

Effect of Reading Recovery on Literacy Needs of Hispanic English Language Learners

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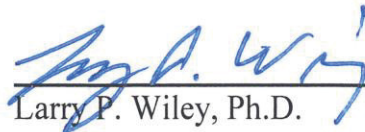
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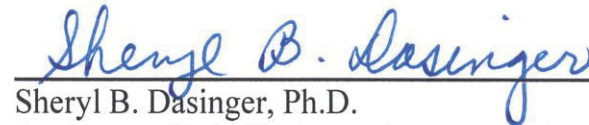
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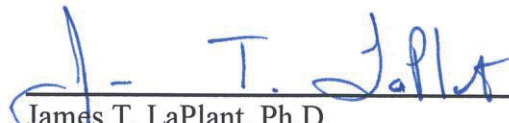
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ABSTRACT

This study examined how the Reading Recovery early intervention program affected the literacy needs of Hispanic English Language Learners (ELLs) based on their reading performance on the Criterion Reference Competency Test (CRCT). It examined how the Hispanic students sustained their reading performance through third grade in comparison to their peers (non-Hispanic students). Results from 2009, 2010 and 2011 reading portion of the CRCT were used to determine the progress made during the 3 years after the initial implementation of the Reading Recovery intervention.

The quantitative research designed used was a 2 x 2 x 3 mixed factorial analysis to determine the effect of student ethnicity, student status, and administration year. Ethnicity and student status were between-subject variables, but administration year was within-subject variable. The sample population consisted of 135 former Reading Recovery students who had attended a rural school district in south Georgia. The Statistical Software for Social Science (SPSS) was used to analyze the data.

The results indicated that there was a significant difference between average CRCT scores for the discontinued and recommended students. The discontinued students scored significantly higher than recommended students. However, there was no significant difference between average CRCT scores for the Hispanic and non-Hispanic students. There was no significant interaction between Reading Recovery status and ethnicity. The results also concluded that there was no significant difference between CRCT score for the 3 consecutive years. The CRCT scores were very similar in range. They consisted of 2009 ($M = 819.43$), 2010 ($M = 820.82$) and 2011 ($M = 817.82$). There was no significant interaction between CRCT scores and Reading Recovery status.

Likewise, there was not a significant interaction between CRCT scores and Ethnicity. The final analysis of the study indicated that there was not a significant interaction between CRCT scores, ethnicity, and Reading Recovery status.

The qualitative analysis consisted of four descriptive case studies that followed two Hispanic students and two non-Hispanic students through the Reading Recovery process. Each descriptive case study reflected the Reading Recovery process for the selected students during 2008-2009 school-term and CRCT reading scores for 2009-2011. CRCT reading scores were presented in the case studies: (a) students who scored above 800 on the assessment successfully met the criterion to pass; (b) students who scored 850 or above on the CRCT exceeded the required expectations; and (c) students who scored below 800 failed to meet the minimum requirement. The final analysis of the case studies indicated that in 2009, the average CRCT reading score was 814.50. The average reading score for 2010 was 816, and the average reading score for 2011 was 817. Overall, the average student population continued to maintain the necessary strategies to perform successfully over a 3-year period on the CRCT reading test after receiving Reading Recovery lessons.

TABLE OF CONTENTS

| | |
|--|----|
| Chapter I: Introduction..... | 1 |
| Statement of the Problem..... | 10 |
| Purpose of the Study..... | 10 |
| Definition of Terms..... | 10 |
| Research Questions..... | 12 |
| Chapter II: Review of Literature..... | 13 |
| English Language Learners..... | 14 |
| Academic Struggles of ELLs | 14 |
| Effectiveness of Communication | 16 |
| Early Literacy Intervention..... | 19 |
| Closing the Achievement Gap | 19 |
| Long-term Effects of Early Interventions | 22 |
| Interventions for Struggling Students | 24 |
| Reading Recovery..... | 36 |
| Development of Reading Recovery | 36 |
| Effectiveness of Reading Recovery | 38 |
| Criticisms of Reading Recovery | 43 |
| Summary..... | 45 |
| Chapter III: Methodology | 47 |
| Research Questions..... | 47 |
| Population and Sample | 48 |
| Instrumentation | 48 |

| | |
|---|----|
| Data Collection | 51 |
| Independent Variables | 52 |
| Dependent Variable | 54 |
| Research Design, Analysis, and Hypotheses | 54 |
| Chapter IV: Presentation and Analysis of the Data | 57 |
| Results..... | 58 |
| Hypothesis 1..... | 58 |
| Hypothesis 2..... | 59 |
| Hypothesis 3..... | 59 |
| Hypothesis 4..... | 60 |
| Hypothesis 5..... | 61 |
| Hypothesis 6..... | 62 |
| Hypothesis 7..... | 63 |
| Case Studies | 64 |
| Case Study 1 | 67 |
| Case Study 2 | 73 |
| Case Study 3 | 78 |
| Case Study 4 | 83 |
| Chapter V: Summary, Findings, Conclusions, and Recommendations..... | 89 |
| Summary..... | 89 |
| Findings..... | 90 |
| Conclusions..... | 96 |
| Recommendations..... | 98 |

REFERENCES99

Appendix A: Permission Form109

Appendix B: Institutional Review Board Oversight Screening Form111

LIST OF FIGURES

Figure 1. Mean CRCT reading score as a function of ethnicity58

Figure 2. Mean CRCT reading score as a function of reading recovery status59

Figure 3. Mean CRCT reading score as a function of administration year60

Figure 4. Mean CRCT reading score as a function of reading recovery
status and ethnicity.....61

Figure 5. Mean CRCT reading score as a function of reading recovery
status and administration year.....62

Figure 6. Mean CRCT reading score as a function of ethnicity and
administration year.....63

Figure 7. Mean CRCT reading score as a function of reading recovery
status, ethnicity, and administration year.....64

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Chapter I

INTRODUCTION

“Increasing student diversity was perhaps the most notable hallmark of turn-of-the-century classrooms in the United States. Much of this diversity arises from the increasing numbers of English Language Learners (ELLs) in public schools” (Bowman-Perrott, Herrera, & Murry, 2010, p. 91). As the attendance population of ELLs has continued to increase, many educators and policymakers have been striving to improve the educational foundation for ELLs (Klingner, Artiles, & Barletta, 2006).

According to Betts et al. (2008), of all the content areas considered for academic improvement, reading was one content area that tended to gain the most attention. Betts et al. reported that the ability to learn to read during childhood was a major accomplishment. They stated that reading was necessary for successes in school and life that became progressively more important throughout history. Although many children learn to read when introduced to multiple instructional approaches, some children have difficulty when faced with reading instruction in school (Hicks & Villaume, 2000). Researchers found that one of the major factors for reading difficulties and lagging readers was limited vocabulary (Carlo et al., 2008). In the classroom, teachers must realize these differences and adequately prepare themselves to differentiate instruction as necessary to meet the needs of all learners, especially Hispanic ELLS (Carlo et al., 2008). Reading has a lifelong impact on access to knowledge and economic success (Calhoon, Otaiba, Greenberg, King, & Avalos, 2006). Calhoon et al. (2006) stated that

socioeconomic classes and ethnic groups exhibited different levels of reading achievement from a relatively early age. Hagaman, Luschen, and Reid (2010) indicated that reading problems were usually the reason students were referred to be tested for special education services. Likewise, Gyovai, Cartledge, Kourea, Yurick, and Gibson (2009) suggested that some children who struggle with reading could possibly have learning disabilities. Fountas and Pinnell (1996) pointed out that good readers were capable of self-monitoring, searching for cues, discovering new details about the text, examining one source of information against another, confirming their reading, self-correcting when necessary, and solving unknown words while using multiple sources of information. Moreover, Bowman-Perrott, Herrera, and Murry (2010) stated that other key components of reading instruction would include phonics, phonemic awareness, vocabulary, reading comprehension, and reading fluency. By balancing the different strategies, readers were able to determine the meaning of the text (Fountas & Pinnell, 1996). Schwartz, Hobsbaum, Briggs, and Scull (2009) found that one crucial factor in determining the effectiveness of any form of instruction was whether it enhances the performance of students academically.

Rumbaugh and Brown (2000) reported that government officials mandated elementary schools improve reading instruction within the United States. However, Farver, Lonigan, and Eppe (2009) indicated that non-English speaking children continued to face major challenges in becoming literate. They noted that these students had a higher chance of reading difficulties and low academic achievement. Malloy, Gilbertson, and Maxfield (2007) reported that there was a national concern for the educational plight of English Language Learners. They indicated that this was a major concern because

generally low reading achievement scores lead to high rates of grade retention that eventually led to greater school dropout rate for this population.

Wyatt (2008) noted that there was a great need for developing early intervention programs. She stated that early interventions were pathways many educators use to increased academic performance of struggling students. Wyatt reported that the interventions were to get struggling students to progress to the average range of their class and perform adequately on local, state and national assessments. Wyatt indicated that these early interventions could possibly include, but were not limited to, small group, an additional resource teacher, computer assistance programs, after school tutoring, pull out instruction, and peer tutors.

Slavin (1987) reported that small group instruction allowed teachers opportunities to address the need of students more efficiently. He noted that small group activities increased the amount of meaningful and interesting talk shared among the students. Slavin also emphasized the fact that more evidence was available that supports students working together in small cooperative groups mastering materials, as opposed to working alone.

Isherwood and Barger-Anderson (2008) stated that having an additional teacher in the classroom allows more opportunities for students to receive more direct help for an extended period. They emphasized that teachers who incorporate a co-teaching model in their classroom must establish a system of trust, a line of open communication, ability to delegate responsibilities, prepare themselves for challenges and obstacles, and rejoice when they achieve academic gains. Isherwood and Barger-Anderson found that the implementation of a co-teaching partnership could be very rewarding, yet complex. They

contended that the workload between team teachers generally produces an effective use of time and energy.

Cates (2005), on the other hand, found that computer assisted programs were known to be of great assistance to students. He noted that computer assisted programs were developed to deliver individualized instruction. As the program delivered individualized preprogrammed materials, it continued to give consistent and efficient learning trials that increased learning opportunities (Cates, 2005). Cates stated that the computer programs generally kept an ongoing progress check and recorded areas of difficulty and areas mastered.

David (2011) determined that after school tutoring could provide enrichment activities that usually will not take place during school hours. During this time, students had opportunities to complete homework assignments, test preparation skills, academic counseling, and assistance from someone that was knowledgeable of the content material (Nelson-Royes & Reglin, 2009). David stated that an effective after school tutoring programs generally consisted of strong leaders, clear goals, consistent and dependable staff, and the ability to keep the student engaged and motivated.

According to Clay (1991), grouping students appropriately was very important. She concluded that teachers put groups together based on the effects of learning throughout the year and not solely on information recorded at the beginning during pretest. She discussed that by pulling students out and working with them one-on-one or in a small group, students were able to receive direct instruction based on their particular needs. Similarly, Fountas and Pinnell (1996) pointed out that groups were subject to change because children learn quickly and work at their own pace.

Almaguer (2005) explained that having a peer tutor reassures ELLs in class due to their limited ability to speak English. She reported that as students interacted with peers, they were capable of helping one another, which increased academic achievement. Cates (2005) found that peer tutoring was an effective method that was cost efficient, which had much less impact on the educational cost. Moreover, Dufrene et al. (2010) concluded that peer tutors tend to be more consistent and accurate when implementing academic strategies. Cates stated that peer tutoring decreased behavioral issues among students who typically exhibited undesirable behavior and/or attention deficit hyperactivity disorder. They further discussed that the support of another peer made a big difference in the amount of time lost or gained when trying to interpret unknown content.

Dunn (2010) concluded that interventionists developed early intervention reading programs to improve the reading performance of students. He discussed that early interventions, even at the kindergarten level, could efficiently, and economically eliminate many of the struggles children were facing with ongoing reading difficulties. Dunn stated that early intervention programs worked in large, small, and/or individual groups. There was a national educational policy for schools to distinguish interventions that assisted ELLs who experienced difficulty with literacy (Burroughs-Lange & Douetil, 2007).

According to Malloy, Gilbertson, and Maxfield (2007), it was very difficult to locate effective instructional intervention for ELLs due to the vast differences in language proficiency, motivation, and school experience. They reported that language was a barrier because poor communication leads to a lack of understanding between the

educator and the student. They also contended that a lack of motivation caused the student to not participate nor thrive to obtain more academically. Malloy et al. (2007) determined that school experience played an integral role in student success. Hurry and Sylva (2007) concluded that if early interventions were more available, the *Matthew Effect* or the gap between those who had early reading skills in place and those who were less fortunate who continued to lag behind, could diminish sooner. Hurry and Sylva noted that the *Matthew Effect* stated that the implementation of an early intervention program was crucial at an early age if we want remediation programs to be successful later on. Linan-Thompson, Vaughn, Prater, and Cirino (2006) reported that there was a demand for more information about effective interventions in reading for English Language Learners to determine the long-term effects of systematic and explicit interventions based on the core elements of an effective reading intervention.

Almaguer (2005) stated that the number of English Language Learners was growing at a rapid pace within schools throughout the country. Almaguer described ELLs as people whose primary language was not English, but people who were striving to acquire English as a second language. Garcia, Jensen, and Scribner (2009) concluded that ELLs were students whose English proficiency was not fully developed; therefore, they continued to struggle with English instruction. ELLs were one of the largest groups to demonstrate difficulty with literacy (Tissington & LaCour, 2010).

Gilbertson, Maxfield, and Hughes (2007) reported that interventions with the likelihood of being effective for ELLs derived from known factors when intervening with native English speakers. In addition, Nakamoto, Lindsey, and Manis (2008) indicated that a major factor to be considered was the varying degree to which ELLs were bilingual

and biliterate. They stated that proper communication was an essential factor; therefore, how well skills transferred from their first language to their second language made a major difference.

Almaguer (2005) concurred that offering multiple opportunities of communication was essential. She determined that the importance of these opportunities helped to assist with development of language proficiency, content knowledge, and capability of understanding the strengths in language and different cultures. Garcia, Jensen, and Scriber (2009) found that ELLs in the United States had the capability of speaking multiple languages with Spanish being the most dominant.

There were different tasks that ELLs face as they learned new languages and content information (Bowman-Perrott, Herrera & Murry, 2010). Therefore, educators must strive to produce the most conducive environment for learning possible (Tissington & LaCour, 2010). Betts et al. (2008) concluded that finding the appropriate assessment tool for ELLs who lack control of the English language was very difficult for school systems across the United States. They discussed that the key issues in assessment of ELLs were language proficiency, cultural and linguistic background, acculturation, and socioeconomic status of ELLs. These researchers asserted that the administration process and the type of assessment used with ELLs were very important. They noted that because examination procedures and concerns complicate identification and eligibility services, misclassification of ELLs had been an issue.

Dong (2009) revealed how important it was for teachers to activate prior knowledge for all students, especially the ELLs. They reported that ELLs had difficulty transferring their prior knowledge to content matter they were learning in English;

therefore, it was vitally important for teachers to make the connections for them. Bifuh-Ambe (2009) determined that learning strategies for ELLs were mostly problem oriented which meant that ELLs problem solved the situation by self-direct learning, social collaboration, and using context clues to guess. She indicated that of all the tools for ELLs to use, motivation was the one that appeared to bring the most success academically.

Reading Recovery (RR) was a short-term early intervention program designed for children recognized as the lowest literacy achievers (Bufalino, Wang, Gomez-Bellenge, & Zalud, 2010). Reynolds, Wheldall, and Madelaine (2009) found that Reading Recovery positively affected the reading abilities of struggling students. The main purpose of the Reading Recovery program was to reduce the continuous reading deficiencies of many first grade readers who were at risk of failing to learn to read (Quay, Steele, Johnson, & Hortman, 2001).

Rumbaugh and Brown (2000) reported three levels in which Reading Recovery placed focus. First, they noted that Reading Recovery consisted of helping school districts to increase reading performance of struggling readers through this delivery model. Secondly, Reading Recovery assisted in training teachers in gaining a better understanding of how children think and learn. Lastly, Reading Recovery emphasized the importance of assisting struggling students with formal, systemic procedures.

Compton-Lily (2011) reported that the goals of Reading Recovery were to improve literacy skills, to minimize the number of struggling readers in first grade, and to minimize any future struggles in reading. In addition, she explained that Reading Recovery placed emphasis on alphabets, fluency, comprehension, and basic reading

achievement. Compton-Lily noted that the design of the program allowed trained teachers to work for approximately 12 to 20 weeks with Reading Recovery students for 30 minutes daily, one-on-one.

With development of literacy, new strategic behaviors were developing in reading and writing which enhanced academic performance (Bufalino, Wang, Gomez-Bellenge, & Zalud, 2010). Hicks and Villaume (2000) added that Reading Recovery was an effective intervention for reshaping the difficulties and struggles of literacy. The ultimate goal of Reading Recovery was to increase the performance of the lowest achievers to the average of their class performance (Gardner, 2010).

According to Clay (2005), Reading Recovery was an early intervention program that fostered the self-esteem of each child. She stated that the teacher and student had opportunities to get to know one another through daily interactions. She pointed out that each child should always feel successful by the end of a Reading Recovery lesson. Clay indicated that the teacher may have encountered difficulty accelerating the student academically, but the child should not feel this frustration. Instead, Clay revealed that the teacher must make every effort to maintain a positive environment at all times.

Tissington and LaCour (2010) concluded that consistent, explicit, systematic instructions for ELLs to be more beneficial. They explained that language plays an integral role during this process as ELLs proceed to learn to be fluent independent readers. Klingner et al. (2006) insisted that it was difficult to make decisions about ELLs who were struggling in reading. A major focus for the educational community was determining a functional method of assessing struggling readers and writers (Dunn, 2010).

Statement of the Problem

The No Child Left Behind Act of 2001 mandates that every child be on grade level by 2014 regardless of life experiences, intelligence capabilities, or background experiences (Nelson-Royes, & Reglin, 2009). Calhoun, Otaiba, Cihak, King, and Avalos (2007) indicated that effective early reading instructional practices made a difference, especially for those children who were at risk of reading difficulties. Tissington and LaCour (2010) revealed that ELLs were recognized as one group who continued to struggle in reading. Bufalino, Wang, Gomez-Bellenge, and Zalud (2010) added that a preventative approach would provide services to children at the beginning of their educational experience that could have deterred any future literacy challenges. The need for early intervention programs was warranted and studies exemplified them as powerful (Bufalino et al., 2010).

Purpose of the Study

The purpose of this study was to explore how the Reading Recovery (RR) program affected the literacy needs of Hispanic ELLs based on their reading achievement score on the Georgia Criterion Reference Competency Test (CRCT). The study examined how Hispanic students who received RR in first grade sustained through third grade in comparison to their non-ELLs peers. Descriptive case studies of Hispanic and non-Hispanic students provided a view of the typical RR process.

