbook materials (McGraw Hill, 2008). The comprehension strand also consists of four levels and is designed to change the behavior of students who do not understand what they read. For this study, only the decoding strand of the Corrective Reading Program was used.
Student progress was monitored with oral reading fluency (ORF) passages from AIMSweb. AIMSweb is a web-based data management system that was developed to universally screen and progress monitor reading, spelling, writing, and math performance for students in kindergarten through grade 8; it can be used with any curriculum (NCS Pearson, 2012). AIMSweb ORF probes are known as reading curriculum-based measures (R-CBM) and were used to collect baseline data on the number of words read correctly in one minute by each student, as well as used as a twice-weekly progress monitoring tool. As shown by Muyskens, Betts, Lau, and Martson (2009), R-CBM has been found to be reliable and valid for ELL students who are from Spanish, Hmong, and Somali backgrounds.

**Procedures**

All ELL students in the supported reading and English classroom were administered AIMSweb R-CBM. Students whose reading skills were below the 25th percentile at the seventh grade level were then administered AIMSweb R-CBM survey level assessment (SLA) to assess their current English oral reading fluency level. All students who were administered AIMSweb SLA were also administered the *Corrective Reading Program Decoding Placement Test* to determine their entry level in the *Corrective Reading* decoding strand. Those students whose placement test scores confirmed a need for reading decoding instruction were candidates for this study. Students were selected to participate in the study based on a rank order from lowest to highest. Students who were not selected, but who showed traits consistent with a need for decoding instruction were placed on a waiting list. All students who were enrolled in the study were shown to be reading at about a fourth grade level and to need level B2
Corrective Reading instruction. The Corrective Reading-Decoding lessons were in addition to daily classroom instruction.

The scripted procedures from the Corrective Reading-Decoding manual were utilized with all three students. An example of a Corrective Reading-Decoding lesson is provided in Appendix A. The typical Decoding B2 lesson is divided into four major parts. The first part is Word-Attack Skills. This part of the lesson takes about 10 minutes and students practice identifying letter combinations and reading isolated words composed of letter-sound combinations that they know. The second section is Group Reading. This immediately follows the word attack skills lesson and typically takes 10 to 15 minutes. Students read from their Student Book. The third part of the lesson is Individual Reading Checkout (Fluency Assessment) in which students participate in two one-minute timed reading fluency assessments. The first fluency assessment is derived from the lesson just read by the student; the second is from the preceding lesson. The second reading is documented and used as a monitor for growth. The fourth and last section of the Corrective Reading Decoding B2 lesson is a Workbook Exercise. Some of these activities are teacher-directed and others are done independently. The workbook exercise takes approximately five to 10 minutes. All lessons follow a similar format.

Three interventionists (two certified teachers, one paraprofessional) were trained by this researcher to use the Corrective Reading lessons. Multiple interventionists were trained to implement Corrective Reading to ensure that the study procedures could be implemented even if the primary interventionist was absent. Both teachers were ELL trained certified teachers. The paraprofessional had been providing individual reading interventions for students at the middle school level for over 15 years. The training
included modeling and practice from the publisher-developed teaching tutor CD-ROM. The CD trainings are recommended by McGraw Hill SRA (2008) as an effective way to ensure that interventionists are properly trained to deliver accurate and well-paced Corrective Reading lessons. Once trained, the interventionists provided the intervention during the participants’ 45-minute study hall time four times per week in a quiet space, free from distractions. Student progress was monitored twice weekly with AIMSweb oral reading fluency (R-CBM) progress monitoring probes conducted by the interventionists. The interventionists also were trained to administer and score AIMSweb R-CBM according to the AIMSweb administration and scoring manual (NCS Pearson, 2013).

Intervention treatment integrity was assessed through weekly observations of Corrective Reading lessons and program-developed treatment integrity checklists. In order to ensure instructional integrity, 30% of the Corrective Reading lessons were observed by the researcher to ensure that the lesson was delivered as intended. During each observation, the researcher completed a Corrective Reading treatment integrity checklist (Appendix B). The researcher shared the observation results with each Corrective Reading interventionist and provided additional training to improve accuracy, if needed. A summary of treatment integrity data for each instructor is shown in Table 1.