Definition of Terms

Acceleration. This is the rate of progress a child must make to catch up to the average of his or her classmates.

Cross-checking. When a student is not satisfied with a response, he or she makes another attempt by using two sources of information, checking one against the other.

Discontinued. This signified that the student has successfully completed the requirements of the RR program and can independently read on or above grade level.

Early Intervention. This is an intervention program that took place prior to students attending third grade.

Exit Status. This refers to the progress level of the student as he or she leaves the program.

Incomplete program. Students who are unable to receive the full intervention program of RR due to the academic school year ending Observation Survey. This is a six-battery assessment instrument used to admit and exit students from the RR Program. The assessment includes Letter Identification, Concepts About Print, Word Test, Writing Test, Writing Vocabulary, Hearing and Recording Sounds in Words, and Text Reading.

Recommended. A student is recommended when he or she makes progress, but not enough to reach grade level performance level within the 20-week intervention period. Instead, the student is recommended for further instructional support or evaluation.

Roaming Around the Known. During this particular session, the RR teacher focuses on what the child already knows. There is no new knowledge introduced during this period.

Running Record. This is a reading assessment instrument used to record a student reading orally.

Research Questions

- 1) Will Hispanic and non-Hispanic students score differently on the CRCT Reading?
- 2) Will students who are discontinued from the reading recovery program score differently on CRCT reading test than those students who are recommended?
- 3) Will CRCT scores change over the 3-year period when aggregated across ethnicity and reading recovery status?
- 4) Will non-Hispanic students who are discontinued or recommended have similar differences in CRCT reading scores as Hispanic students who are discontinued or recommended?
- 5) Will CRCT scores differ across the 3-year administration for discontinued and recommended students?
- 6) Will CRCT scores differ across the 3-year administration for Hispanic and non-Hispanic students?
- 7) Will the pattern of differences in CRCT reading scores for Hispanic and non-Hispanic students who are discontinued or recommended persist over the first, second, and third grades?
- 8) How did Hispanic students and their non-Hispanic peers progress through RR as an early literacy intervention?

Chapter II

REVIEW OF THE LITERATURE

According to Almaguer (2005), ELLs were those individuals with a primary language other than English and were in the process of learning English. ELLs were faced with differences in language proficiency, motivation, and school experiences; therefore, educators struggled with finding appropriate interventions to support them (Malloy, Gilbertson, & Maxfield, 2007). Mayers (2006) reported that the No Child Left Behind (NCLB) Act set high expectations for all students, regardless of race, to excel academically. Mayers, also, added that President Bush emphasized the idea that leaving behind any child in education was not permissible. Thus, government officials mandated elementary schools to improve reading instruction within the United States (Rumbaugh & Brown, 2000). Quay, Steele, Johnson, and Hortman (2001) stated that the main purpose of the RR program was to reduce the continuous reading deficiencies of many first grade readers who were at risk of failing to learn to read. Hicks and Villaume (2001) noted that RR was an essential tool in developing effective literacy skills. Therefore, the review of the literature portrayed relevant research concerning ELLs, early literacy intervention, and RR.

English Language Learners

Academic Struggles of ELLs

According to O'Day (2009), educators and policymakers were alarmed about meeting the academic needs of ELLs. O'Day stated that over five million ELLs were being educated in the United States. With the increased numbers of ELLs enrolled in school, a large portion of these learners struggled academically or performed below the adequate performance level (Klingner, Artiles, & Barletta, 2006).

Betts et al. (2008) discussed that school systems within the United States often struggled with identifying the appropriate test for students who exhibited difficulty with the English language. They added that the growing number of ELLs and reports of poor achievement had intensified this effort. Betts et al. conducted a study to examine the reading achievement of students from kindergarten to second grade. Components used to predict the reading achievement were fluency-based prompts, alphabetic principle, and oral reading. Their study used the Curriculum Based Measurement (CBM) to measure students' progress on core academic areas. Betts et al. stated that the measures were practical, adequate, and conscious of minor changes in students' performance. The authors specifically looked at long-term predictions of early literacy skills and later reading achievement. The sample population consisted of 1,919 students from an urban school district in the upper Midwest. There were 34% Caucasian, 35% African American, and 31% Hispanic. Twenty-eight percent of these students were eligible to receive services as ELLs. Fifty-two percent were girls and 48% were boys. Approximately 62% of the students were eligible for free or reduced lunches. All students were administered the Minneapolis Kindergarten Assessment (MKA) during the

spring of 2001-2002. Trained district employees administered and scored the MKA. The study only included the fluency sections on the assessment and literacy skills. The researchers administered the Northwest Achievement Levels Test (NALT) in April of second grade. Betts et al. noted that the reliability on the NALT was computed using the observed score variability and the conditional standard error of measurement. Betts et al. reported that the findings suggested that the socioeconomic status and second grade reading scores were statistically significant. In addition, the findings indicated that the predictive validity of the early literacy was high with no evidence of predictive bias for ELLs and non-ELL groups.

Klinger, Artiles, and Barletta (2006) conducted a review study that differentiated between ELLs who struggled in acquiring reading skills due to limited proficiency in English and those who had been diagnosis with learning disabilities. They conducted a comprehensive search for all articles that met specific criteria. Studies that were selected to participate in the review were studies with original data, focused on students in grades K-12, focused on English as second language learners, and those at risk ELLs with learning disabilities or struggling readers. Educational Resources Information Center (ERIC) was a primary source for the search. In addition, the ERIC Thesaurus gave appropriate descriptors for students who were ELLs. Klinger et al. consulted with other researchers for additional articles on distinguishing between language acquisition and learning disabilities. They browsed the internet for online searches of journals not identified by the ERIC database. They stated that ELLs tended to exhibit lower academic achievement than non-ELLs. Lastly, Klinger et al. pointed out that schools had been

accountable for increasing academic achievement of ELLs and non-ELLs with and without learning disabilities.

In the United States, studies indicated that Hispanic ELLs had struggles with oral language and reading comprehension (Nakamoto, Lindsey, & Manis, 2008). Nakamoto et al. (2008) conducted a 7-year longitudinal investigation of 303 Hispanic kindergarteners in a Texas town near Mexico. The research team and school district collected data during a 4-week period in May 2002 (250 third graders) and within a 4-week period in January 2005 (245 sixth graders). Students received individual administration of a 50 to 90 minute test in a quiet room during school hours. The test consisted of letter word identification, timed word reading, picture vocabulary, listening comprehension, memory for sentences, passage comprehension, and the Gray Silent Reading Test. The longitudinal data consisted of 282 participants who had scores for at least one of the two data collection periods. The findings indicated that in third grade, the English and Hispanic decoding measures had distinct and highly related factors and the English and Hispanic oral language assessments had two factors that demonstrated a small positive correlation. Likewise, in sixth grade, the findings indicated that both languages had significant predictors of the reading comprehension, decoding and oral language.

Effectiveness of Communication

Almaguer (2005) reported that various communications were essential for ELLs. Almaguer stated that ELLs who worked cooperatively with native English speakers on projects increased the opportunities for ELLs to hear and produce language and to discuss meanings with others. Almaguer conducted a study to determine the effect of dyad

reading instructions on the reading achievement of 80 third grade ELL students. There were 40 students in both the experimental and control group. The students were of Mexican descent from south Texas. Based on the pretest, the students were comparable in reading fluency and reading comprehension. They were very similar in socioeconomic status, ethnicity, and primary language. The research design used was a quasi-experimental nonrandomized pretest-posttest control group. The instrument used to measure the effect of dyad reading instruction on the Hispanic third grade ELLs was the Comprehensive Reading Assessment Battery (CRAB). The CRAB allowed the researchers to acquire three scores: number of words read correctly, number of comprehension questions answered correctly, and number of word replacements chosen correctly in the cloze procedure. The students in the experimental group received dyad reading instruction in conjunction with regular classroom instruction by the classroom teacher. Within the 90-minute language arts block, the students in the experimental group participated in dyad teams for 30-minute sessions daily. The term lasted for 9 weeks. Both groups received the school district mandated language arts instruction for the language arts block. An analysis of covariance was conducted. Two portions of the instruments were statistically significant on reading fluency and reading comprehension, but the third part of the instrument did not show a statistically significant result for reading comprehension. Instead, it showed through a cooperative peer-assisted reading strategy such as dyad reading; students would benefit from each other in this social context while reading.

Bowman-Perrott, Herrera, and Murry (2010) stated that to assist educators with drawing background knowledge when working with ELLs, teachers could have

previewed the material more, had the students summarize what they read in their own language, assisted students with comprehension of the text as they were reading, and reviewed the material read to ensure they were on the right track. They indicated the reading process for ELLs as three language systems: sociological, psychological, and linguistic. When combined together, this sociopsycholinguistic perspective contributed to multiple factors that affected reading performance. Likewise, Bowman-Perrott et al. added that after instructions, ELLs were disinterested and discouraged because they did not understand the tasks. They also pointed out that when enhancing the vocabulary of ELLs, there was very little reading comprehension involved, but it was mostly working with words in isolation. Lastly, they found that approximately two thirds of the ELLs did not receive the language assistance they needed to achieve successfully.

In 2002, Title I enacted a law that required Limited English Proficiency (LEP) students, also known as ELLs to take the content areas of their state exams with identified accommodation. After enrollment of 3 years, ELLs were required to take state content area assessments in English (Mayers, 2006). The new law laid the foundation for developing or creating effective early intervention programs that would assist ELLs (Bowman-Perrott, Herrera, & Murry, 2010). Bowman-Perrott, Herrera, and Murry (2010) pointed out that the most notable hallmark in the United States classrooms was the increase in student diversity. Bowman-Perrott et al. noted that much of the diversity related to the increasing number of ELLs. Because Hispanic ELLs were more likely to live below the federal poverty level, they had a greater probability of entering school with limited vocabularies, poor early literacy skills, and minimal school readiness factors (Bowman-Perrott et al., 2010). They estimated that by 2030, 40% of the student

population in K-12 would be comprised of ELLs. In addition, they noted that ELLs often struggled in the area of reading, which negates for discovery and implementation of effective practices.

In Summary, Tissington and LaCour (2010) added that ELLs were one of the largest groups who struggled with literacy. ELLs continued to increase in numbers daily, which was an educational challenge for the United States (Klingner, Artiles, & Barletta, 2006). The American schools were having difficulty meeting the academic needs of students who demonstrated difficulty using the English language (Betts et al., 2008). Thus, developing early literacy interventions to assist the ELLs were necessary due to their constant struggles (Askew et al., 2002).

Early Literacy Intervention

Closing the Achievement Gap

In public schools, teachers provided all students with classroom instructions, which served as the first line of prevention for educational struggles (Askew et al., 2002). However, certified teachers needed other safety nets when students continued to exhibit academic deficiencies (Askew et al., 2002). Wasik and Slavin (1993) suggested that remediation after the primary grades was extremely ineffective; therefore, more focus should be placed on preventing learning problems than waiting to remediate in later grades. Wasik and Slavin conducted a study of five programs that were associated with one-to-one tutoring for first grade students who were at risk of failing reading. The researchers used a set of procedures called best-evidence synthesis that included a combination of elements of meta-analysis and traditional narrative reviews. The five programs consisted of instructional materials as well as provision of one-to-one adult

tutors. Within the five programs, there were variations of curriculum, implementation of classroom instruction, usage of certified versus paraprofessional tutors, models of reading, and assessment techniques. The programs were located in Illinois, Maryland, North Carolina, Indiana, New York, and Ohio. The duration of each program ranged from 15 to 30 minutes daily. There were only two components of reading that all five programs emphasized. They were perceptual analysis of print and decoding. However, there were other components of the reading programs that differed such as knowledge of print conventions, syntactic analysis of sentences, prose structure, story grammar, inference, reading strategies, meta-cognition and error detection, and error correction strategies. The five tutoring programs varied greatly in models of reading, curriculum, tutoring methods, duration, integration with classroom instruction, and other factors. Wasik and Slavin found that programs with the most comprehensive models of reading, and complete instructional interventions, appeared to have more impact on students than those with only a few components in the reading process. They noted that using tutors only was not enough. They further indicated that the type of instructional delivery was of great importance as well. Wasik and Slavin found using certified teachers as tutors appeared to have more impact on the students than using a paraprofessional. They reported that one-to-one tutoring was expensive, but the lasting effects of this approach were extremely rewarding.

Early effective reading instructional practices fostered huge difference in having successfully closed the reading gap (Calhoun et al., 2007). Malloy, Gilbertson, and Maxfield (2007) pointed out that identifying an effective instructional intervention for ELLs who demonstrated difficulty reading due to language proficiency, motivation, and

different school experiences was a difficult task. Bursuck and Damer (2007) noted that students in need of additional support in reading tended to be at risk of becoming struggling readers. Clay (2001) added that regardless of the type of early intervention implemented; it was essential to identify and support these children who experienced difficulty reading early.

Calhoon et al. (2007) stated that there were critical reasons as to why improvement in Hispanic children's reading development was necessary. Firstly, teachers were retaining Hispanic students at a high rate that led to a high proportion considered for special education programs. Secondly, they were more likely to drop out of school as compared to Caucasian students. Lastly, the ultimate goal of No Child Left Behind Act was to increase reading performance for all students by 2014. Likewise, Calhoon et al. reported that 80% of ELLs had Spanish as their first language and were more likely than their English-speaking peers to demonstrate reading difficulties. They revealed that ELLs reading development was hindered by their limited academic language. Calhoon et al. (2007) conducted a study with 76 first grade students whose parents enrolled them in the two-way bilingual immersion (TWBI) program. Seventy-nine percent of the students were Hispanic and 21% were determined to have limited English proficiency. More than 80% of the students received free or reduced lunch. The study took place in three Title I elementary schools in a southwestern school district, located near the border with Mexico. Six certified Hispanic teachers participated in the study. Peer-assisted learning strategies (PALS) or contrast condition were randomly assigned to the classrooms. The PALS students met three times weekly for a total of 30 hours of peer mediated early literacy intervention. The researchers used the Dynamic

Indicators of Early Literacy Skills (DIBELS) to measure reading achievement. Calhoon et al. found statistically significant differences with large effect sizes in favor of PALS on phoneme segmentation fluency, nonsense word fluency, and oral reading fluency.

Meichenbaum and Biemiller (1998) found that students who had difficulty at the start of school continued to exhibit relatively weak skills throughout their educational lives. Their sample populations consisted of 99% African American students with 70% of the students being qualified for free lunch. The findings revealed that the seventh-grade students ranged in their reading and language skills from below the first grade to above the eleventh grade level. They noted that children who acquired literacy skills at an early stage in their life, generally remained average or above average readers, writers, and spellers for the remainder of their elementary school years. Likewise, those children who exhibited difficulty during their primary years often continued to demonstrate struggles later on academically.

Long-term Effects of Early Interventions

Linan-Thompson, Vaughn, Prater, and Cirino (2006) concluded that it was necessary to develop more effective interventions in reading for ELLs when determining the long-term effects of systematic and explicit interventions. Linan-Thompson et al. (2006) conducted a study with first grade students from 11 schools. Four schools utilized the English intervention and seven schools utilized the Hispanic intervention. One hundred and three Hispanic students were participants in this study. Linan-Thompson et al. randomly assigned the students into intervention or control groups. The reading intervention groups met daily for 50 minutes in small groups from October to April. Assessment used for this study was the Woodcock Language Proficiency Battery-Revised

(WLPB-R). The subtests administered from the WLPB-R were letter-word identification, word attack and passage comprehension. Linan-Thompson et al. findings indicated that ELLs who were at risk of reading difficulties made gains and were less likely to be placed in special education classes if they received explicit, systematic, and intensive interventions.

Almaguer (2005) noted that it was the responsibility of the educator to address the needs of ELLs. She suggested that by providing a sound educational practice, this would help students to succeed in this competitive economy. Whereas, Bowman-Perrott et al. (2010) indicated that it was sometimes difficult to get a clear picture of how well ELLs were performing academically because of the difference in assessment and reporting practices across states. Bowman-Perrott et al. stated that nationwide data revealed a significant gap between the achievements of ELLs and native English-speaking peers, especially in the area of reading.

Farver, Lonigan, and Eppe (2009) stated that ELLs had lower literacy performance, lower academic achievement, higher grade-retention rate, and higher school dropout rates than non-ELLs. Farver et al. attributed the problems students experienced in learning to their elementary years. Farver et al. conducted a study with 94 Hispanic speaking ELL preschoolers who were located in Los Angeles, California. These students were from homes where Spanish was the dominant language. Each participant was born in the United States. A randomized design was implemented to assign the students to one of three conditions: (a) a control group of 32 who received the High/Scope Curriculum only, (b) a group of 31 who received their classroom High/ Scope Curriculum and the small group from Literacy Express Preschool Curriculum in English, and (c) a group of

31 who received their High/Scope Curriculum and the small groups from the Literacy Express Preschool Curriculum began in Hispanic and then transitioned to English instruction. The measures used during this study consisted of a family demographic questionnaire and a Home Literacy Questionnaire. The researchers assessed the students' oral language, phonological awareness, and print knowledge with the Receptive Vocabulary, Definitional Vocabulary, Blending, Elision, and Print Knowledge subtests of the Preschool Comprehensive Test of Phonological and Print Processing. The procedure consisted of assessment with the students' preliteracy skills in both Spanish and English prior to the intervention from October to November and at the end of May to June. It took two different days to administer the 20-30 minute individualized assessments. The examiners used the language of the test to avoid changing any codes. The results of this study indicated the students in the English only and transitional groups made significant gains in their emergent literacy skills in both Spanish and English in comparison to the control group. The results of the English-only and transitional models were equally effective for outcomes in English language, but the transitional model was most effective for the Hispanic-language outcomes. Additionally, the results indicated that an early literacy intervention might have improved preliteracy skills of Spanish-speaking preschoolers.

Interventions for Struggling Students

Wyatt (2008) noted that the purpose of early intervention programs was to assist students who were having difficulty progressing to the average range of their class and performing satisfactorily on local, state, and national assessments. Possible interventions included, but were not limited to, small group instruction, co-teaching, computer assisted

programs, after school tutoring, peer tutoring, and pulling students out of the classroom. Wyatt conducted a study that examined the sustained effects of RR for 3 years after the initial intervention. In addition, Wyatt also examined the relationship between former discontinued RR students in second to fourth grades who needed additional literacy support. The study took place in Southwest Arkansas where 79 RR students and 21 RR teachers participated. The student population consisted of 66% Caucasian, 25% African American, and 9% Hispanic. Longitudinal data was used for comparing achievement scores obtained from the Arkansas Benchmark Examination of fourth grade discontinued RR students and the Observation Survey of Early Literacy Achievement. The RR teachers collected scores from the fourth grade Arkansas Benchmark Examination. The scores were categorized into one of four areas: Below Basic (below average), Basic (average), Proficient (above average), and Advanced (well above average). The findings indicated that some RR students did not meet the state average, but 87% did score at the Basic or above level. In addition, the majority of the former fourth grade RR students sustained their gains.

Small Groups. Fien et al. (2011) conducted a small group study on the vocabulary and comprehension of first grade students with low language and low vocabulary skills. The small group study included 106 first grade students. Fifty-two students were in the control group and 54 students received small group intervention. During the study, all students participated in the whole group instruction with the Read Aloud Curriculum, but the intervention small group received an additional 20 minutes, twice per week, for 8 weeks. The Read Aloud Curriculum consisted of 30-minute lessons that lasted about 40 instructional days. Each small group contained fewer than five

students, and they worked for approximately 8 weeks. As the students participated in the small group, they were able to receive additional read aloud activities and more opportunities to study the whole-class Read Aloud Curriculum in detail. Fien et al. used a randomized block design to investigate whether or not additional small-group instruction improved the vocabulary and comprehension skills of the low achievers. The results of the study indicated those students who received small group instruction outperformed the control group on vocabulary assessments and expository retells, but not on the narrative retells. The effect size ranged 0.56 to 0.66.

Kamps, Abbott, Greenwood, Willis, Veerkamp, and Kaufman (2008) conducted a study on small group reading instruction as secondary and tertiary level components of a three-tier model of prevention and intervention. The sample population consisted of 83 students. Forty-four were boys and 39 were girls. Sixty-one percent were Caucasian, 10% African American, and 29% Hispanic. There were 38 students from the low-socioeconomic status and 39 students from the middle-socioeconomic status. The students were selected from 11 elementary schools. The assessment instruments were Dynamic Indicators of Basic Early Literacy Skills (DIBELS) and Woodcock Reading Mastery Test-Revised (WRMT-R). The quasi-experimental design used an experimental and control group comparison. Schools randomly assigned to experimental groups. The small group reading intervention occurred during first and second grades. The intensive-level students were a part of one of four curricula. The intervention was delivered to groups of one to six students for 30 to 40 minute sessions at least three times per week over a 2-year period. The findings indicated that students in the more directed, explicit

intervention groups generally out-performed students in the comparison group who did not receive consistent phonics instruction or structured lessons.

Ross and Begeny (2011) conducted a study to determine the relative effects of an evidence-based, time-efficient one-on-one intervention and small group intervention for ELLs with reading difficulties. The sample population consisted of five, second grade students from one rural school in the Southeast. The students' first language was Spanish. The assessments used at the beginning and end of the study were DIBELS Oral Reading Fluency (DORF) Benchmark and Test of Word Reading Efficiency (TOWRE). An alternating treatments design was used to assess the differences between the small group and one-on-one intervention. The small group and one-on-one interventions followed the same procedural order. Following the preliminary assessment, each intervention began with Listening Passage Preview (LPP), followed by Repeated Reading (RR), Retell, Phrase-Drill Error Correction (PD), Vocabulary Instruction, RR, LPP, RR, PD, and RR. The participants in the small group intervention had a trainer during the sessions. Each session was about 13 minutes. The findings concluded that nearly all the students benefitted from the one-on-one intervention. In addition, there were two students who benefitted from the small group intervention.

Co-Teaching. Sileo (2011) pointed out that co-teaching was an instructional delivery model used to instruct students with disabilities and those at risk of educational failures. When establishing a co-teaching setting, teachers established a system of trust, incorporated an open line of communication, delegated responsibilities, prepared themselves for challenges and obstacles, and celebrated when academic achievement occurred (Isherwood & Barger-Anderson, 2008). Effective communication was the key

to navigating a professional co-teaching relationship (Sileo, 2011). In addition, Sileo added that co-teaching was comparable to a professional marriage in which communication must take place between the partners to obtain a successful instructional relationship. Magiera et al. (2006) conducted a study to provide a more in depth analysis of co-teaching at an elementary school. The participants consisted of twenty staff members such as general education teachers, special education teachers, related service personnel, and administrators. Through individual interviews, the researchers found four elements to be critically important: strong communication between the teachers, flexibility in co-teaching practice, and respect between the co-teachers, and great organizational skills for instruction.

Scruggs, Mastropieri, and McDuffie (2007) noted that co-teachers generally supported co-teaching. Scruggs et al. conducted a study using 32 qualitative reports. The participants in the reports consisted of 454 co-teachers, 42 administrators, 142 students, 26 parents, and 5 support personnel. The co-teachers were working in geographically diverse areas, Northeast, Mid-Atlantic, Southeast, Midwest, Southwest, and West coast of the United States. There were a total of eight urban, nine suburban, four rural, and five combination locations involved. Scruggs et al. used studies that included qualitative research method as their primary methodology; however, quantitative studies were also included. Their search procedure involved searching the electronic databases, including PsychINFO, ERIC, Dissertation Abstracts, and Digital Dissertations. Key descriptor words were co-teaching, inclusion, mainstreaming, and cooperative. Other terms such as include, inclusive, included, mainstream and co-teach were used as well. Scruggs et al. used the metasynthesis methodology to examine issues and findings within and across

studies to summarize the research. By using the NVivo software, Scruggs et al. compared a large number of the issues within and across the studies. Scruggs et al. indicated that administrators, teachers, and students perceived the model of co-teaching to be generally beneficial for the general education population and for special education students. Secondly, they indicated that teachers identified some conditions that were needed for co-teaching to succeed such as sufficient planning time, compatibility of co-teachers, training, and appropriate student skill level. Thirdly, they noted that often time the co-teaching model was viewed as one teacher and one assistant with the special education teacher often playing a subordinate role and lastly, the general education teacher taught the whole class while the special education teacher supported the students with special needs.

Computer Assisted Programs. Saine, Lerkkanen, Ahonen, Tolvanen, and Lyytinen (2011) found that computer assisted reading instruction had been explored as an intensive and viable method for training reading skills. Saine et al. conducted a study to determine if computer assisted, remedial reading application could have enhanced letter knowledge, reading accuracy, fluency, and spelling in children with low prereading skills and risk for reading disabilities. There were 166 children in two cohorts, 88 girls and 78 boys. The children were followed from school entry to the start of third grade. Most of the children were from middle-class families with average socioeconomic status. The researchers used a randomized controlled trial design. The assessments were letter knowledge, reading accuracy, fluency, and spelling. Phonic-based reading instruction was given to all the children in their classroom. The regular remedial reading intervention (RRI) used regular remedial procedures for first graders in groups of five.

The 45-minute remedial intervention period was divided into four segments: (a) prereading activities linking reading, spelling, and phonology; (b) activities using word segmentation for 10 minutes; (c) activities of decoding and spelling for 10 minutes; and (d) vocabulary training. The computer-assisted remedial reading intervention (CARRI) used the same phonics-based remedial reading program as the RRI group. However, CARRI used the GraphoGame application during the first segment in place of the other prereading activities. The computer-assisted remedial reading intervention was highly beneficial in this study. The regular type of intervention was not as successful.

Macaruso and Rodman (2011) indicated that the computer-assisted instruction (CAI) could have been a valuable supplementary aid for reading instruction. They stated that computer-based activities tended to be highly motivating with pictorial and animated displays. Macaruso and Rodman compared two studies which examined the efficacy of using computer assisted instruction to supplement a phonics-based reading curriculum with preschoolers. The first study sample population consisted of 38 preschool students, 19 treatment students and 19 control students. The students were from diverse sociocultural backgrounds. With the treatment group, the ethnicity of the students was 32% Caucasian, 5% African American, and 63% Hispanic. With the control group, the ethnicity of the students was 40% Caucasian, 7% African American, and 53% Hispanic. The preschool teachers participated in training sessions on how to implement the software properly. The instruments used for assessment in the study were Early Reading and The Group Reading Assessment and Diagnostic Evaluation, Level P. The results indicated that preschoolers in both treatment and control classes did show improvement in preliteracy skills. However, the treatment group showed larger gains than the control

group on accelerated progress during the time of CAI use. During the second study, the researchers expanded the number of kindergarteners. Participants were selected from three elementary schools in the same urban area as for the first study. There were 47 students in the treatment group and 19 students in the control group. There were diverse sociocultural backgrounds. There were 30% Caucasian, 6% African American, and 64% Hispanic. Very similar to the first study, a high percentage of the treatment students qualified for free or reduced lunch. These students were involved in daily reading exercises using explicit phonics instruction based on Scott Foresman Reading Street and Bradley Reading and Language Arts. Assessment instruments used were The Early Reading and Primary Reading, and GRADE- Level K. Macoaruso and Rodman stated that both groups made large gains over the school year that indicated the value of a strong phonics based reading curriculum for low performing kindergartners. For both studies, there were no significant differences between treatment and control groups on pretest measures of early literacy skills. The overall findings revealed that preschoolers and low performing kindergarteners could have benefited from intensive, systematic practice provided by CAI programs.

After School Tutoring. David (2011) indicated that strong leadership, clear goals, consistent and dependable staff members, and the ability to keep students engaged and motivated generally characterized after school tutoring programs. Nelson-Royes and Reglin (2009) pointed out that after school tutoring gave students opportunities to complete homework assignments, develop test preparation skills, receive academic counseling, and gain assistance from someone who was knowledgeable of the content

material. David (2011) also added that after school tutoring had provided enrichment activities that usually would not have taken place during school hours.

Hartry, Fitzgerald, and Porter (2008) found that schools and districts had often viewed an extended school day as another opportunity to improve literacy skills of the lowest-performing students by dedicating more time to reading instruction. They noted that while structured reading programs could have helped teachers use afterschool instructional time more effectively, the degree of effectiveness of their implementation would have determined the students' outcomes. Hartry et al. conducted a study to determine how effective the implementation of the reading program was for increasing student achievement. The researchers wanted to assess whether READ 180 could be implemented effectively in an afterschool setting. Hartry et al. stated that the READ 180 instructional model was intended to provide an organized pattern for teachers to present reading instruction and classroom activity. The READ 180 session began and ended with whole group, teacher directed instructions. When the students were in whole group session, they broke into three small groups that rotated among three stations: small group direct instruction by the teacher, a READ 180 software or computer rotation, and independent and modeled reading. READ 180 had been used in regular school for over a decade. The READ 180 program was designed for students who were reading at least two grade levels below the expected reading performance level. Hartry et al. reported that READ 180 was being used more in the afterschool setting. There were elements designed specifically for READ 180 in an afterschool context. First, it was designed to be more engaging. Second, the lessons were built to last for 90 minutes, although the schedule could be modified to a shorter time frame. Finally, the materials and activities

were designed to require limited preparation time from teachers. The sample population consisted of 42% Caucasian, 43% African American, and 10% Hispanic. The study was conducted in the Boston metropolitan area. There were seven schools involved. Students in grades four through six who were reading below proficiency level were eligible to enroll in the district's afterschool program. The data were collected over 2 years. The students in the control and treatment groups received the same assessments, except the additional five questions asked on the READ 180 survey for the treatment group. Most of the data were collected during site visits. The instruments used for assessments were interviews, observations, surveys, and attendance and attrition data. The findings of the study indicated that strong preparation was required before the program was launched in schools. Issues such as the physical layout of the school, technology, and scheduling were paramount. READ 180 could be implemented successfully in an afterschool setting based on the results of the study.

Peer Tutoring. Peer tutoring, on the other hand, was an effective and cost efficient intervention method that provided instruction through peers (Cates, 2005). As peers interacted, they were capable of helping one another, which increased academic achievement (Almaguer, 2005). Dufrene et al. (2010) conducted a study evaluating the feasibility and impact of a peer-tutoring package for reading fluency. The seven participants were from the rural southeastern United States. All participants were in the sixth grade. Three students served as the tutors and the other four were tutees. The four students received the tutoring needed for Tier II intervention service. The tutors received training protocols to ensure consistency. A multiple baseline design across participants evaluated the effectiveness of the oral reading fluency from instructional packages.

Dufrene et al. chose this particular design due to the small number of tutees. The researchers found that the oral reading rate increased on the instructional probes after implementation of the peer tutoring procedure.

Miller, Topping, and Thurston (2010) indicated that peer tutoring was a form of peer-assisted learning (PAL) where children work with peers in class on specified curriculum content and processes. Miller et al. conducted a study in Scotland involving 125 primary schools. A stratified random sample was selected from these schools assigned to the paired reading (PR) intervention. Four schools were randomly selected from the cross-age condition and four from the same-age condition. The cross-age group consisted of 81 primary children (5-9 years old) and 6 elementary children (10-12 years old). The same-age group consisted of 87 primary children and 6 elementary children. The control group consisted of 92 primary children and 6 elementary children. The researchers used a pre-posttest design. In addition, as a measurement of self-esteem, Miller et al. administered the Rosenberg's Self-Esteem Scale. The intervention lasted for 15 weeks with each week containing one half-hour session. Significant pre-post gains in self-esteem in both same-age and cross-age conditions, but not for controls, were found in the study.

Kourea, Cartledge, and Musti-Rao (2007) pointed out that students located in urban settings were usually at a disadvantage educationally when compared to their peers in suburban areas. Kourea et al. (2007) conducted a study with a second and third grade joint classroom located in a Midwestern metropolitan area. The majority of the school's population consisted of 13% Caucasian, 85% African American, and 2% Hispanic. The target classroom, however, only included 14 African American. Within these 14

students, more than half were receiving special education services outside the general education classroom. During the intervention, both the general and the special education teachers were present. As the peer tutoring took place at the class-wide level, the general education teacher assisted in implementing the program, while the special education teacher monitored the students during the intervention. The study focused on four dependent variables: sight-word acquisition, reading fluency, comprehension, and maintenance. The instruments used for assessment were Woodcock-Johnson -III and DIBELS Oral Reading Fluency (DORF). The experimental design used was the multiple-baseline across-subjects. This design evaluated the effects of total class peer tutoring on student performance. Pretests were given at the beginning of every week and immediately before the intervention. The peer tutoring sessions were 30 minutes in length, three times weekly. Each student had a set of 10 sight words, which were determined based on weekly pretests. The classroom teacher decided on the word set for the target students. The results indicated that five of the six students significantly increased their sight-word acquisition and maintenance.

Pull Out Model. According to Alawiye and Williams (2005), the pull out model provided additional instruction for the struggling students in reading, math, and language arts. Fountas and Pinnell (1996) stated that these groups were subject to change because children learned quickly and worked at their own pace. Clay (1991) added that as teachers grouped students, the group formed was determined based on the effects of learning throughout the year and not solely on entry-level data. Klingner, Vaughn, Schumm, Cohen, and Forgan (1998) reported that the pull out model was the only service delivery option available at school prior to inclusion model. Klingner et al. (1998)

conducted a study with thirty-two students with and without learning disabilities to determine which delivery model was their preference, inclusion or pull out model. There were 4 fourth graders, 14 fifth graders, and 14 sixth graders. The researchers asked twelve questions as they interviewed the students individually. The results indicated a mixed review. Several children stated their model of choice was the pull out model; whereas, others stated the inclusion model met their academic and social needs.

Interventions were safety nets to prevent educational struggles (Askew et al., 2002). Malloy, Gilbertson, and Maxfield (2007) noted that identifying an effective instructional intervention for English Language Learners was a difficult task. However, Linan-Thompson, Vaughn, Prater, and Cirino (2006) revealed that it was necessary to have developed more effective interventions in reading for ELLs. Multiple studies have indicated that children who have had difficulty acquiring skills at an early age would have continued to demonstrate weak skills later during their educational experience (Meichenbaum & Biemiller, 1998). By implementing effective instructional practices, achievement gaps would have been closed successfully (Calhoon et al., 2007).

Reading Recovery

Development of Reading Recovery

Marie Clay of New Zealand developed RR as a remedial intervention reading program (Iversen & Tunmer, 1993). According to Iversen and Tunmer (1993), the purpose of the RR program was to reduce the number of students who were struggling with reading and writing. Clay created RR because educators were concerned that students were not progressing in literacy skills and there was not an intervention to correct the problem (Dunn, 2010).

In 1984, RR was introduced in the United States (Reynolds & Wheldall, 2007). Hiebert (1994) pointed out that, from 1984 to 1993, RR grew from one training site at the Ohio State University (OSU) to 201 sites around the United States. Reynolds and Wheldall added that by 1994 the program had spread rapidly among 47 states. According to Clay (1991), RR was an early intervention program designed to enhance reading skills for young readers who struggled to move forward after receiving one year of formal reading instruction. She indicated that the RR program has put specific attention on four attributes: letters and sounds, meaning, visual, and structure.

The RR program consisted of a series of 30-minute lessons and strategies with a trained teacher for first grade students only (Dunn, 2010). Dunn stated that the duration for each round was 12 to 20 weeks. Before proceeding with the sessions, consultation with the previous kindergarten teacher and current first grade teacher must have taken place to determine which students were the best candidates for the program (Dunn, 2010).

Multiple books at different reading levels were used to assist students with reading tasks and strategies that had helped to develop their reading skills (Dunn, 2010). The teacher used teachable moments when the student demonstrated difficulty reading in an effort to increase reading progress in areas such as phonemic awareness, sound symbol, blending, patterns, or sight words.

Furthermore, Rumbaugh and Brown (2000) concluded that RR focused its efforts on three main topics: school district improvement, staff development, and student intervention. They stated that it was imperative for the district level to have implemented the program adequately with commitment, training, ongoing in-service, and data

collection. With staff development, they emphasized that teachers would have had opportunities to learn the necessary knowledge that would have assisted them in developing and constructing a greater understanding of what had continued to cause the students to fail when reading. Rumbaugh and Brown determined that the student intervention and staff development were the most successful. Reynolds and Wheldall (2007) added that the RR program had offered intensive, one-to-one daily instruction for at risk students identified in first grade as struggling in the area of literacy. They reported that those students chosen to receive RR have been identified as the lowest performing students in first grade.

Effectiveness of Reading Recovery

Some researchers (Askew et al., 2002; Herman & Stringfield, 1997; Iverson & Tunmer, 1993; Kelly, Gomez-Valdez, Klein & Neal, 1995; Pinnell, 1989; Quay, Steele, Johnson, & Hortman, 2001; Schmitt & Gregory, 2005) found RR to be an effective intervention program. Pinnell (1989) conducted one of the first studies in the United States on RR. The pilot project involved 21 teachers and children from six urban schools with a high proportion of low-income students. There were two classrooms of students used in this particular study. The program classroom consisted of 55 of the lowest achieving students to receive the RR intervention, whereas, the comparison classroom had 55 randomly selected students. In October, the researcher gave the total population six tests of the diagnostic survey. The intervention process did not start until January of that school year. The average number of RR lessons taught ranged about 45 to 60 lessons within 12 weeks. In the month of May, the researcher gave the diagnostic survey to the

total population. Both groups took the Stanford Achievement Test (SAT). Pinnell found the RR program provided immediate and long-term positive effects for its students.