These data show that the interventionists administered the programs correctly and adhered to the instructional program with high fidelity while they administered Corrective Reading-Decoding lessons.

Table 1. Treatment Integrity Observation Data (Accuracy Percentage)

<table>
<thead>
<tr>
<th>Interventionist</th>
<th>Percent Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100%</td>
</tr>
<tr>
<td>B</td>
<td>100%</td>
</tr>
<tr>
<td>C</td>
<td>100%</td>
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Baseline. Baseline data were collected by the researcher using the AIMSweb oral reading fluency (R-CBM) probes. Each student’s correct grade level for progress monitoring was determined based on the results from survey level assessment (SLA). SLA involves having a student complete successively easier reading passages until the student’s current reading level is reached. Based on SLA scores, all of the participants were reading at the fourth-grade level. Based on these data, fourth-grade AIMSweb R-CBM was administered twice weekly during the baseline phase. Baseline continued until a stable trend was observed for at least one participant. Once a trend was identified, the intervention began with the first participant. Baseline data continued to be collected on the other two participants until the first participant showed positive stable trends on the AIMSweb R-CBM progress monitoring data (e.g., fourth grade R-CBM probes).

Progress Monitoring. Progress monitoring occurred twice weekly at the end of the Corrective Reading lesson of the day. Participants progress was monitored at the fourth grade level based on students skills identified during the SLA by the interventionists. The progress data were entered into the AIMSweb data manager program and the results were shared with each participant at the end of each week.

In order to verify scoring accuracy, inter-observer agreement (IOA) data were collected. The researcher co-scored 20% of the baseline and progress monitoring assessments alongside the interventionists. The researcher and the interventionist independently scored the participants’ oral reading fluency and then compared results to assess for accuracy in scoring. In order to account for IOA the scores from the R-CBM should be within two points of each other. Word-by-word score agreement was computed
and the number of agreements and disagreements recorded. The number of agreements was divided by the number of agreements plus disagreements to yield the percentage of scoring agreement. IOA results indicated a high percentage of score accuracy with all above 90%. A summary of IOA data is shown in table 2.

Table 2. Inter-Observed Agreement Data (Accuracy Percentage)

<table>
<thead>
<tr>
<th>Interventionist</th>
<th>Percent Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93%</td>
</tr>
<tr>
<td>B</td>
<td>94%</td>
</tr>
<tr>
<td>C</td>
<td>94%</td>
</tr>
</tbody>
</table>

**Student engagement.** The Corrective Reading curriculum incorporates a reinforcement system to help students remain engaged. As recommended by the publisher, daily incentives were provided to students for their participation in the reading activities. The incentives included food items (e.g., chocolate, gum, etc.), school materials (e.g., pencils, sticky notes, etc.), and fidget toys (e.g., silly putty). Each student was allowed to select his or her preferred item at the end of each lesson.

**Data Analysis**

Students’ oral reading fluency data were measured and analyzed with multiple-baseline experimental design methods. The data from the baseline and intervention were graphed using the AIMSweb data management system. These data were reviewed every two weeks by the researcher. A specific oral reading fluency goal was calculated for each student. The goals were based on an ambitious rate of improvement of two words per week, times the number of weeks of the intervention. The number of words to be gained was added to each student’s survey level assessment baseline score to yield the goal score. This equation yielded a needed gain of 18 words read correctly for student A, 16
words read correctly for student B, and 14 words read correctly for student C.

Intervention effectiveness was determined based on the students’ overall reading improvement and whether the students met their individual oral reading fluency goals.
Chapter 3

RESULTS

The results of the *Corrective Reading* data are organized to reflect individual, twice weekly, AIMSweb R-CBM progress monitoring results according to a multiple baseline design (Figure 1). In addition, each student’s *Corrective Reading* daily fluency check-outs (Figure 2) and their pre- and post-intervention seventh grade AIMSweb scores (Figures 3) are shown.

**Weekly Progress Monitoring Outcomes**

Based on visual analysis of Figure 1, it appears that all three students benefited from the *Corrective Reading* program. Baseline data in R-CBM for Student A display a stable level with minimal variability at the fourth grade progress monitoring level. She began the *Corrective Reading* intervention with a SLA fluency score of 93 words per minute with 8 errors at the fourth grade and after nine weeks of intervention and twice weekly progress monitoring, she reached a fourth grade R-CBM score of 112 words read correctly, with two errors. A gradual, but stable increasing trend was depicted, with Student A reaching her goal of 111 words read correctly at the fourth grade level by the end of the week 9 of *Corrective Reading* intervention.

Baseline data in R-CBM for Student B revealed variability around the fourth grade progress monitoring level. This student showed a slight decreasing trend prior to the introduction of *Corrective Reading*. He remained in baseline for two weeks prior to beginning the intervention. He began the *Corrective Reading* intervention with a SLA reading fluency score of 93 words per minutes with five errors at the fourth grade level.
Figure 1. 4th grade R-CBM for three seventh grade students. Points represent the number of correct words per minute for each student. WRC = number of words read correctly in 1 minute.
Figure 2. Oral reading fluency on *Corrective Reading* program-specific passages. Points represent the number of correct words per minute for each student. WRC = number of words read correctly in 1 minute.
After 8 weeks of intervention and twice weekly progress monitoring, he reached an R-CBM score of 120 words read correctly in 1 minute at the fourth grade level. He demonstrated high levels of variability among his progress monitoring data, with more stable data depicted by the last five data points. He surpassed his goal of 109 words read correctly at the fourth grade progress monitoring level.

Student C remained at baseline for three weeks prior to beginning the intervention. She demonstrated a stable, but slightly declining, baseline trend prior to beginning the Corrective Reading intervention. She began the intervention with an SLA fluency score of 94 words read correctly per minute with 4 errors at the fourth grade level. After 7 weeks of Corrective Reading intervention and twice weekly progress monitoring, she surpassed her goal of 108 words read at the fourth grade level. On October 1, she read 144 words correctly with 1 error at the fourth grade progress monitoring level. Due to this strong progress, she moved up to progress monitoring at the fifth grade level. She continued to demonstrate an increasing trend at the fifth grade level over a 3 week period and finished the Corrective Reading intervention reading 120 words read correctly with 1 error using fifth grade progress monitoring probes.

**Seventh Grade R-CBM Pre- and Post Intervention Outcomes**

Student A began the year with a seventh grade R-CBM score of 74 correct words and 7 errors. Following 9 weeks of Corrective Reading intervention, post-intervention data indicated a median seventh grade reading fluency score of 109 words read correctly with three errors. This was an improvement of 35 words per minute at grade level.

Student B began the year with a seventh grade R-CBM score of 65 words read correctly with 6 errors. Following 8 weeks of Corrective Reading intervention, post-intervention
data results indicated a median reading fluency score of 116 words read correctly with 3 errors. This was an improvement of 51 words per minute at grade level. Student C began the year with a seventh grade R-CBM score of 94 words read correctly with 5 errors. Following 7 weeks of Corrective Reading intervention, post-intervention data results indicated a median reading fluency score of 121 words read correctly with 2 errors. This was an improvement of 27 words per minute at grade level. Based on the obtained data, all three students were on track to meet the Winter seventh grade benchmark score of 155 WRC.

![Figure 3](image)

Figure 3. Pre-test and post-test R-CBM data at seventh grade level

**Corrective Reading Fluency Check-Out Scores**

All three students participated in daily fluency check-outs as part of the Corrective Reading intervention (see Figure 2). Student A demonstrated a high level of variability in her reading fluency check-outs. Results indicated a range beginning with 96
Table 3. Pre- and post-intervention seventh grade reading scores

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WRC</td>
<td>errors</td>
<td>WRC</td>
</tr>
<tr>
<td>Student A</td>
<td>74</td>
<td>7</td>
<td>109</td>
</tr>
<tr>
<td>Student B</td>
<td>65</td>
<td>6</td>
<td>116</td>
</tr>
<tr>
<td>Student C</td>
<td>94</td>
<td>5</td>
<td>121</td>
</tr>
</tbody>
</table>

words read correctly per minute to a high of 155 words read correctly over 32 lessons. Student two demonstrated a more consistent pattern of growth over 30 lessons with minimal variability. Results showed a range from 93 words read correctly to a high of 176 words read correctly. Student three showed high levels of variability over 26 lessons. Results indicated a range from 99 words read correctly to 187 words read correctly within one minute. Overall, all the students showed an improving trend in their program assessments.