Schmitt and Gregory (2005) conducted a study to explore the literacy achievement of RR participants who successfully discontinued during their first grade year and how they continued to perform up to 3 years later. A discontinued student reached grade level expectations and performed at grade level without the assistance of supplemental support from a RR teacher (Clay, 2005). The researchers randomly selected 548 participants from the total population of second, third, and fourth grade children from 253 schools in Indiana. Schmitt and Gregory obtained class lists for all children who would have been in second, third, and fourth grade in the fall as a means of selecting sample populations of the former RR children and the cohort sample group. They used an interval sampling technique to select 100 children in each group with the intent to draw from all schools. Assessments instruments used were running records of oral text reading and comprehension and vocabulary subtests of the Gates-MacGinitie Reading Tests. Schmitt and Gregory found that a large percentage of former successful RR students were still reading at or above grade level up to 3 years after the program.

Herman and Stringfield (1997) reported several research studies on the effectiveness of RR. For example, a longitudinal study was conducted in Columbus, OH, from 1985 to 1989. There were 153 students in the sample population. Students were randomly assigned to control classes receiving RR or in class support. The assessment instruments included the Comprehensive Test of Basic Skills, Text Reading Level Assessment, and the Woodcock Reading Mastery Test. They found that RR students outperformed the control group on four of six subtests. The four subtests were Concepts

About Print, Writing Vocabulary, Dictation, and Text Reading. In addition, RR students achieved higher reading levels than the control group. Herman and Stringfield reported another longitudinal study conducted from 1984 to 1987 in Columbus, OH. This pilot study contained a sample size of 110 students. The assessment instruments used were Text Reading Level assessment, Diagnostic Survey, and Stanford Achievement Test. RR students outperformed the control group on four of six subtests through the second year follow-up. The four subtests were Concepts About Print, Writing Vocabulary, Dictation, and Text Reading. RR students also achieved higher reading levels than the control group through the third year follow-up.

Furthermore, Quay, Steele, Johnson, and Hortman (2001) conducted a study to determine if first grade RR participants differed from a control group of children on standardized achievement measures, academic progress rated by teachers, promotion rates, and personal and social development according to teachers' outlook. There were four reasons why this study was different from most RR evaluations. The control at-risk group was very similar to the RR group in gender, ethnicity, and initial reading achievement. The RR outcomes were not as promising in this study due to first year of implementation. The researchers used teacher assessments to measure the extent of RR students and control students' academic performance. An assessment of personal and social development was included to decide if the RR program affected children in other areas. The population sample consisted of 107 children in each group, a RR group and a control group. Approximately 70% of the children in each group were African American and approximately 60% were boys. The Iowa Test of Basic Skills (ITBS) was administered early fall. Afterwards, a Multivariate Analysis of Variance Test

(MANOVA) confirmed that the groups were equivalent on reading achievement. Quay et al. found that at the end of first grade, RR students outperformed the control group of non-RR students on three measures: (a) four of the six subtests on the Iowa Test of Basic Skills which included reading comprehension, word analysis, reading total, and language total, (b) all of the subtest of the Gates MacGinitie, and (c) all of the tasks of the Observation Survey.

Askew et al. (2002) conducted a longitudinal study on former RR students through fourth grade. Target populations included RR students and non-RR students. A total of 218 discontinued RR students and 244 randomly sampled students not served by RR participated in this study. By the end of fourth grade, data were available for 116 of the original 218 RR students and 129 of the 244 randomly sampled children. During the data collection procedures, each subject had data collected at five distinct time periods. Askew et al. indicated that entry data on the Observation Survey and Gates-MacGinitie Reading Test (GMRT) were collected on both the RR group and the non-RR random sample group at the beginning of first grade. The GMRT, tests of oral reading, and classroom teacher questionnaires were administered during the last month of each school year. At the end of third and fourth grade, data for the Texas Assessment of Academic Skills (TAAS) were collected. The classroom teachers, RR teachers, and RR teacher leaders collected data. The RR teacher leaders submitted scores on the TAAS. The researchers compared subjects from one time period to the next during each phase. The final phase was the analysis of the data comparison across periods. The results showed significant differences between the RR scores of the first graders and the randomly sampled students' scores that validated the need for a secondary prevention program.

Iverson and Tunmer (1993) conducted a study using three groups of first grade at-risk readers. The purpose of their study was to determine if by using phonological recoding skills, the RR program would have been more effective with the at-risk readers. The at-risk participants were selected from 30 schools within 13 school districts. Each group contained 32 students. The groups were identified as a modified RR group, a standard RR group, and a standard intervention group. Regular RR lessons were administered to the standard and modified RR groups; however, the students in the standard intervention group received detailed instruction in phonological recoding skills. The assessments used for this study were the Diagnostic Survey, Dolch Word Recognition Test, and three phonological processing measures. All teachers who participated in this study were certified reading specialists with master's degrees. The researchers matched the three groups of students based on the following variables: geographical location, socioeconomic status, and type of classroom reading program. The three distinct types of classrooms identified were a traditional basal classroom, a whole language classroom, and a mixed classroom setting. The traditional basal classroom consisted of students meeting in ability groups for reading instruction that included work in phonics. The whole language classroom setting was on the other end of the spectrum. The teacher gave reading instruction as a class or individual level only. Reading instruction derived from children's own language experience, big books, and independent reading of the literature. Phonics was not evident. The mixed classroom setting, however, combined aspects of whole language philosophy with the basal reading. The results indicated that students who received RR, and those who received a modified version, had significantly higher scores on Clay's diagnostic measures than children who

received the other reading intervention. Students who received the modified version reached the adequate performance level more quickly than the other groups. The results also revealed that RR students were extremely deficient in phonological processing skills.

Kelly, Gomez-Valdez, Klein, and Neal (1995) conducted a study concerning the RR program with first graders from California. The studies used statewide data obtained during the 1993-94 programs to determine if the program was an effective intervention for children who struggled to read. The three groups consisted of children who only spoke English, children who only spoke Spanish, and non-English speaking children learning English while using the program. The selection process consisted of children in the lowest 20% of first grade classrooms. Teacher recommendations and results on three of six sub-tasks on Clays' Observation Survey: writing vocabulary, hearing and recording sounds in words, and text reading levels were also determining factors. The researchers surveyed the children at the beginning and end of the program. Seventy-six percent of the children reached the average reading level and discontinued from the program. The researchers found that the three sub-tasks demonstrated continuous growth in the children's ability to read continuous text as measured by the text reading sub-task. Kelly et al. also found that the program was a useful and successful short-term intervention. They concluded that ELLs who received a full RR program discontinued at rates similar to native English speaking children who received a full program.

Criticisms of RR

Not all research and literature has supported the effectiveness of RR program; some research criticized the use of RR (Dunn, 2010). Some argued that there were no sustained effects from the program (Busbee, 2001; Harris, 2001; & Hiebert, 1994).

Busbee (2001) conducted an expo facto study to examine the initial and sustained effects of the RR program on reading achievement using a Metropolitan Achievement Test. The school district in the study contained a student population of 24, 976 with a population percentage of 65% Caucasian, 34% African American, and 1% Hispanic. The districts' overall percentage of students on free or reduced lunch was 42.1%. The target population consisted of all students who participated in the RR intervention during 1993-1994 and 1994-1995 school years. The study reviewed the performance of students in grades one through five on the nationally norm-referenced student achievement data. The purpose of their study was to determine if the average reading achievement during both years of the discontinued RR students was comparable to the average range of their first grade peers who did not receive the program. The cohorts were determined based on their gender, race, socio-economic status, school location, and the Cognitive Skills Assessment Battery (CSAB) readiness score. RR students' average reading achievement was not in the average range of their peers, nor above. The intervention was more effective longitudinally for some subgroups of RR students, but below the average range for all students.

Harris (2001) conducted a study to examine second grade teachers' perceptions of the reading ability of discontinued RR students and impact on placement or instruction. The type of data gathered were teacher interviews, classroom observations, and review of documents with student achievement. Reading progress of former RR students in this study did not carry over to second grade.

Hiebert (1994) conducted a longitudinal study to investigate the performances of a cohort of students who received the RR tutoring at the OSU site from 1985 to 1986

from first to fourth grade. The study compared the performances to other students who were at comparable achievement levels but who received Chapter 1 services as first graders. Forty-eight students represented a randomly selected 20% of the three groups. Hiebert compared the students' performance to other students who began first grade at a similar level. The subgroups resulted in random assignments. The ratios of retained to non-retained students in the groups were not equal. The RR subsamples were underrepresented, whereas, the Achievement Comparison group was overrepresented with retainers. Hiebert concluded that although their scores ranged in the fourth quintile of the Metropolitan Achievement Test, this was not a true representation of students who were truly the lowest overall. In addition, Hiebert criticized the data collection techniques because not all students were counted who received RR, which caused the study not to have an authentic sample population. Therefore, due to the findings of these researchers, the RR program was found to be ineffective.

Summary

Farver, Lonigan, and Eppe (2009) found that ELLs tended to perform poorly in literacy, poorly in academic achievement, but greater in grade-retention and school dropout rates than their non-ELLs peers. Therefore, policymakers and educators were concerned about meeting the academic needs of all students (O'Day, 2009). The enactment of the No Child Left Behind Act was developed to support the accountability measures to make sure all students were educated (O'Day, 2009). Askew et al. (2002) pointed out that educators in public schools provided all students with classroom instructions that served as the first line of prevention for educational struggles. By providing early effective reading instructional practices, the reading gap successfully

closed (Calhoon, Otaiba, Cihak, King, & Avalos, 2007). Dunn (2010) indicated that Clay created RR because educators were concerned that students were not progressing in literacy skills. The RR program offered intensive, one-to-one daily instruction for at risk students identified in first grade as struggling in the area of literacy (Reynolds & Wheldall, 2007).

Chapter III

METHODOLOGY

The purpose of this mixed methods research was to explore how the RR (RR) program addressed the literacy needs of Hispanic students based on their reading achievement score on the Criterion Reference Competency Test (CRCT) as compared to non-Hispanic students. The study examined Hispanic students who received RR during 2008-2009 and how they sustained reading performance through third grade in comparison with their non-Hispanic peers.

Research Questions

The mixed-factorial, mixed-method design allowed for the eight following research questions:

- 1) Will Hispanic and non-Hispanic students score differently on the CRCT Reading assessment?
- 2) Will students who are discontinued from the RR program score differently on CRCT reading test than those students who are recommended?
- 3) Will CRCT scores change over the 3-year period when aggregated across ethnicity and RR status?
- 4) Will non-Hispanic students who are discontinued or recommended have similar differences in CRCT reading scores as Hispanic students who are discontinued or recommended?

- 5) Will CRCT scores differ across the 3-year administration for discontinued and recommended students?
- 6) Will CRCT scores differ across the 3-year administration for Hispanic and non-Hispanic students?
- 7) Will the pattern of differences in CRCT reading scores for Hispanic and non-Hispanic students who are discontinued or recommended, persist over the first, second, and third grades?
- 8) How did Hispanic students and their non-Hispanic peers progress through RR as an early literacy intervention?

Population and Sample

Quantitative. The population of this study consisted of former RR students who attended school in a rural school district. All 13 rural public schools in this district were school-wide Title I schools. Of the 13 schools, five were primary schools that implemented the RR program. The ethnicity percentage for the 135 students who had participated in RR in the rural school district was 46% Caucasian, 42% Hispanic, and 12% African American.

Qualitative. For the purpose of the case studies, the population consisted of four former RR students who attended school in the same rural south Georgia public school district. The four students were selected to represent diversity of ethnicity, RR status, and grade level.

Instrumentation

The data used in this research was longitudinal archival data from 2008-2009 through 2010-2011. The archival data were retrieved from five schools within a rural

school district in south Georgia. The instruments used to gather the archival data for this study included the Observation Survey of Early Literacy Achievement Test and the CRCT.

Observation Survey of Early Literacy Achievement. Archived Observation Survey Test scores from former RR students who attended the rural school district were used to determine the completion status (discontinued, recommended, or incomplete) of each student who completed the RR program. Students with an incomplete status were not included in the study since they did not participate in the full RR process. The Observation Survey Test included Letter Identification, Ohio Word Test, Concepts about Print, Writing Vocabulary, Hearing and Recording Sounds in Words, and Text Level Reading (Gardner, 2010).

Validity of Observation Survey of Early Literacy Achievement. The validity of the Observation Survey of Early Literacy Achievement, also known as the Observation Survey Test, was established by determining the relationship between an existing test and a new test. The Observation Survey was correlated with the Iowa Basic Skills Test resulting in validity coefficients ranging from .79 to .85 (Gardner, 2010).

Reliability of Observation Survey of Early Literacy Achievement. The reliability of the Observation Survey of Early Literacy Achievement was obtained through a two-year study of kindergarten and first grade students in an Early Literacy Project. The Rasch program for rating scale analysis was used, Pearson $r = 0.83$, Item $r = 0.98$ (Clay, 1993).

Criterion Referenced Competency Test (CRCT). The CRCT is a written multiple-choice state mandated assessment for students in grades one to eight (GaDOE, 2011).

This standardized assessment measures students' academic achievement in the areas of English/Language Arts, Reading, Mathematics, Social Studies, and Science. The test measures how well students have obtained information taught to them based on the state curriculum. Each child receives a report detailing information about their scale score and their accuracy for the sections assessed on the CRCT. Those students who scored above an 850 are considered to be exceeding the standards. Those students who scale scores are between 800-849; they are considered to be meeting the standards. Those students who scored below 800 are not meeting the standards. For the purpose of the current study, only the reading section was used. The students who performed above 800 on the test met the criterion to pass the test. The students who performed above 850 exceeded the minimum requirement, and the students who performed below 800 did not meet the required performance level.

Validity of CRCT. Validity was the most important consideration in the test development process of the CRCT (McLeod, 2012). Content experts and psychometricians have established validation of the CRCT through the process of test development, alignment of curriculum, development of test items and specifications, multiple reviews by educators, and detail form construction (Georgia Department of Education, GaDOE, 2011). The evidence for the validity of the CRCT relied mostly on how close the assessment instrument matched the intended curriculum to be assessed and how the score reports inform various stakeholders on how students' perform (GaDOE, 2011).

Reliability of CRCT. The CRCT has several reliability indices, the Cronbach's Alpha reliability coefficients and the raw score Standard Error of Measurement (SEM).

Cronbach's Alpha measures the internal consistency of responses to a set of items that measured an underlying trait (GaDOE, 2011). The Cronbach's Alpha reliability coefficient for 2012 CRCT for third grade was .90 in the content area of reading. The raw score SEM for third grade reading was 2.39. The GaDOE reported that the reliabilities for the 2012 CRCT were consistent with previous administrations and suggested that the CRCT assessments were sufficiently reliable for its intended purpose.

Data Collection

Quantitative. The archival data were collected with the authorization of the superintendent of the rural school district. After meeting with the superintendent, I met with the Lead RR teacher. The teacher provided archival data of RR students who discontinued or recommended during 2008-2009 school terms. The Lead Teacher provided names from each of the five primary schools. Anonymous information was obtained from each of the five school's testing notebooks. After receiving the CRCT notebooks from the principals, I used the School's CRCT Summary Report to record the student's identification number and scores. By adding the students' identification numbers, I was able to remove their name and manually chart their archived CRCT scores for three consecutive years, 2008-09 through 2010-11. In cases where I could not find scores for students, the school system's data analyst used an electronic data base system known as Infinite Campus and the Statewide Longitudinal Data System (SLDS) to locate and provide the remaining student data.

During the year of 2008-09, the total number of Hispanic students who discontinued RR in this rural school district out of five primary schools was 23 and only

8 were recommended from the program. The total number of non-Hispanic students who discontinued was 72 and only 32 were recommended.

Qualitative. The Lead Teacher provided me with four notebooks for students who participated in RR during 2008-09 and represented diversity of ethnicity, RR status, and grade level. Notebook contents had been compiled for each of the four students by their RR teacher as documentation of the RR process. Data for the case studies were gathered from these student notebooks. The documents analyzed in each student notebook were the attendance chart, daily lesson records, Observation Summary Pre/Post, prediction of progress, book graphs, Known Vocabulary/Known Writing Words, and Permission/Information sheet. CRCT reading scores were obtained for each of the four students from the School's CRCT Summary Report. The data were initially housed in a locked cabinet in the RR classroom. After I received the data, I housed it in the vault until I finished collecting data on all four students. I returned the original notebooks to the Lead Teacher. The information that I obtained was locked in a safe. Pseudonyms were used to protect student identities.

Independent Variables

Student status. Student status was used to classify a student's participation status in the RR Program. The goal of RR program was to help children become independent readers with internal self-extending systems (Fountas & Pinnell, 1996). How well the student performed in gaining this self-extending system determined the status of how the student finished the reading program. The three status levels are discontinued, recommended, and incomplete. For the purpose of this research, only discontinued and

recommended were used. Incomplete status indicated that students had not participated in the full RR process.

Discontinued. Clay (1993) reported that discontinued was essentially that the child had a system of strategies in place such as directional movement, one-to-one matching, self-monitoring, cross-checking, use of multiple cue sources, and self-correction which allowed him to be a successful reader and writer. Likewise, a discontinued student reached grade level expectations and performed at grade level without the assistance of supplement support from a RR teacher (Clay, 2005).

Recommended. The student was recommended when he/she made progress, but not enough to reach grade level performance level within the 20-week intervention period. Instead, the student was recommended for further instructional support or evaluation.

Ethnicity. This referred to the characteristic of a particular ethnic affiliation or group.

Hispanic. This referred to individuals of Latin American descent living in the United States. However, for the purpose of this study, the Hispanic population predominantly consisted of students who were born in the United States or moved here from Texas or Mexico.

Non-Hispanic. The non-Hispanic population consisted of ethnic groups who did not identify themselves as Hispanic.

Dependent Variable

The purpose of the CRCT is to measure how well the students obtain essential information delivered by teachers based on the state curriculum, Georgia Performance Standards (GPS) (GaDOE, 2011). The CRCT also served as an accountability measure for the Federal No Child Left Behind (NCLB) Act of 2001. The CRCT, a written multiple-choice state mandated assessment for students in grades one to eight, was used as the dependent variable in the current study. The test measures how well students have obtained information taught to them based on the state curriculum. Each child receives a report detailing information about their scale score and their accuracy for the sections assessed on the CRCT. Those students who scored above an 850 are considered to be exceeding the standards. Those students who scale scores are between 800-849; they are considered to be meeting the standards. Those students who scored below 800 are not meeting the standards. For the purpose of the current study, only the reading section was used. The students who performed above 800 on the test met the criterion to pass the test. The students who performed above 850 exceeded the minimum requirement, and the students who performed below 800 did not meet the required performance level.