In summary, all three students who participated in the *Corrective Reading* intervention exceeded their individual growth goals. In addition, all three students demonstrated growth from pre- to post-intervention at their enrolled grade level of seventh grade. Notably, also, all three students met the *Corrective Reading* goal of 105 words read correctly with less than three errors after participating in 26, 30, and 32 lessons, respectively.
Chapter 4

DISCUSSION

This study examined the effects of the Corrective Reading program on the reading ability of three seventh grade ELL school students with identified at-risk decoding skills. This intervention provided intensive, individually administered decoding intervention for these students four days per week for seven, eight, and nine weeks, respectively. In assessing the effects of the Corrective Reading intervention on reading fluency skills, this study found the program to be highly effective. The reading fluency gains for students in this study supported prior research that shows explicit, direct, and systematic reading fluency interventions work for students who are English language learners (Lesaux & Siegel, 2003). All three participants were progress monitored at a fourth grade level based on the results from AIMSweb SLA data. Student C reached her target goal of 108 words read correctly after four weeks of receiving the Corrective Reading intervention, and therefore was progress monitored at the fifth grade level for the remaining 3 weeks of intervention. Given the fact that these three students were middle school students, two words per week growth was an ambitious growth goal. According to Fuchs and Fuchs (2005), the fastest reading progress typically occurs when students are in the first and second grade. The typical rate of improvement for words read per minute for a seventh grade student is .64 words per week (NCS Pearson, 2013). Nonetheless, when provided with the Corrective Reading Decoding program, all three participating students exceeded this growth rate.

Several positive findings related to reading performance were demonstrated in this study. First, all three students’ correct words per minute intervention scores exceeded
their correct words per minute baseline scores on the fourth grade progress monitoring probes. Second, each participant showed substantial evidence of generalization of fluency gains in grade-level AIMSweb passages. Given that the pre- and post-test data were based on more difficult reading material, the students’ grade-level fluency scores were superb. Student A showed an improvement of 35 words read correctly. Student B made a gain of 51 words read correctly, while student C demonstrated an improvement of 27 words read correctly in one minute. This rate of growth is most likely due to the fact that each target student received intensive, one-on-one, Corrective Reading Decoding intervention for four days per week over seven to nine weeks. More typically, Corrective Reading is provided in small group or whole class formats. In addition, all three participants had a reduction in the number of errors from pre-intervention to post-intervention, thereby maintaining high rates of accuracy while increasing their reading speed.

Each student in this study was provided with biweekly graphs of their progress monitoring data, which they brought home to share with their parents. In addition, prior to each progress monitoring session, students were informed of their previous score. The program-specific oral reading fluency scores were graphed by the students following each lesson. Students were able to see their progress daily. All three students set personal challenges to beat their previous scores on both the AIMSweb progress monitoring probes, as well as the within-program oral reading fluency check-outs. The check-out assessments included two measures. The first check-out measure was on the first part of the story that the student just completed reading. The student was given 1 minute to read and this was considered a practice fluency check-out. The second check-out measure was
on the first part of the previous lesson’s story. The student was given 1 minute to read and the total number of words read correctly and errors were totaled by the interventionist and then graphed by the student at the back of the student workbook. All three students appeared to benefit from reading the harder material on the first check-out prior to assessing reading fluency. Following each lesson, each student chose a prize from the treasure box as an additional form of reinforcement for their participation.

Similar to the research completed by Lingo et al. (2006), the Corrective Reading program results indicated that students identified as at-risk at the middle school level were capable of making exceptional reading fluency growth when provided with intensive, direct, and systematic reading instruction that matched their level of need. Participants in this study were provided intensive, one-on-one instruction for approximately 30 minutes per day, four days a week over a short period of time, which may have accounted for the substantial growth noted from pre- to post-intervention. The results suggest that a program such as Corrective Reading might be an effective intervention for ELL students who are significantly behind grade level in reading.