Research, Design, Analysis, and Hypotheses

Quantitative. A mixed method design was selected to provide a more complete understanding of the impact of RR on Hispanic and non-Hispanic students. The quantitative section was composed of a 2 x 2 x 3 mixed factorial analysis to determine the effect of ethnicity (Hispanic and non-Hispanic), student status (recommended and discontinued), and administration year (2009, 2010, and 2011) on CRCT Reading Scores. Ethnicity and student status were between-subject variables, and administration year was

within-subjects variable. The 2 x 2 x 3 mixed factorial analysis produced these hypotheses:

Hypothesis 1: Main effect for ethnicity: Non-Hispanic students will have higher CRCT reading scores than Hispanic students.

Hypothesis 2: Main effect for student status: Discontinued students will have higher CRCT reading scores than students who were recommended.

Hypothesis 3: Main Effect for CRCT reading scores: No significant differences were expected between the three years of CRCT scores aggregated across ethnicity and student status.

Hypothesis 4: Two-way interaction for ethnicity and student status: Non-Hispanic students who discontinued will score slightly higher on CRCT reading scores than non-Hispanic students who were recommended; however, Hispanic students who were discontinued will score much higher on CRCT reading scores than Hispanic students who were recommended.

Hypothesis 5: Two-way interaction for student status and administration year: The 3-year pattern of CRCT scores for discontinued students will be similar to the 3-year pattern of CRCT scores for recommended students.

Hypothesis 6: Two-way interaction for student status and administration year: The 3-year pattern of CRCT scores for Hispanic students will be similar to the 3-year pattern of CRCT scores for non-Hispanic students.

Hypothesis 7: Three-way interaction for ethnicity and administration year: No interaction was predicted for the three-way effect. The pattern of CRCT scores for ethnicity and RR status was predicted to persist over the three test administration years.

Qualitative. Hypothesis 8: There will be no difference in the process followed by the Hispanic students and their non-Hispanic peers during the RR early intervention program. The qualitative section, which addressed Hypothesis 8, consisted of a document analysis of student RR notebooks and CRCT readings scores which generated four case studies that followed the two Hispanic and two non-Hispanic students through the RR process. According to Merriam (1998), “Since the investigator is the primary instrument for gathering data, he or she relies on skills and intuition to find and interpret data from documents” (p. 120). Therefore, as a former RR teacher, I was able to interpret the primary source documents accurately. Merriam also pointed to the value of documents as data for qualitative case studies in that “they can ground an investigation in the context of the problem being investigated” (p. 126). I composed case studies based on information contained in each student’s notebook that described the context of the RR process followed by each of the four students along with their CRCT score reports. The units of analysis compared across the cases were ethnicity, living arrangements, siblings, pre-K, attendance, primary language, hearing and vision, number of weeks, text level, letter identification, Ohio Word Test, Concepts About Print, writing vocabulary, Hearing and Recordings Sounds in Words (HRSIW) test, and CRCT reading scores for 2009-2011. I used the units of analysis to draw comparisons across the case studies (see Table 1).

Chapter IV

PRESENTATION AND ANALYSIS OF THE DATA

The purpose of this study was to explore how the RR program addressed the literacy needs of Hispanic ELLs over a 3-year period in comparison to their non-Hispanic peers. The data was based on the students' performance on the Criterion Reference Competency Test (CRCT) during 3 consecutive years, 2009, 2010, and 2011. The sample for this study consisted of 135 former RR students who attended the same rural school district. Within this school, the ethnicity percentage was 45% Caucasian, 40% Hispanic, and 15% African American, whereas, the ethnicity percentage for the system consisted of 46% Caucasian, 34% African American, 18% Hispanic, 1% Asian, and 1% Multi-Racial. All analyses were completed using Statistical Software for Social Science (SPSS).

In an effort to answer the research questions, a combination of both quantitative and qualitative methodologies was used to complete the mixed methods approach. The quantitative methodology was composed of a 2 x 2 x 3 mixed factorial analysis of CRCT Reading scores to determine the effect of ethnicity (Hispanic and non-Hispanic), student status (recommended and discontinued), and administration year (2009, 2010, and 2011). Ethnicity and student status were between-subject variables, whereas, grade was within-subjects variable. The qualitative methodology consisted of four descriptive case studies that involved a combination of Hispanic and non-Hispanic students who had received RR

during the 2008-2009 school terms. Only the reading portion of the CRCT scores was considered during the studies.

Results

The following results address the hypotheses of how effective is Reading Recovery with the literacy needs of Hispanic students and their non-Hispanic peers.

Hypothesis 1. Main effect for ethnicity: Non-Hispanic students will have higher CRCT reading scores than Hispanic students. There was no significant difference between average CRCT scores for the Hispanic and non-Hispanic students, $F(1, 131) = .353, p = .553$. Hispanic students ($M = 822.82, SD = 18.494$) scored similar to non-Hispanic students ($M = 818.31, SD = 16.338$) (see Figure 1).

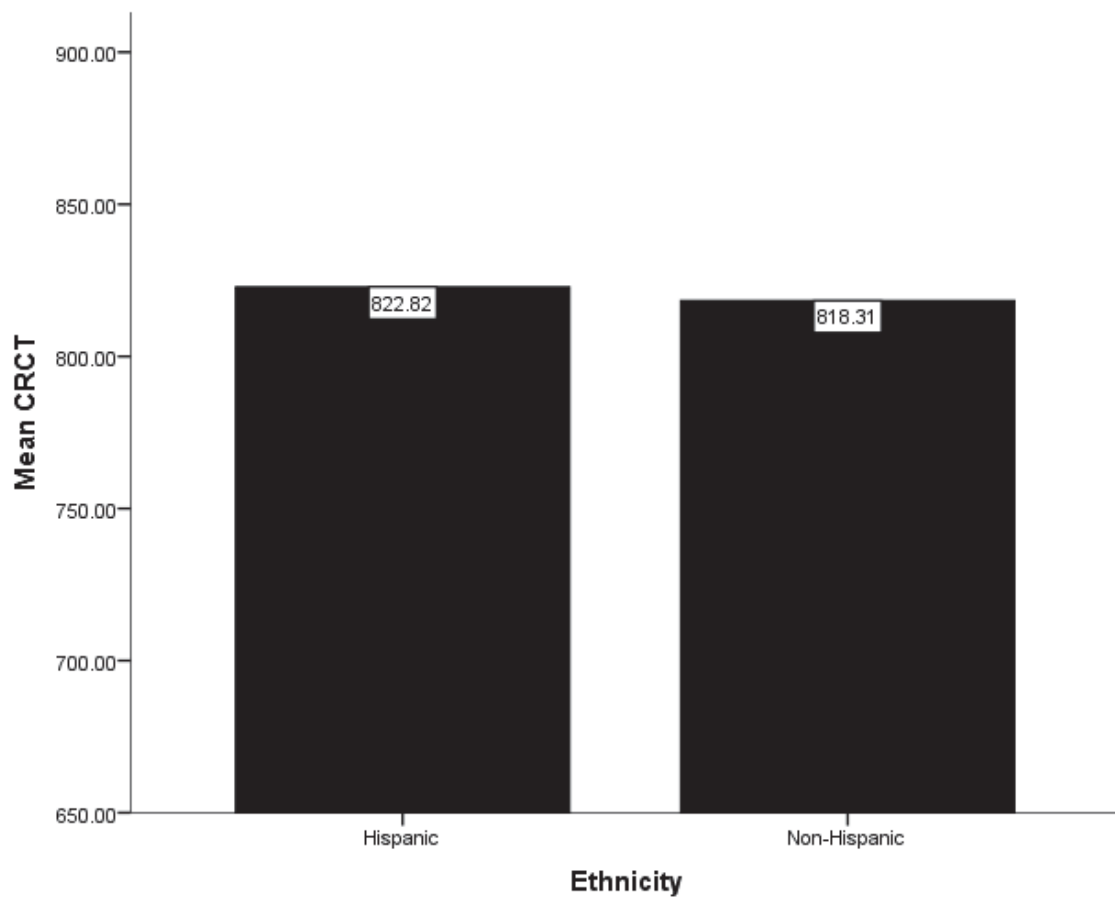


Figure 1. Mean CRCT scores as a function of ethnicity.

Hypothesis 2. Main effect for student status: Discontinued students will have higher CRCT reading scores than students who were recommended. There was a significant difference between average CRCT scores for the Discontinued and Recommended students, $F(1,131) = 27.019, p < .001$. Discontinued students ($M = 824.20, SD = 15.819$) scored significantly higher than Recommended students ($M = 807.83, SD = 13.566$) (see Figure 2).

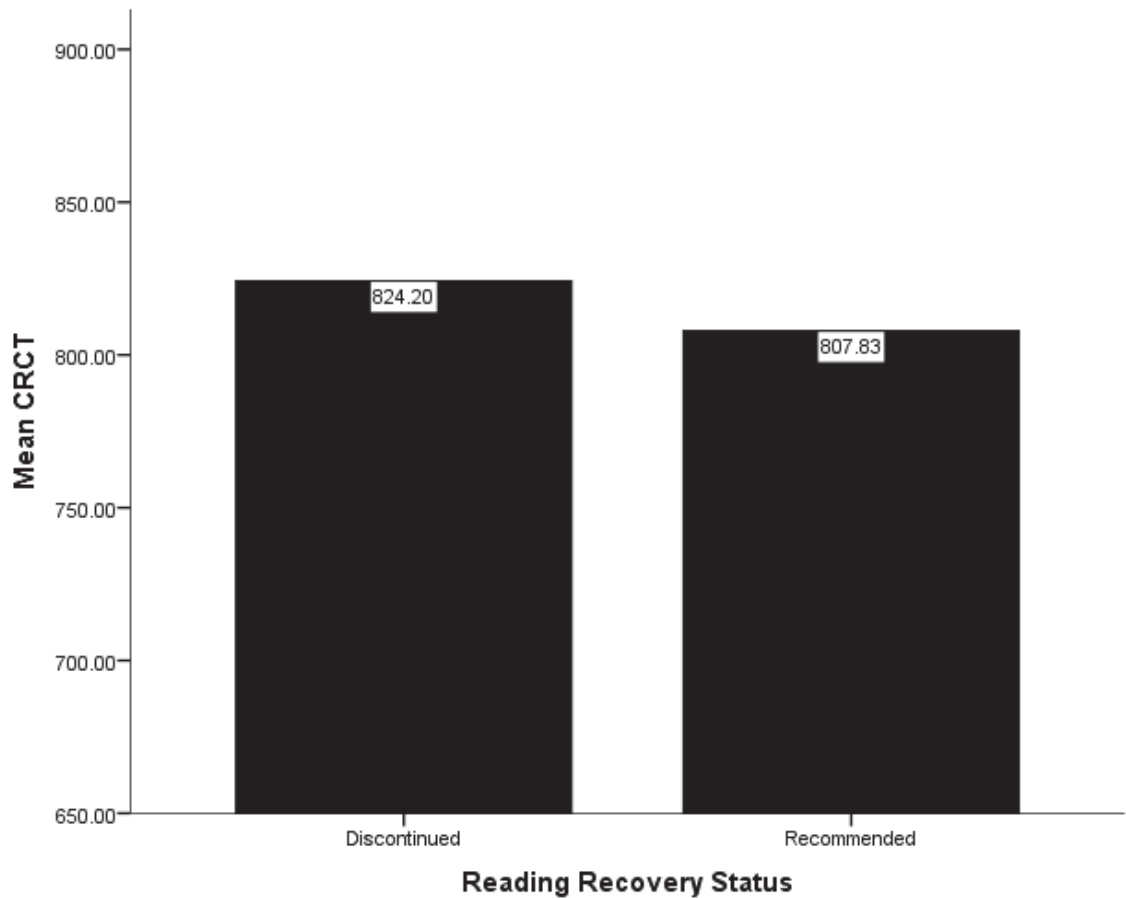


Figure 2. Mean CRCT scores as a function of RR Status.

Hypothesis 3. Main Effect for CRCT reading scores: No significant differences were expected between the three years of CRCT scores aggregated across ethnicity and student status. There was no significant effect for CRCT scores for the three consecutive years,

$F(2, 262) = .612, p = .543$. CRCT scores for 2009 ($M = 819.43, SD = 18.902$), 2010 ($M = 820.82, SD = 19.697$), and 2011 ($M = 817.82, SD = 20.839$) were not significantly different from one another (see Figure 3).

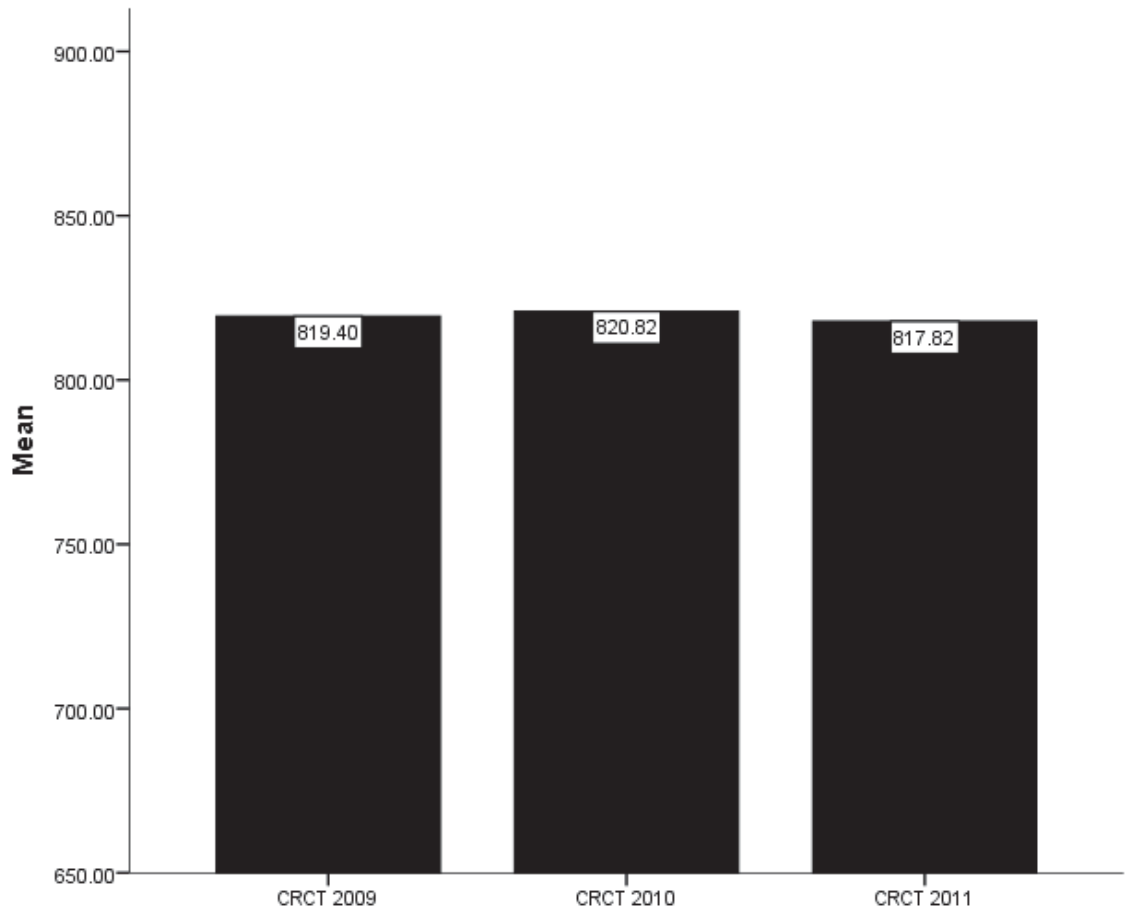


Figure 3. CRCT Scores for Three Consecutive Years

Hypothesis 4. Two-way interaction for ethnicity and student status: Non-Hispanic students who discontinued will score slightly higher on CRCT reading scores than non-Hispanic students who were recommended; however, Hispanic students who were discontinued will score much higher on CRCT reading scores than Hispanic students who were recommended. There was not a significant interaction between RR status and Ethnicity, $F(1, 131) = .991, p = .321$. The mean CRCT scores for discontinued

students across the three years was similar for both Hispanic and non-Hispanic students; likewise, the mean CRCT scores for discontinued students across the three years was similar for both Hispanic and non-Hispanic students (see Figure 4).

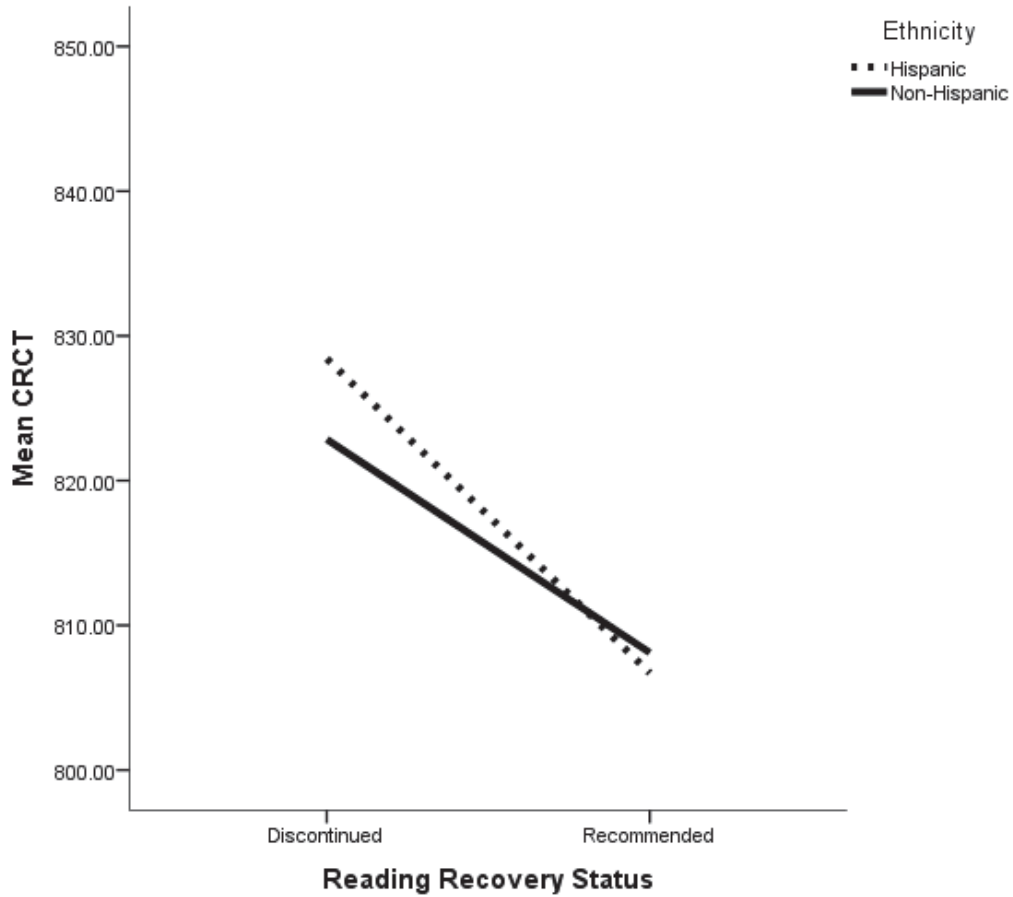


Figure 4. RR Status and Ethnicity with Mean CRCT Averages.

Hypothesis 5. Two-way interaction for student status and administration year: The 3-year pattern of CRCT scores for discontinued students will be similar to the 3-year pattern of CRCT scores for recommended students. RR was an early intervention that had proven to be successful. There was not a significant interaction between CRCT scores and student status, $F(2, 262) = .887, p = .413$. The mean CRCT scores for

discontinued students across the 3 years was similar to the mean CRCT scores for recommended students across the same 3 years (see Figure 5).

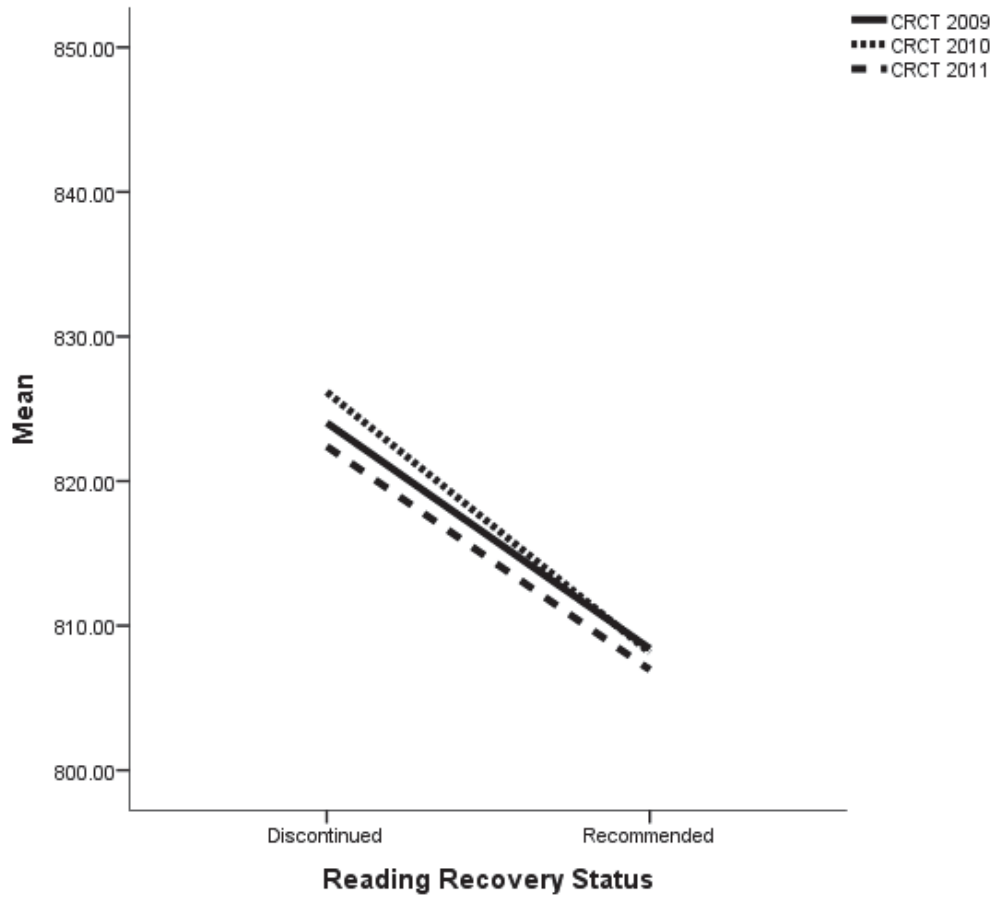


Figure 5. Interaction between CRCT Scores and RR Status

Hypothesis 6. Two-way interaction for student status and administration year: The 3-year pattern of CRCT scores for Hispanic students will be similar to the 3-year pattern of CRCT scores for non-Hispanic students. There was not a significant interaction between CRCT score and ethnicity, $F(2, 262) = .185, p = .831$. The mean CRCT scores for Hispanic students across the 3 years was similar to the mean CRCT scores for non-Hispanic students across the same 3 years (see Figure 6).

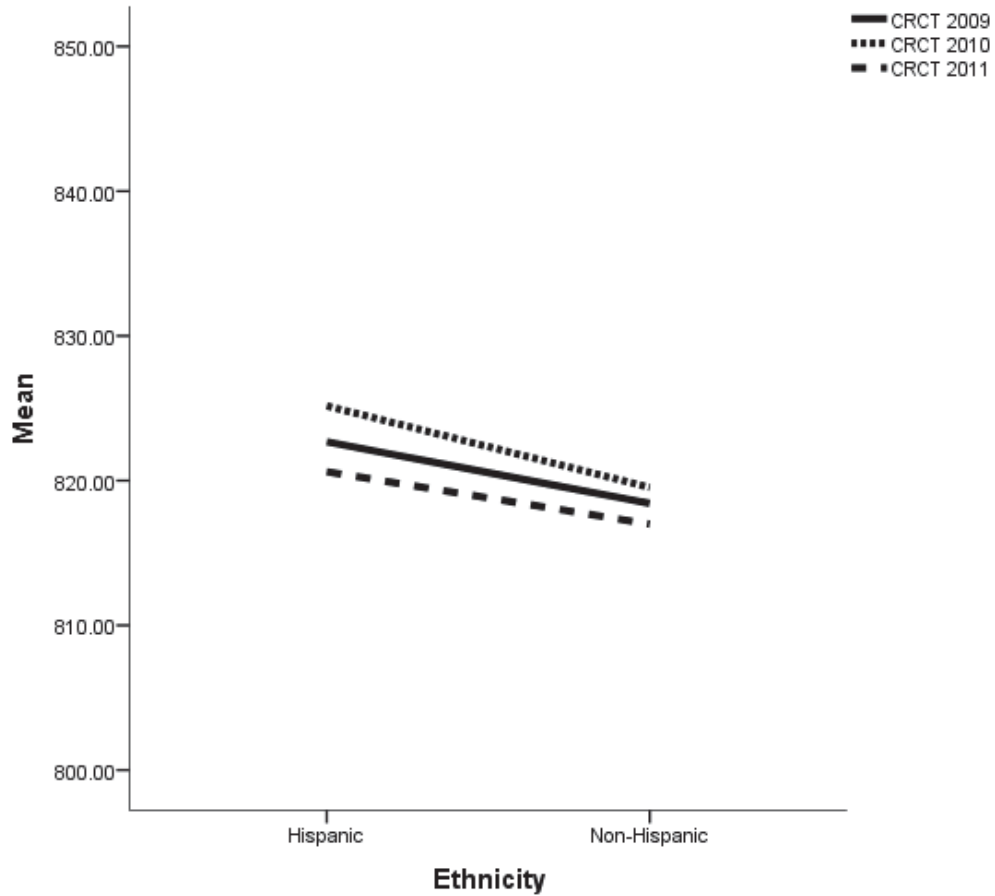


Figure 6. Interaction between CRCT Scores and Ethnicity

Hypothesis 7. Three-way interaction for ethnicity and administration year: No interaction was predicted for the three-way effect. The pattern of CRCT scores for ethnicity and RR status was predicted to persist over the 3 test administration years. There was not a significant interaction between CRCT scores, Ethnicity, and RR status, $F(2, 262) = .133, p = .2066$. The mean score differences for both discontinued and recommended students were similar for Hispanic students across the 3 years and for non-Hispanic students across the same 3 years (see Figure 7).

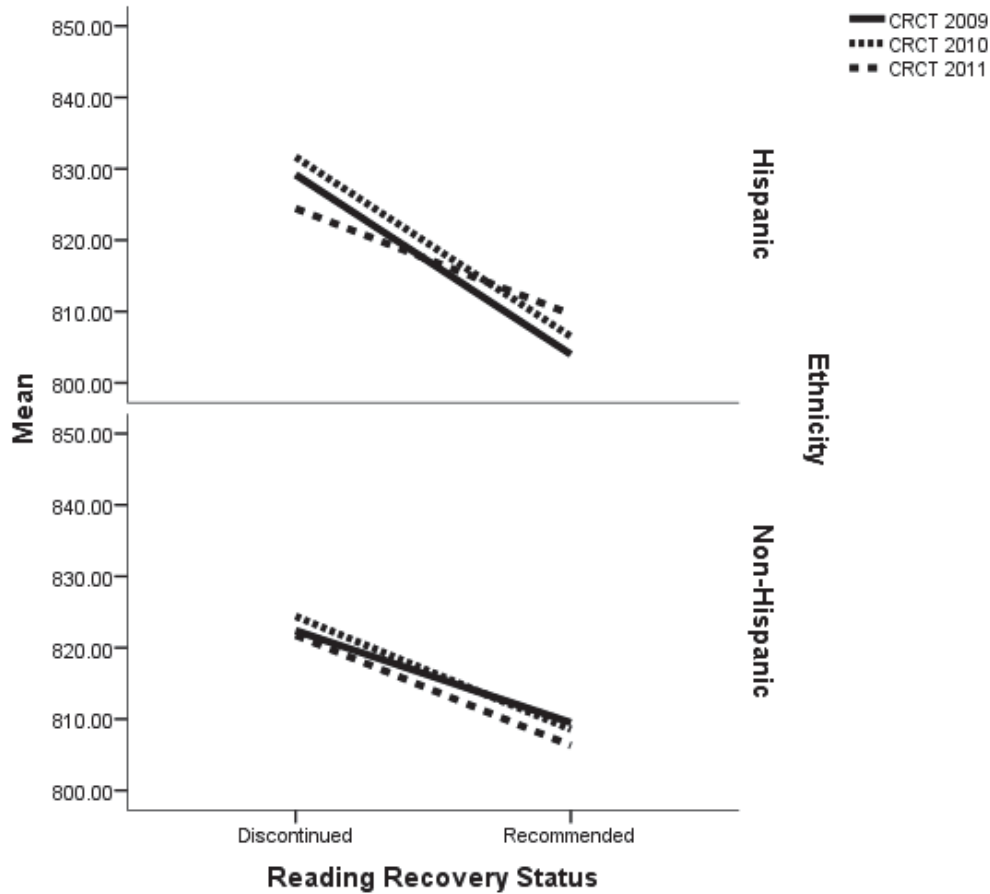


Figure 7. Interaction between CRCT Scores, Ethnicity, and RR Status

Case Studies

The case studies that illustrated the document analysis of the student notebooks and reported CRCT reading scores addressed research Question 8: How did Hispanic students and their non-Hispanic peers progress through RR as an early intervention in literacy?

There was a total population of four participants in the case studies. The participants were not identified by their actual name. The participants consisted of two Caucasian boys, one Hispanic boy, and one Hispanic girl. Of these four studies, there

were two students who discontinued and two students who were recommended. They were selected due to their diversity of ethnicity, RR status, and grade level.

For the purpose of this study, only the CRCT reading scores were considered. The following standards were in place for the reading portion of the CRCT. Students who scored above 800 met the criterion and passed the reading portion successfully. If they scored above 850, they exceeded the requirements. For those students who scored below 800, they failed to meet the minimum requirements.

Hypothesis 8: There will be no difference in the process followed by the Hispanic students and their non-Hispanic peers during the RR early intervention program. A description of the comparison of units of analysis across the cases follows. All of the students lived with both parents with the exception of one, Blake. He lived with his grandparents. In addition, Blake was the only student who did not have siblings in the home with him. As for attending pre-K, Richard was the only student to attend the public pre-K school. The other three students did not attend pre-K anywhere. Their first year attending school was in kindergarten. During the RR lessons, it was essential for the students to have good attendance. Of the four students, Blake and Jose had the best attendance. Maria and Richard's attendance was fair. Two of the students spoke English as the primary language in their home while the other two students spoke Spanish primarily. When given the preliminary hearing and vision screening, all four of the students passed the assessment successfully. The average number of weeks spent with the four students was 17.75 weeks. Two students received the full 20 weeks. One student received 16 weeks, and the other student received 15 weeks. At the end of the program, the text reading levels ranged from Level 7 to Level 18. The students who read

Text Level 16 and Text Level 18 discontinued from the program. The students who ended the program reading Text Level 7 and Text Level 11 were recommended. The average letter identification for these students was 53 out of 54 letters. On the Ohio Word Test, they averaged 16 out of 20 words. On Concepts About Print, the students demonstrated an average of 15 out of 24 early behaviors. The writing vocabulary assessment consisted of an average of 29 words. As for the Hearing and Recording Sounds assessment, the students averaged 33 out of 37 sounds. Their average CRCT reading score for 2009 was 814.50. The average reading score for 2010 was 816, and the average reading score for 2011 was 817.

Table 1

Comparison of Units of Analysis Across Cases

| Units of Analysis | Case Study | | | |
|-----------------------|--------------|------------|---------------|----------------|
| | One (Blake) | Two (Jose) | Three (Maria) | Four (Richard) |
| Ethnicity | Caucasian | Hispanic | Hispanic | Caucasian |
| Living Arrangements | Grandparents | Parents | Parents | Parents |
| Siblings | None | Three | Three | One |
| Pre-K | No | No | No | Yes |
| Attendance | Good | Good | Fair | Fair |
| Primary Language | English | Spanish | Spanish | English |
| Hearing and Vision | Passed | Passed | Passed | Passed |
| Number of Weeks | 15 | 16 | 20 | 20 |
| Text Level | 18 | 16 | 11 | 7 |
| Letter Identification | 54/54 | 53/54 | 53/54 | 53/54 |
| Ohio Word Test | 15/20 | 19/20 | 14/20 | 17/20 |
| Concepts About Print | 17/24 | 15/24 | 14/24 | 14/24 |
| Writing Vocabulary | 36 | 28 | 24 | 28 |
| HRSIW | 35/37 | 32/37 | 35/37 | 31/37 |
| CRCT Reading 2009 | 823 | 827 | 785 | 823 |
| CRCT Reading 2010 | 831 | 836 | 797 | 800 |
| CRCT Reading 2011 | 827 | 833 | 800 | 808 |

Note. K= kindergarten; HRSIW = hearing recording sounds in words; CRCT = Criterion Reference Competency Test for Reading.

Case Study One

Blake was a Caucasian boy who completed 15 weeks of RR lessons and discontinued from the program. He was an only child who moved from another state to live with his grandparents. He was 6 years of age and had no visitation rights with his biological parents. He did not attend pre-K; therefore, when he entered Kindergarten, he was not as advanced as the other kindergarteners were. During the 2008-09 school-terms, he was placed in the first grade, but he struggled with literacy skills. In January of 2009, he was given the RR test and was selected to participate. Before he could participate in the sessions, Blake was tested with the vision and hearing screenings. He passed all parts successfully. During the first ten days of Roaming, his RR teacher realized Blake really loved his parents and wanted to be with them often. His home life with his grandparents was loving and comfortable, but lacked the educational attention he needed on a daily basis. His grandmother signed the permission form for Blake to participate in RR. Blake had very good attendance during his participation in the RR program.

During the initial testing in December 2008, Blake took the Observation Survey test. The test identified that Blake knew most of the letters in the alphabet. He knew 50 of the 54 upper and lower case letters. The letters that he missed were b, d, p, and q that were confusing due to the similarities of the letters. The Ohio Word Test showed that he knew 10 of 20 words from Word List A. While reading this list, he was able to recognize most two or three letter words. He recognized words like: and, the, has, am, little, one and yes. Likewise, he was able to recognize the initial beginning of most of the unknown words. He demonstrated difficulty with middle and ending sounds of words. On the

Concepts About Print Test, he was able to recognize the front of the book, where to start reading, which direction to go, how to return sweep, and match words one by one in the book. Blake knew that print contains a message, the concept of first and last, where the bottom of the picture was located, how to look at the left page before the right page, and the meaning of different punctuations. On the Writing Vocabulary Test, he was able to write nine words independently. He wrote two or three letter words like: an, and, am and the. The Hearing and Recording Sound in Words Test showed that Blake knew 28 of the 37 sounds in the two written sentences: I have a big dog at home. I am going to take him to school. When identifying the sounds within each sentence, Blake was able to get all the initial sounds correctly, but omitted the ending sounds. During the December 2008 running record, Blake was able to read a Level 3 book successfully at 95% accuracy. As he read the book, he repeatedly mispronounced the same three words while reading. He called the word hippo, hippos. If hippo were a proper noun such as a person's name, it would have only counted as one error.

Overall, Blake had control of early reading behaviors such as tracking print from left to right, attempting unknown words by focusing mostly on the initial letter sound, and self-correcting when something didn't make sense. Blake neglected the structure of words occasionally. He generally attempted initial consonants, but he did not follow through to the end of words. Blake demonstrated that he knew how to write about 40 vocabulary words. He was capable of writing words such as the, I, A, is, me, my, am, an, look, like, at, go, we, this, that, boy, and more. When writing words independently, he slowly articulated the sounds. Some words were difficult for him to articulate such as the

word has. He pronounced it as had. Because Blake knew most of his letters and sounds, he used his background knowledge to build upon during his RR sessions.

During Week 1, Blake only received two roaming sessions due to a Teacher Work Day, Professional Learning Day, and classroom testing. He added three more words to his writing vocabulary, big, look, and like. During this week, Blake demonstrated difficulty with sh and r words.

During Week 2, he was able to recognize the similarities quickly in letter work such as gg, aa, qq, tt and yy. This week, the RR teacher noticed Blake demonstrating some fluency and phrasing when reading. He was able to write sentences by sounding out each letter sound. Although he used incorrect verb tense, he was able to sound out the words and spelled most of the words correctly. Blake was able to attend all roaming sessions this week. He discovered six more words this week to add to his writing vocabulary, love, if, will, was, playing and zombie.

During Week 3, Blake missed one day of session due to the Martin Luther King Holiday. He completed his last three of ten roaming sessions. On Friday, he began his first full 30-minute session using all the different component parts of a RR lesson. He attempted a Level 6 book called Jack and the Beanstalk. He read the book with 97% accuracy and a good self-correction rate of 1:4. For example, for every four errors Blake made, he was able to self-correct one. Likewise, he added five more words to his vocabulary list: apple, tree, be, going, and red.

Week 4 was another successful week. Blake was present each day. He moved up to Level 7 books. He read the book called Fishing at 100% accuracy and no errors. The words had, snake, pet and tag were added to his writing vocabulary. He appeared to

enjoy reading and writing about animals; therefore, three of the five new books read that week were about animals. The titles were Brave Father Mouse, Fishing and Choosing a Puppy.