Limitations and Future Research

Certainly, the intervention examined in this study would benefit from further research that delineates when it is most applicable and the limits of its use. For example, this study provided intensive, one-on-one direct instruction four days per week. This level of intensive intervention might be difficult to apply in schools due to teacher responsibilities for many other students throughout the school day. Future research could investigate the impact of the Corrective Reading program on students’ oral reading fluency if the intervention is only administered two to three times per week, or if
provided in small groups of ELL students. Such research would be important because it would replicate conditions in a typical middle school. Also, all three students were natives of Somalia and the outcomes cannot be extended to all ELL students. It is not known whether the features of the Somali language might have influenced the outcomes in ways that would not be seen among students using other languages. Additional research with ELL students from other linguistic backgrounds is needed.

Another potential limitation to this study is that the interventionists were highly supported throughout the study. The researcher was in the intervention room at least twice weekly during intervention times, and met with the interventionists weekly to answer questions and provide support. Thus, the amount of instructional support may have been a critical implementation variable. In addition, the interventionists’ level of enthusiasm may have played a part in the students’ desire to participate in the Corrective Reading program each day. All three interventionists built positive relationships with the students they were working with during this intervention. A third limitation to this study is that this was the first experience for the interventionists with the Corrective Reading program, and in addition, one of the interventionists was a first year ELL teacher. Ongoing professional development and practice with administering the Corrective Reading program lessons may further enhance the growth that students make with this intervention.

Additional research is needed to determine the effects of the Corrective Reading program on small groups of ELL students after the completion of all 65 lessons. Future research should compare the effects on oral reading fluency of ELL students who receive the Corrective Reading program, coupled with the district reading program as part of
their core reading program throughout a school year, with those ELL students who receive only the district provided core reading program.
Chapter 5

SUMMARY

As students progress in the grades, there is a shift from “learning to read” to “reading to learn” which usually takes place around fourth grade. Once this transition occurs, it is expected that students have adequately mastered the skills of decoding and reading fluently, and that they have a basic understanding of word meaning in order to comprehend what they have read. Students in middle school who have not learned to decode and read fluently require explicit, direct, and intensive reading intervention to make the gains needed to be able to decode and read fluently at grade level.

This study reviewed the effects of the Corrective Reading-Decoding program on the oral reading fluency of three ELL seventh grade students. All three participants were identified as at-risk for reading difficulties. The Corrective Reading-Decoding program intervention provided opportunities for students to: (a) participate in repeated reading practice, (b) receive immediate corrective feedback, and (c) participate and monitor their own growth through progress monitoring. Results revealed that all three students met and surpassed their individual goals on the AIMSweb R-CBM progress monitoring fourth grade probes. In addition, all three students demonstrated exceptional growth in words read correctly from pre- to post-intervention using seventh grade AIMSweb R-CBM benchmark probes. Lastly, all three students met the Corrective Reading goal of 105 words read correctly with less than three errors after participating in 26, 30, and 32 lessons, respectively.

The instructional practice that may have impacted these students the most in their oral reading fluency growth was the intensive, one-on-one, oral reading fluency activities
they were receiving during each lesson. The benefit of participating in the Corrective Reading program in a one-on-one setting is that the participant reads an entire story each day, as compared to participating in a small group in which they would only read a brief portion of the passage. This amount of oral reading fluency practice may have added to the significant growth that the students made between pre- and post-intervention. This study provides evidence that explicit, structured, systematic, direct reading instruction with frequent monitoring and immediate feedback is an effective method of teaching decoding and reading fluency skills to ELL students from Somalia.
References

Coutinho, M.J (1986). Reading achievement of students identified as behaviorally disordered at the secondary level. *Behavioral Disorders, 11*, 200-207.


Appendix A

Corrective Reading example Lesson 26

Lesson 26

WORD-ATTACK SKILLS

Board Work

EXERCISE 1
INTERNAL VOWEL CONVERSIONS: ea, oa

1. (Print in a column on the board:)

   rear
   leaf
   mean
   ears

2. (Point to rear.  Pause.) What word?  (Signal) Rear.
   • (Repeat for leaf, mean, ears.)
3. (Replace ea with oa in each word:)

   roar
   loaf
   moan
   oars

4. (Point to rear.  Pause.) What word?  (Signal) Roar.
   • (Repeat for loaf, moan, oars.)
5. (Change the list to:)

   rear
   loaf
   mean
   ears

6. (Point to rear.  Pause.) What word?  (Signal) Rear.
   • (Repeat for leaf, mean, ears.)
7. (Change to the original list:)

   rear
   leaf
   mean
   ears

EXERCISE 2
WORD READING WITH UNDERLINED PART

1. Open your Student Book to Lesson 26.
   - Touch part 1.
   - You’re going to say the sound for the underlined part and then read the word.
2. First word.
   - What sound?  (Signal) ch.
   - What word?  (Signal) Ranch.
3. Next word.
   - What sound?  (Signal) er.
   - What word?  (Signal) Faster.
4. (Repeat step 3 for each remaining word.)
5. (Repeat steps 2-4 until firm.)

EXERCISE 3
WORD READING

1. Touch the first word in part 2.
   - What word?  (Signal) Rode.
2. Next word.
   - What word?  (Signal) Named.
3. (Repeat step 3 for each remaining word.)
EXERCISE 4

WORD READING

Task A Irregular words
1. Touch the first word in part 3.

3

Emma anyone nobody good
because let's boss didn't
ready their Flop woman
women milked herself station
question biggest stayed Branch

2. That word is Emma. What word?
   (Signal.) Emma.
   • Spell Emma. (Signal for each letter.)
     E–M–M–A.
   • What word? (Signal.) Emma.
3. The next word is anyone. What word?
   (Signal.) Anyone.
   • Spell anyone. (Signal for each letter.)
     A–H–Y–O–N–E.
   • What word? (Signal.) Anyone.
4. The next word is nobody. What word?
   (Signal.) Nobody.
   • Spell nobody. (Signal for each letter.)
     N–O–B–O–D–Y.
   • What word? (Signal.) Nobody.
5. The next word is good. What word?
   (Signal.) Good.
   • Spell good. (Signal for each letter.)
     G–O–O–D.
   • What word? (Signal.) Good.

Task B
1. Go back to the first word.
   • What word? (Signal.) Emma.
2. Next word.
   • What word? (Signal.) Anyone.
3. (Repeat step 2 for each remaining word.)

EXERCISE 5

WORD-ATTACK SKILLS: Individual tests

1. (Call on individual students. Each student reads a row. Tally the rows read without error. If the group reads at least 9 rows without making errors, direct all students to record 4 points in Box A of their Point Chart. Criterion is 80 percent of rows read without error.)
2. (If the group did not read at least 9 rows without errors, do not award any points for the Word-Attack Skills exercises.)

GROUP READING

EXERCISE 6

STORY READING

1. Everybody, touch part 4.
2. After you read each part without making more than 3 errors, I'll ask questions about that part.

4

The Rancher

3. (Call on a student to read the title.)
   The Rancher.
   • What do you think this story is about? (Accept reasonable responses.)
4. (Use the following procedures for each part of the story.)
a. (Call on individual students. Each is to read one or two sentences. Praise students who read without making errors.)
b. (At the end of the part, tell the students the number of errors the group made and whether the group earned points for that part.)
c. (If the group made more than 3 errors, direct the group to reread the part.)
d. (After the group reads a part with no more than 3 errors, call on individual students to answer the comprehension questions for that part.)
Lesson 26

There was a big ranch in the West. The rancher who ran this ranch was named Emma Branch. She rode a horse well. She chopped fast, and she swam faster. The men and women who worked for Emma Branch liked her. They said, “She is the best in the West.” On her ranch she had sheep, and she had cows. There were goats and horses. There was a lot of grass.

The rancher had a lot of women and men working for her. They worked with the sheep and the goats, and they milked the cows. Each worker had a horse. But the rancher’s horse was the biggest and the best. It was a big, black horse named Flop.

First-part questions:

a. What was the name of the rancher? Emma Branch.
b. Name some things she did well. (Ideas: Rode a horse well, chopped fast, swam faster.)
c. What kind of animals did she have on her ranch? (Ideas: Sheep, cows, goats, horses.)
d. Who had the biggest horse? (Ideas: The rancher; Emma Branch.)
e. What was its name? Flop.