Blake had great attendance during Week 5. He read all Level 7 and Level 8 books with ease. He did not score below 94% accuracy on any of the books read. This week, he added five more vocabulary words such as she, for, park, puppy and May.

Week 6 consisted of three sessions only. The teacher was absent one day and there was another Professional Learning Day for educators. On his last day for this week, Blake attempted a Level 9 book called, The Lion and the Mouse. He read the book with ease at 97% accuracy with a good rate of 1:2 self-correction ratio. He only added two new words to his writing vocabulary, off and then.

Week 7 was a four-day week because of the President's Day Holiday on Monday. In the meantime, Blake continued to do an excellent job with using meaning and structure, as well as, visual clues to problem solve as he was introduced to new books daily. This week he read a Level 11 book titled, Late for Soccer. He read the book at 94% accuracy, but struggled with a 1:11 self-correction rate. Likewise, his vocabulary expanded by eight more words, lost, very, good, blocked, took, him, helped and with.

During Week 8, Blake soared. He attempted levels 12, 13, 14 and 15. He scored above 94% accuracy on all of the books. His writing vocabulary included an additional seven words, so, blue, bike, won, his, robot and green. Blake enjoyed his reading sessions, so he never missed coming to school.

Week 9 was an awesome week for extending Blake's writing vocabulary. This week, Blake added eleven new words to his writing. The words included dad, take,

fishing, man, got, by, fox, three, Billy, seen and her. On the other hand, Blake demonstrated some struggles with Level 17. When reading *The Cabin on the Hill*, he read at 92% accuracy with good self-correction of 1:3 and five words told to him. He did not get discouraged; he simply tried his very best.

During Week 10, Blake only received two sessions because his teacher was absent 3 days due to death in her family. When the teacher returned, she attempted a Level 18 book called, *Ant City*. Blake read this book at a frustration level of 89% and no self-corrections. The teacher felt this struggle was due to her absence. Therefore, she continued with Level 18 the following week. Blake added five more words to his writing vocabulary, bike, fast, pet, hunting, and five.

Week 11 was a 3-day week due to Spring Break. When Blake returned, he continued working with Level 18 books. He did a much better job this week. His lowest accuracy rate when reading was 94% with good self-correction 1:4. The teacher only told him a few words when reading. His new vocabulary words this week included truck, rode, Ginger and away.

Week 12 only included three sessions because of a tornado drill during a bad weather day and the lead teacher testing students. This week he attempted a Level 19 at 89% accuracy and fair self-correction of 1:7. The teacher had to assist him with nine words. After the teacher witnessed the struggles, she decided this was a bad choice of book. However, he was able to add six words to his writing list, doing, magic, very, fish, last and week.

Week 13 was a repeat of levels read previously. The teacher wanted to make the reading sessions easy so the student could review skills taught earlier. The student read

reading Level 18 at 90% accuracy and struggled at 1:11 self correction; Level 14 at 96% accuracy with great self-correction of 1:2; Level 17 at 96% accuracy with good self-correction of 1:4; and Level 15 at 90% accuracy with 1:nil. This week he added four more words to his writing vocabulary, Sunny, day, brother, and Desi.

Because of Easter Holidays, Weeks 14 and 15 only consisted of four workdays together. Text Levels 17 and 18 were read at a minimum of 94% accuracy. The End of Program assessment was given during Week 15. During the assessment, Blake used meaning, structure and visual information to problem solve unknown information. His self-confidence grew tremendously. He repeated words to confirm and make self-corrections. In writing, Blake had learned to sound out words and recognize many word parts. He was very creative when writing. His writing vocabulary consisted of about 111 words. He was to identify 54 of the 54 upper and lower case letters on the letter identification test. On the Ohio Word Test, he could identify 15 of the 20 words. On Concepts About Print, he could identify 17 of the 24 concept skills about reading a book. On the Writing Vocabulary, Blake wrote 36 words independently. When given the Hearing and Recording Sounds in Words test, he was able to recognize 35 of the 37 sounds independently. He discontinued reading at Level 18 at 93% accuracy with good self-correction of 1:5.

When Blake took the reading portion of the CRCT at the end of his 2008-09 school-terms, Blake passed the reading section with a score of 823. The minimum requirement for passing was 800. During the spring 2010, Blake passed the reading section again with a score of 831. Lastly, during spring 2011, he scored an 827 which means he successfully passed the reading portion for 3 consecutive years.

Case Study Two

Jose was a 6-year-old Hispanic boy who lived with both parents. He had one brother and two sisters. Jose was next to the youngest. His family's primary language in the home was Spanish. He did not attend pre-K prior to going to grade school. Literacy and language were huge factors for Jose during his kindergarten year. Fortunately, his kindergarten teacher highly recommended him to be tested for the RR intervention program in first grade. His father was the dominant parent in this household. He worked at a restaurant while his mother was a homemaker. Jose's oldest sibling was in the third grade. Therefore, he was able to receive home support nightly from his family. As a preliminary procedure, Jose was screened for hearing and vision problems. After a full evaluation, there were no concerns discovered. He passed all of the assessments.

During the RR first initial Observation Survey Test, Jose knew 51 of the 54 upper and lower case letters. There were confusions with q, b, and l. On the Concepts About Print Test, he knew where the front of the book was located, that print contains a message, where to begin reading on a page, and the concept of first and last. Likewise, he was able to identify the difference between a letter and a word. On the Word Test, he identified seven words from Word List A with emphasis on the initial sounds of each word such as: and, the, has, is, little, one, and yes. In addition, Jose was able to write a few one to four letter high frequency words on the Writing Test. He wrote words like play, log, A, is, my, and it. When forming words, Jose predominantly wrote the letters correctly. On the Hearing and Recording Sounds in Words Test, Jose articulated vowels and consonants slowly as he gravitated more towards the initial and ending sounds in words. When reading, Jose understood reading from left to right, and retaining the meaning of the text. He used meaning, structure, and visual cues to identify unknown

words. Although Jose could only read and write a few high frequency words, he did demonstrate some difficulty with matching one to one. He occasionally had insertions of words and/or omissions. When high frequency words were in isolations, Jose had difficulty recognizing them. He relied heavily on patterned text. Jose successfully read a Level 1 book at 96% accuracy.

During Week 1, Jose was present every day for RR. The teacher worked on the letter confusion p and q. He does not recognize the difference. They worked on matching one to one as well. His writing vocabulary for this week included a total of ten words: Brayan, play, dog, is, my, it, a, red, to and dad.

Week 2 only consisted of four days due to the Labor Day Holiday. Jose added five words to his writing vocabulary: we, clock, big, he, and can. This week he worked on letter work for the letters l and b. His one to one matching was improving as well.

Week 3 was a 4-day week because the teacher was absent on Tuesday. Jose read both Level 2 and Level 3 books. He was successful with both levels. However, he demonstrated difficulty with reading sentences that contained the word *in*. He generally called it the word *on* each time. Words that were added to his writing vocabulary were I, with, the, see and went.

Week 4 was a 4-day week due to the teacher being unavailable because of a Tier Meeting. The student worked on reading Level 3 and Level 4 books. As he read each story, he did a wonderful job of getting his mouth ready for initial sounds. Thus far, the Level 3 books are within his instructional level. He added the words school and go to his writing vocabulary.

Week 5 was a super week for Jose. He was able to receive a full week of one on one tutoring. He read Level 4 and Level 5 books successfully. He added a total of ten new words to his writing vocabulary: cook, fish, in, pan, get, dog, away, am, for and four.

Week 6 was a struggle. Three of the five books read were read at frustration level. The Farm in the Spring (Level 5) was a book read at 85.5% accuracy. Scat said the Cat (Level 6) was read at 83% accuracy and Grumpy Elephant (Level 7) was read at 87% accuracy. All of the books were below acceptable performance levels. Jose missed several words during his independent reading; however, he was able to get most initial sounds correct. This week he added the words: said, are, you and win.

Week 7 was much better. Jose was present every day and successfully read four of the five books on reading Level 6 and 7. He struggled with words like: come for came and with for went. The teacher notated multiple times that the Jose read with good expression this week. He also added words such as bug, him, so and good to his writing vocabulary.

Week 8 was a 3-day week due to Parent Conference Day and Fall Break. He was reading Level 7 books with great difficulty. He only read one book successful this week. He consistently read the word *I'm* as *am*. Words that were added to his writing vocabulary were love, he, Boo, say, and we.

Week 9 was another 3-day week. The teacher was unavailable one day and Fall Break Holiday was on Monday. Jose attempted Level 7 books again. This time he successfully read Baby Bear Goes Fishing. As he read this book, he continued to mispronounce the word *am* for *I'm*. During writing, he added the words went and me to list of known words.

Week 10 was a good week. There were only four lessons taught because Jose was absent one day. The teacher attempted several Level 8 books. Jose was successful on all Level 8 books. Therefore, the teacher attempted a Level 9, and he scored 90% accuracy with no self-corrections. The title of the book was Sally's Friend. He added three new words: T-rex, did and at.

Week 11 was another great week. The teacher and student attended class each day. Jose not only read a Level 9 book successfully, but he read three Level 10 books and one Level 11 book at the instructional level or above. As he read each book, he continued to look at the initial letters carefully. He was getting much better at reading all the way through to the end of words. In addition, he surprisingly added ten more words to his writing vocabulary: ate, eggs, they, was, little, lion, liked, his, tree, and dump.

Week 12 was even better. Both the teacher and student were present each day. Jose read Level 11 and Level 12 books without much assistance from the teacher. He only added two new words: all and kids. The lowest percentage rate read this week was 90% accuracy.

Week 13 was another productive week. Jose participated every day. He read Level 12 and 13 books with very little frustration. He consistently formed the initial sounds in words, but he demonstrated some difficulty following through to the end. Words added to the writing vocabulary were up, be, cook, eat, baby and she.

Week 14 only consisted of 2 days due to the Thanksgiving Holidays. This was not a productive week. Jose only added three words: Batman, she and baby. He successfully read one Level 14 book called The Enormous Watermelon at 97% accuracy.

Whereas, he failed reading the book: You'll Soon Grow into Them Titch at 87% accuracy.

Week 15 only consisted of two sessions due to LLI Training. Jose continued reading Level 14 books at 91% or above for accuracy. His new writing words for this week consisted of man, buy, and toy. His reading included a lot of phrasing and voice intonation.

Week 16 was the conclusion of his RR lessons. Jose attended class every day this week. He successfully read Level 15 and 16 books. He also added new words like must, want, blue, cup, and giant to his writing vocabulary. After being administered the End of Program test, Jose correctly identified 53 of the 54 upper and lower case letters of the alphabet. He identified 15 of the 24 concepts about print items. He could read 19 of the 20 words on the Ohio Word Test. He was able to write 28 words successfully by himself on the Writing Vocabulary Test. On the Hearing and Recording Sounds in Words Test, he could identify 32 of the 37 sounds. Finally, he successfully read a Level 16 book titled: The Hippo in the Hole. He read this book at 90% accuracy but struggled with 1:10 self-correction ratio. Jose discontinued from the RR program in December 2008.

In May 2009, Jose took the CRCT test and passed the reading portion with a score of 827. He only needed a minimum of 800 to be successful. During the spring 2010, Jose passed the reading section again with a score of 836. Lastly, during spring 2011, he scored an 833 that means he successfully passed the reading portion for the third consecutive year.

Case Study Three

Maria is a 6-year-old Hispanic girl who was recommended from RR after 20 weeks of one to one tutoring. Her household consisted of both parents who only spoke Spanish. They both worked the farmland daily. Maria had three younger brothers who spoke some English but mostly Spanish. Her siblings stayed with their grandmother during the day. Maria did not attend pre-K. However, she was given the vision and hearing screening prior to participating in the reading sessions. She successfully passed all examined parts.

During the initial Observation Survey Test, Maria utilized mostly meaning and structure cues to problem solve unknown information. There were evidence of sentence phrasing and reading fluency taking place. On the Letter Identification Test, she knew 47 of the 54 upper and lower case letters of the alphabet. There were some confusion with her letters such as n for m, p for d, j for g, and z for v. However, she was able to match most corresponding capital letters with the lowercase counterparts. When given the Concepts About Print Test, Maria could identify the front of a book and recognize that print contains a message. She knew where to start reading and which way to go. As she read a book, she knew how to return sweep and how to read the left page before the right page. She also understood the concept of first and last. Because she was able to recognize a few punctuations, she was able to read with meaning. Areas she needed to work on were one to one matching, noticing a change in line structure, letter and word order, and the purpose of a question mark. On the Word List A, she only identified three words: the, like, and yes. When Maria could not identify the other words, she spent very

little time trying to problem solve. Several of her errors consisted of visual similarities like: on for one, the for there, and for did, and like for little.

When the Writing Test was administered, Maria could only write a limited amount of high frequency words. She only knew six words: to, a, my, dog, yes, and Joana. When the RR teacher tried to give prompts, she only made minimum attempts to write the prompts. The attempts that she did make had some visual similarities such as: me for mom, yi for I, and ys for is. On the Hearing and Recording Sounds in Words Test, Maria heard and recorded some sounds, but the letters within the words did not have sequence or orientation like buz for bus, and ti for it. Likewise, as she slowly pronounced each word, she demonstrated difficulty with identifying and recording vowels and chunks within the words. She entered the program reading on Level 1 at 92% accuracy.

Week 1 through 3 consisted of Roaming Around the Known and detailed paperwork. Maria recognized 12 words during this three-week period. Most of the words she identified were two and three letter words such as dog, to, yes, a, my, the, I, go, is, me, we, and Joana.

Week 4 consisted of Maria reading all Level 2 books. These books were read at the minimum of 93% accuracy. She read the books with confidence. This week, she added words such as at, like, saw, he, and play.

Week 5 was a combination of Level 2 and 3 books. She read all Level 3 books correctly with a minimum of 90% accuracy. Words added to her writing vocabulary were in, got, for and it. Maria has been present everyday thus far, but the teacher has missed two days.

Week 6 was another good week. Maria read Level 3 and 4 books successfully. When reading the Level 4 books, she read two books at 100% accuracy and one book at 95% accuracy with minimum self-corrections. Words added this week are mom, you, can and cannot.

Week 7 was a difficult week for Maria. She read all Level 4 books, but there were many struggles. She successfully passed two stories, but failed an additional two. The teacher was absent again this week on Friday. Words that were added to the writing vocabulary list: eat and and.

Week 8 was much better. They both had perfect attendance for the week. Maria read mostly Level 5 books. She did not score below 95% accuracy rate on any of the books read this week. She added an additional four words to her writing vocabulary: on, P.E, eats and with.

Week 9 only had 3 days for tutoring due to Parent Conference Day and Fall Break Holiday. Maria read all Level 6 books with 94% accuracy being the lowest percentage rate and great self-correction rate of 1:2. Boys, forgot, and was were the three new words added to her writing vocabulary list.

Week 10 was the most difficult week for tutoring sessions. The teacher and child were absent one day each, and Monday was a Fall Break Holiday. Of the two Level 6 books that were read, one was too hard. Therefore, the teacher asked her to stop reading the book because her frustration level was really high. The book, Lazy Mary, was read at 92% accuracy. Words added this week consisted of man, am and going.

Week 11 consisted of Maria reading books on a Levels 6 and 7. She read one Level 7 book at 89% accuracy that means she struggled on this particular book. Words

added to the writing vocabulary are twins, bus, and day. Maria missed one tutoring lesson this week due to missing the school bus.

Week 12 was a full week of tutoring sessions. Maria once again failed a Level 7 book at 87.5% accuracy and had some trouble with 1:6 self-correction rate. She also attempted a Level 8 book. Her reading accuracy on this book was 90% accuracy with 1:9 self-correction rate which exemplifies she struggled. Five words added to her writing vocabulary list were sit, Sam, his, they, and ran.

Week 13 was another 3-day week due to both the teacher and student being out one day each. Only Level 8 books were read. She failed one book at 83% accuracy and 1:18 self-correction rate which means the book was really hard for her. The words bed and gray were added to the writing vocabulary list.

Week 14 was a 3-day tutoring session. The student did not attend one day because of early dismissal and Fun Friday; whereas, the teacher missed one day because of Professional Learning Development. The student read all Level 9 books at 90% accuracy and above. Seven words were added: pip, zoo, she, her, dad, want, and today.

Week 15 only contained two reading sessions. The remainder of the week was cancelled because of Thanksgiving Holidays. She read two Level 9 books successfully. In addition, she added the words turkey and went.

Week 16 had only two reading lessons as well. The teacher was unavailable 3 days because LLI Training. Maria was tutored on Monday and Friday. She failed both Level 9 books at 87.5% accuracy. Attendance was a huge concern because Maria was losing consistency. She added big and brother to her writing vocabulary this week.

Week 17 was a much better week. Maria and the teacher attended reading sessions every day. Maria read Level 9 books daily. She successfully read three of the five books at 92% accuracy and above. The other two books were Level 9 books, as well, but they were too hard. She read them at 80% and 83% accuracy. The words, December, said and fat were added to the writing vocabulary list.

Week 18 was a 4-day week. Maria was absent one day. During the week, she read all Level 10 books. Each book was read successfully at 97% or above accuracy. She added four more words to her writing vocabulary: are, making, yellow, and one. Then, Maria went on a 2 week Christmas Break.

Week 19 only contained three lessons. Monday was a Teacher Work Day and Tuesday was a Professional Learning Day. Maria read at 93% accuracy or above on all three books. She added the words have and shirt to her writing vocabulary list.

During her final week of lessons, Week 20, Maria only had one lesson. She read a Level 11 book at 97% accuracy with 1:2 good self-correction ratio. In addition, she added three more words to her writing list: lost, old and house. When given the End of Program Test, she scored 53 out of 54 on the Letter Identification Test, 14 out of 20 on the Ohio Word Test, 14 out of 24 on the Concepts About Print Test, listed 24 words on the Writing Vocabulary Test, 35 out of 37 words on the Hearing and Recording Sounds in Words Test and successfully read a Level 11 text at 97% accuracy with 1:2 good self-correction ratio. Although the student successfully passed Level 11, she did not graduate from RR. After 20 full weeks of lessons, she needed to read at a Level 14 or above. Therefore, she was recommended from the program.

In May of 2009, Maria scored 785 on the reading portion of the CRCT test, which means she did not meet the minimum requirement of 800. During the spring 2010, Maria did not pass the reading section again with a score of 797. However, during spring of 2011, Maria finally passed with a score of 800 on the reading section.

Case Study Four

Richard was a 6-year-old Caucasian boy who was recommended from RR. Richard was larger than the normal 6-year-old boy. When speaking, he spoke with a speech impediment and a southern drawl. Richard did attend pre-K. He was a very inquisitive student. If he did not understand a concept, he would ask why repeatedly. Richard lived with both parents and his little sister. His family played an active role in his life as well as the community. Because Richard's family had a strong educational background, they supported the school initiatives regularly.