Flop got its name because it reared up. When Flop reared up, any rider on it fell down and went “flop” in the grass. But Flop did not rear up when the rancher rode it. Emma Branch bent near Flop’s ear and said, “Let’s go, Flop.” And they went. She did not have to slap the horse. She didn’t have to jab her heels and yell at Flop. She just said, “Let’s go,” and they went like a shot.

Every day, she checked up on the workers to see what they were doing. She checked to see that they were working well and that they were not loafing.

Second-part questions:

a. Why did Flop have the name Flop? (Idea: When anyone tried to ride Flop, Flop reared up and the rider went “flop” in the grass.)
b. Did Flop give Emma a hard time? No.
c. What did Emma do every day? (Idea: Checked on the workers.)

If a worker was loafing, Emma told the worker, “I will say this for the last time: ‘Do not loaf on this ranch any more.’” If a worker was loafing the next time she checked, she said, “Go from my ranch. We do not need loafers here.”

The women and men who worked on the ranch said, “When you hear Flop running, you had better be working. If you are not working, you had better get ready to leave this ranch.”

But the workers that stayed at the ranch liked to work for Emma Branch. They said, “We like to have Emma on our side. We can see how mean Flop is, and he is very tame when Emma rides him. So it’s good to have Emma on your side.”

Third-part questions:

a. What would Emma do if she found a worker loafing for the first time? (Idea: Tell the worker not to loaf on the ranch any more.)
b. What would she do the next time? (Idea: Tell the worker to leave the ranch.)
c. Why did the workers think it was good to have Emma on their side? (Accept reasonable responses.)

5. (After the group has completed reading the story and answering the comprehension questions, tell the students the total number of points to record in Box B of their Point Chart. Maximum = 4 points.)

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FLUENCY ASSESSMENT

EXERCISE 7

NEW READING CHECKOUTS

Note: The rate criterion for Lessons 26-30 is 70 words per minute.

1. (For this part of the lesson, assigned pairs of students work together during the checkouts.)
2. (Each student does two checkouts.)
   • (First checkout: Students can earn 3 points by making no more than 2 errors on the first part of story 26. Students record points in Box C-1 of their Point Chart.)
   • (Second checkout: 1-minute timed reading. Students can earn 3 points by reading at least 70 words and making no more than 3 errors on the first part of story 25. Students record points in Box C-2 of their Point Chart.)
3. (During each checkout, observe at least two pairs of students. Make notes on mistakes. Give checkers feedback.)
4. (Direct all students to plot their reading rate—the number of words they read in 1 minute—on the Individual Reading Progress Chart at the end of their Workbook.)
   • (Next, direct students to circle the number of errors they made during the timed reading.)
5. (Record on the Fluency Assessment Summary form the timed reading checkout performance for each student you observed.)

WORKBOOK EXERCISES

Workbook: Teacher Directed

EXERCISE 8

WRITING LETTERS FOR SOUNDS

1. Open your Workbook to Lesson 26. ✓
   • Find part 1. ✓
   • You’re going to write the letter or letters for each sound that I say.
   • Write it.
3. Next sound: or. What sound? (Signal.) or.
   • Write it.
4. (Repeat step 3 for i, sss, fff, b, ñññ, ééé, êêê, õõõ, p.)

Individual test
(Call on a student.) Read the letters you wrote, starting with the first blank.)
Independent Student Work
1. Complete all the other parts of your Workbook lesson. If you make no more than 4 errors, you earn 6 points.
2. (After checking the Workbooks, direct students who made no more than 4 errors to record 6 points in Box D of their Point Chart.)

Point schedule for Lesson 26

<table>
<thead>
<tr>
<th>Box</th>
<th>Lesson part</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Word Attack</td>
<td>0 or 4</td>
</tr>
<tr>
<td>B</td>
<td>Group Reading</td>
<td>0 to 4</td>
</tr>
<tr>
<td>C-1</td>
<td>1st Reading Checkout (not timed)</td>
<td>0 or 3</td>
</tr>
<tr>
<td>C-2</td>
<td>2nd Reading Checkout (timed)</td>
<td>0 or 3</td>
</tr>
<tr>
<td>D</td>
<td>Workbook</td>
<td>0 or 6</td>
</tr>
<tr>
<td>Bonus</td>
<td>(Teacher option)</td>
<td>—</td>
</tr>
</tbody>
</table>

END OF LESSON 26

EXERCISE 9

WRITING WORDS WITHOUT ENDINGS

1. Find part 2. ✓
   - The words in the first column have endings.
2. First word. ✓
   - What word? (Signal) Patted.
3. Next word. ✓
   - What word? (Signal) Conning.
4. (Repeat step 3 for slipper.)
5. Later, you’re going to write the same words without endings in the second column.
Appendix B

Corrective Reading treatment integrity checklist

Corrective Reading: Decoding (Levels A, B1, B2, C) ©1999
Corrective Reading: Comprehension (Levels A, B1, B2, C) ©1999
McGraw-Hill/SRA [https://www.sraonline.com/]

Implementation Integrity Direct Observation Checklist

Teacher: ___________  School: ___________  Observer: ________
Student: ___________  Grade: _______  CR Program/Level: ___________
Lesson #: _______  Group Size: _____  Start Time: _______  End Time: _______

**Directions:** During the observation, place a checkmark in the “+” (or “−”) column for each step observed (or not observed). Tally the number of “+” and divide by the total number of applicable steps. **Note:** If the step is not applicable, write N/A in the “+” column and do not include in the calculation of fidelity.

<table>
<thead>
<tr>
<th>Step</th>
<th>Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Classroom is organized (e.g., materials are accessible, students can see materials clearly, students are seated appropriately, smooth transitions between lessons)</td>
</tr>
<tr>
<td>2</td>
<td>Teacher teaches all lesson parts</td>
</tr>
<tr>
<td>3</td>
<td>Teacher corrects all errors using appropriate correction procedures (e.g., corrects all errors immediately; teacher says correct word, student repeats correct word, student begins again)</td>
</tr>
<tr>
<td>4</td>
<td>Even, quick pacing is maintained throughout lesson (e.g., approximately 12+ student responses per minute; students are engaged; quick transitions between lessons; teacher able to follow all parts of script without reading directly from script)</td>
</tr>
<tr>
<td>5</td>
<td>Teacher is enthusiastic, provides specific praise throughout lesson</td>
</tr>
<tr>
<td>6</td>
<td>Students are engaged and responsive during teacher-led instruction (e.g., at least 80% of responses are group responses; group responses are on signal, individual turns are offered)</td>
</tr>
<tr>
<td>7</td>
<td>Students respond with 90% accuracy before moving to next part of lesson</td>
</tr>
<tr>
<td>8</td>
<td>Classroom management is evident (e.g., group rules/expectations are clear, misbehavior is ignored or redirected, specific praise is offered; clear and effective motivation system in place)</td>
</tr>
</tbody>
</table>
BIOGRAPHY OF THE AUTHOR

Jennifer L. Robert was born in Lewiston, Maine on June 29, 1973. She was raised in Lewiston, Maine and graduated from Lewiston High School in 1991. She attended Bates College and graduated in 1995 with a Bachelor of Arts degree in Psychology. She remained in Maine and entered the School Psychology graduate program at the University of Southern Maine in 1997. She graduated with a Master of Science degree in School Psychology: Specialist Level in 2000. She married in 1999 and has three beautiful children, ages 13, 10, and 8. She has provided contracted school psychology services to the Lewiston Public Schools since September of 2000. She co-authored two chapters in a book on dropout prevention which will be published in 2014. Jennifer is a School Psychologist: Specialist and Nationally Certified School Psychologist (NCSP). She is currently a member of the National Association of School Psychologist (NASP) and the Maine Association of School Psychologists (MASP).

After completion of the doctoral program, Jennifer will continue to provide comprehensive school psychology services within the school setting, while considering the possibility of providing services through private practice as well. Her specific areas of interest include consultation around Multi-Tiered Systems of Support (MTSS), including all three tiers for academic and behavior. In addition, she hopes to provide Cognitive Behavioral Therapy to help young people manage their behavior. She is a candidate for the Doctor of Psychology degree in School Psychology from the University of Southern Maine in December, 2013.