When given the procedural hearing and vision screening, Richard passed both assessments. Therefore, he was cleared from any auditory or vision barriers. During the initial Observation Survey, Richard's reading was slow and choppy with many repeats of words. He was able to identify 51 of the 54 upper and lowercase letters of the alphabet. There were confusions with z for x, d for b, and g for q. On the Concepts About Print Test, Richard understood several book features such as print containing a message, correct directionality of text, and the meaning of a comma. Richard used meaning and structure to problem-solve unknown information. In addition, he used language patterns to gain understanding of the text. Although Richard had a good memory for text patterns when reading, he continued making omission and insertion errors. He did not attend to the letter detail such as the arrangement of the letters or words. He was able to identify

the words was and no; however, he was inconsistent with the concept of first or last. On the Word List B, Richard was able to identify a limited number of high frequency words like: it, we, do and play. Whereas, when writing independently, he was able to write more words on the Writing Vocabulary Test such as: the, to, and, like, likes, I, is, see, my, we, at, it, and me. When writing, he forms most of his letters correctly. Richard did a wonderful job of noticing the initial sounds in words. After administering several leveled textbooks, Richard did not take long to reach a reading level that was too hard. Level 2 and Level 3 were too hard for him; therefore, he tested out as independent on reading Level 1.

During the first 3 weeks, Richard participated in the Roaming Around the Known process. Because Richard was absent 3 days and unavailable one day, it took 3 weeks to complete the roaming process. Even though Richard identified 12 words on the initial writing vocabulary test, he added an additional 10 words the first 3 weeks of the RR sessions. He added words such as his last name, dad, a, mom, do, book, am, going, papa and he.

Week 4 only had consisted of three lessons. The teacher was absent on Tuesday and the student was absent of Wednesday. This week Richard read Level 3 books. His reading was choppy, but he was successful in completing the books. The words shop and in were added to his writing vocabulary.

Week 5 was the first full week of lessons. Richard read Level 3 books each day. He was successful everyday but one. When he read, Sam Balloon, he was frustrated at 89% accuracy. However, he read Sam and Bingo at 98% accuracy that was considered independent. This week, he added four new words: playing, on, go, and went.

Week 6 was another complete week with perfect attendance. Although Richard read Level 4 books, he struggled greatly. The teacher reported that he was not focused for several days. He failed three of the five Level 4 books. The two books that were successful were read at an instructional level of 90% and 94%. Words added for this week were be, fishing and it.

Week 7 was not a good week for attendance. Richard was only present for one day. During this lesson, he only added one word to his writing vocabulary, which was the word up. He was absent due to illness. Eventually, he was hospitalized for several days.

Week 8 was much better with attendance. This time, the teacher missed one session due to RR Class. Richard continued to read Level 4 books. He was able to read three of the four books successfully at 90% accuracy or higher. This week he did not discover any new words to add to his writing vocabulary list.

Week 9 only contained three reading lessons because the school had Parent Conference Day and Fall Break Holiday. Richard attempted Level 5 books. He struggled on the book called The Little Cousins Visit at 83% accuracy. The only word added to his writing vocabulary was the word but.

Week 10 was a 4-day week. Monday was a Fall Break Holiday. Student four had a very difficult week. He struggled at reading both Level 5 and 6 books. As he read the books, he did use meaning cues to problem solve. However, he had difficulty using his visual cues. He called the word mother-mama, father-papa, and asked-said. Richard added several words to his writing vocabulary. He added with, sweet, baby, sister, she and so.

Week 11 was another 3-day week due to the child being absent for a ball game, and the child being unavailable because of a Halloween parade. Richard worked really hard this week on Level 6 books. He successfully passed two of them at 90% and 92% accuracy. In addition, he added hotel, went, buzz and for to his word list.

Perfect attendance was evident for the next three consecutive weeks. Week 12 through 14 were stressful for Richard. He repeatedly read Levels 5 and 6 books. Most of the Level 6 books that he read were at the frustration level which means he scored below 90% accuracy. Therefore, the teacher tried Level 5 books again. With exception of one Level 5 book, Richard read the other Level 5 books successful at 91% accuracy or above. During this three-week period, he added the following words to his writing vocabulary list: lunch, for, home, cow, play, football, game, find, boo, call, have band, rock, of, toys and get.

Week 15 was only 2 days of lessons because of Thanksgiving Holidays. Richard read a Level 5 book at 50% accuracy and another Level 5 book at 91% accuracy. He did not add any new words to word list this week.

Week 16 only had 2 days as well because the teacher had LLI Training. Richard read Level 5 books at 91% accuracy or above. He added the words were and said to his writing vocabulary list. He was not as frustrated this week.

Week 17 and 18 were full weeks that consisted mostly of Level 7 and 8 books. Within the 10-day window of lessons, Richard only failed two books a Level 6 book at 87% and a Level 7 book at 89% accuracy. However, on the other hand, he added several words to his writing vocabulary. He added air, balloon, are, going, catch, thing, his and tool.

Week 19 occurred after a two-week break for Christmas Holidays. On his first day back, the teacher read a Level 4 book to ease back into reading. The next 2 days were focused on Level 7 books that he read both at 94% accuracy. Likewise, he added only one word to his writing vocabulary, new.

Week 20 only contained one lesson. The student read a Level 7 book at 75% accuracy that only frustrated him. The teacher decided this would be the last lesson due to End of Program testing and a RR Conference trip scheduled in Savannah, Georgia. When given the End of Program Test, he scored 53 out of 54 on the Letter Identification Test, 17 out of 20 on the Ohio Word Test, 14 out of 24 on the Concepts About Print Test, listed 28 words on the Writing Vocabulary Test, and 31 out of 37 words on the Hearing and Recording Sounds in Words Test. After 20 weeks of lessons and only reading at a Level 7, Richard was recommended out of the RR program.

Reading scores on the CRCT test must be above an 800 in order for students to pass successfully. When Richard took the reading portion of the CRCT at the end of his 2009 school term, he passed the reading section with a score of 823. During the spring 2010, Richard passed the reading section again with a score of 800. In addition, he scored an 808 during the spring of 2011 that means he successfully passed the reading portion for 3 consecutive years.

An analysis of the case studies indicated that all of the students lived with both parents with the exception of one who lived with his grandparents. Three of the four students did not attend pre-K. The attendance during RR lessons was great for two of the four students. The primary language spoken in the homes was Spanish for two students and English for the other two students. All four students passed the Hearing and Vision

Screening successfully. The average number of weeks spent with the four students during their lessons was 17.75 weeks. At the end of the program, the text reading levels ranged from Level 7 to Level 18. The average letter identification was 53 out of 54 letters. The Ohio Word Test averaged 16 out of 20 words. Concepts About Print averaged 15 out of 24 early behaviors. The writing vocabulary assessment contained an average of 29 words. The Hearing and Recording Sounds assessment averaged 33 out of 37 sounds. In 2009, the average CRCT reading score was 814.50. The average reading score for 2010 was 816, and the average reading score for 2011 was 817.

Chapter V

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study explored the sustained effects of the RR program on the reading achievement of Hispanic ELLs who received the early intervention program known as RR. In this study, sustained effects referred to the ongoing success of students reading proficiently for three consecutive years as measured by reading scores on the CRCT were used to measure the reading achievement.

All participants in the population sampled received RR during 2008-2009 school-terms. The focus of the study was on Hispanic students and their non-Hispanic peers who discontinued or were recommended. The students who reached grade level or higher successfully discontinued (graduated). The students who completed a full program of 20 weeks but remained below their grade level were identified as recommended status. Incomplete status referred to students who received an incomplete program due to fact that the school year ended. For the purpose of this research, only the discontinued and recommended students were identified.

Calhoon, Otaiba, Cihak, King, and Avalos (2007) indicated that children who were struggling with reading benefitted from effective early reading instructional practices. Likewise, Bufalino, Wang, Gomez-Bellenge, and Zalud (2010) added that

preventive measures provided at the beginning of children's educational experience could deter any future literacy challenges.

According to Tissington and LaCour (2010), ELLs were identified as a group of individuals who typically struggled with reading. However, Nelson-Royes and Reglin (2009) reported that the No Child Left Behind Act of 2001 mandated that every child must be reading on grade level by 2014. Regardless of their life experiences, intelligence capabilities, or background experiences, it did not matter.

Findings

Hypothesis 1: Main effect for ethnicity suggested that non-Hispanic students will have higher CRCT reading scores than Hispanic students. I supported this hypothesis because non-Hispanic students have been at a greater advantage of understanding classroom instruction and receiving support at home. Hispanic students, however, face language barriers at home and school. The findings in the study by Bowman-Perrott et al. supported my hypothesis. Bowman-Perrott, Herrera, and Murry (2010) stated that nationwide data revealed a significant gap, especially in the area of reading, between the achievements of ELLs and English-speaking peers. Their study provided evidence that non-Hispanic readers will perform better than Hispanic readers on a state mandated reading assessment. During their study, they found that ELLs were disinterested and discouraged during tasks because of the lack of understanding. They stated that minimal reading comprehension evolved when enhancing the vocabulary of ELLs. The ELLs mostly worked with words in isolation. In addition, they found almost two-thirds of the ELLs did not receive proper assistance in their language in order to achieve successfully. The results in the current study were in contrast to my hypothesis and the findings from

the Bowman-Perrott et al. research study. The current study found that there was no significant difference between average CRCT scores for the Hispanic and non-Hispanic students. The results showed that Hispanic students scored similar to non-Hispanic students.

Hypothesis 2: Main effect for student status suggested that discontinued students will have higher CRCT reading scores than students who were recommended. This hypothesis was supported based on the fact that discontinued students would have reached the average reading level of their grade level population. The discontinued students would have acquired strategies to become successful independent readers, whereas, the recommended students would not have reached the average reading level by the end of the program. These students would not have the opportunity to acquire all the necessary skills to be successful. Calhoon, Otaiba, Cihak, King, and Avalos (2007) stated that by providing early effective reading instructional practices, the reading gap would successfully close. According to Iversen and Tunmer (1993), the RR program was developed to decrease the number of students who were exemplifying difficulty in the areas of reading and writing. The RR program offered intensive, one-to-one daily instruction for at risk students struggling in the area of literacy (Reynolds & Wheldall, 2007). The results provided evidence that there was a significant difference between average CRCT scores for the Discontinued and Recommended students. The Discontinued students scored significantly higher than Recommended students did.

Hypothesis 3: Main Effect for CRCT reading scores suggested no significant differences were expected between the 3 years of CRCT scores aggregated across ethnicity and student status. This hypothesis was supported because studies have proven

that RR is a successful early intervention program. A child is likely to retain the necessary strategies to become an independent reader if he or she is making progress and performs adequately in RR. Pinnell (1989) found that the RR program provided immediate and long-term positive effects. Her findings supported the results of the current study that there was no significant effect for CRCT scores for the three consecutive years. The CRCT scores for 2009, 2010, and 2011 were not significantly different from one another. However, Meichenbaum and Biemiller (1998) reported that studies have shown that children who demonstrated difficulty acquiring skills early on in life would have continued to demonstrate weak skills later during their educational experience.

Hypothesis 4: Two-way interaction for ethnicity and student status suggested that non-Hispanic students who discontinued will score slightly higher on CRCT reading scores than non-Hispanic students who were recommended; however, Hispanic students who were discontinued will score much higher on CRCT reading scores than Hispanic students who were recommended had a two-way interaction between ethnicity and student status. The hypothesis suggested that non-Hispanic students who discontinued were predicted to score slightly higher on CRCT reading scores than non-Hispanic students who were recommended. Likewise, Hispanic students who were discontinued were predicted to score much higher on CRCT reading scores than Hispanic students who were recommended. This hypothesis was expected to be true because students who had discontinued from RR were more likely to be equipped with demonstrating and utilizing reading strategies that promoted success in reading, unlike those who continued to struggle with reading strategies after weeks of one to one tutoring in the program. In the

United States, studies reported that Hispanic ELLs had difficulty with oral language and reading comprehension (Nakamoto, Lindsey, & Manis, 2008). Because Hispanic ELLs were more likely to live below the federal poverty level, they had a greater probability of entering school with limited vocabularies, poor early literacy skills, and minimal school readiness factors (Bowman-Perrott et al., 2010). Linan-Thompson, Vaughn, Prater, and Cirino (2006) reported that it was necessary to develop more effective interventions in reading for ELLs when determining the long-term effects of systematic and explicit interventions. Malloy, Gilbertson, and Maxfield (2007) added that identifying an effective instructional intervention for ELLs who demonstrated struggles in reading due to language proficiency, motivation, and different school experiences was challenging. Almaguer (2005) reported that it was the responsibility of the educator to provide the necessary needs of ELLs. She suggested that by providing a sound educational practice, this would help students to succeed in society. The results were not supportive of the hypothesis. The study revealed that there was not a significant interaction between RR status and ethnicity. The mean CRCT scores for discontinued students across the 3 years was similar for both Hispanic and non-Hispanic students. In addition, the mean CRCT scores for recommended students across the 3 years was similar for both Hispanic and non-Hispanic students.

Hypothesis 5: Two-way interaction for student status and administration year suggested that the 3-year pattern of CRCT scores for discontinued students will be similar to the 3-year pattern of CRCT scores for recommended students. This hypothesis was supported because both groups of students were making progress. The only difference was the recommended students did not reach grade level expectancy by the

end of 20 weeks. Schmitt and Gregory (2005) conducted a study to explore the literacy achievement of RR participants who successfully discontinued during their first grade year and how they continued to perform up to 3 years later. Schmitt and Gregory found that a large percentage of former successful RR students were still reading at or above grade level up to 3 years after the program. Students who discontinued or recommended from the program generally continue to be successful readers because of the strategies they had gained during their daily RR lessons. The results of the current study revealed that there was not a significant interaction between CRCT scores and student status. The mean CRCT scores for discontinued students across the 3 years was similar to the mean CRCT scores for recommended students across the same 3 years.

Hypothesis 6: Two-way interaction for student status and administration year suggested that the 3-year pattern of CRCT scores for Hispanic students will be similar to the 3-year pattern of CRCT scores for non-Hispanic students. This hypothesis was not supported. The findings in this study were in contrast to my hypothesis. The results stated there was not a significant interaction between CRCT scores and ethnicity. The mean CRCT scores for Hispanic students across the 3 years was similar to the mean CRCT scores for non-Hispanic students across the same 3 years. Quay, Steele, Johnson, and Hortman (2001) stated that it was important to find a reading program to assist students who were at risk of failing to learn to read. They reported the main purpose of the RR program was to reduce the continuous reading deficiencies of many first grade readers. Calhoun et al. (2007) stated that 80% of ELLs who spoke Spanish as their first language was more likely to demonstrate reading difficulties than their non-Spanish

speaking peers. They added that ELL's limited academic language affected their reading development.

Hypothesis 7: Three-way interaction for ethnicity and administration year suggested that there would be no interaction for the three-way effect. The pattern of CRCT scores for ethnicity and RR status was predicted to persist over the three test administration years. I support this hypothesis because RR is an early intervention program known to reduce literacy struggles. Regardless of ethnicity, this early intervention allows students to gain strategies that will remain with them as lifelong learners. As the program ended, those students who were discontinued or recommended, generally, retained the necessary techniques to continue to perform successfully on state assessments over a period of time. RR has proven to persist over several years with all ethnicities. Linan-Thompson, Vaughn, Prater, and Cirino (2006) stated that the long-term effect of systematic and explicit interventions for ELLs must be developed in reading. Linan-Thompson et al. conducted a study using 11 schools with first grade students only. The population sample consisted of 103 Hispanic students. Linan-Thompson et al. findings concluded that ELLs who were at risk of struggling in reading showed growth and were less likely to be placed in alternative classes. The results from my study provided evidence that there was not a significant interaction between CRCT scores, ethnicity, and RR status. The mean score differences for both discontinued and recommended students were similar for Hispanic students across the 3 years and for non-Hispanic students across the same 3 years.

Hypothesis 8: The case studies generated from the document analysis of the student notebooks and CRCT reading scores suggested that there was no difference in the

process followed by the Hispanic students and their non-Hispanic peers during the RR early intervention program. It is my hypothesis that the Hispanic students will progress in a similar manner to their non-Hispanic peers. The analysis for the four case studies indicated that the Hispanic students were similar to the non-Hispanic peers. After receiving the Hearing and Vision Screening, all students successfully passed. Of the four students, three of them did not attend pre-K. However, there was a slight concern for attendance with two students. The number of lessons averaged around 17.75 weeks. The text reading levels ranged from Level 7 to Level 18. The findings in the case studies support my hypothesis. During the 2009 administration of the CRCT reading test, three of the four students passed. Likewise, the 2010 administration of the CRCT reading test resulted in three of the four students passing. Lastly, the 2011 administration of the CRCT reading test consisted of all four of the students passing successfully.

Conclusions

The purpose of this study was to determine how RR affected the literacy needs of Hispanic ELLs and their non-Hispanic peers. Government officials within the United States mandated elementary schools to improve reading instruction (Rumbaugh & Brown, 2000). There was a national concern for the educational plight of ELLs (Malloy, Gilbertson, & Maxfield, 2007). Malloy, Gilbertson, and Maxfield (2007) stated that this was a major concern because generally low reading achievement scores lead to high rates of grade retention that eventually led to greater school dropout rate for this population. However, based on the findings of this study, this would not be a problem if more elementary schools would implement the RR program as an early intervention. The following conclusions were drawn from the findings of the study:

1. There was no significant difference between average CRCT scores for the Hispanic and non-Hispanic students.
2. There was a significant difference between average CRCT scores for the Discontinued and Recommended students. Discontinued students scored significantly higher than Recommended students.
3. There was no significant effect for CRCT scores for the 3 consecutive years. CRCT scores for 2009, 2010, and 2011 were not significantly different from one another.
4. There was not a significant interaction between RR status and Ethnicity. The mean CRCT scores for discontinued students across the 3 years was similar for both Hispanic and non-Hispanic students; likewise, the mean CRCT scores for discontinued students across the 3 years were similar for both Hispanic and non-Hispanic students.
5. There was not a significant interaction between CRCT scores and student status. The mean CRCT scores for discontinued students across the 3 years was similar to the mean CRCT scores for recommended students across the same 3 years.
6. There was not a significant interaction between CRCT score and ethnicity. The mean CRCT scores for Hispanic students across the 3 years was similar to the mean CRCT scores for non-Hispanic students across the same 3 years.
7. There was not a significant interaction between CRCT scores, Ethnicity, and RR status. The mean score differences for both discontinued and

recommended students were similar for Hispanic students across the 3 years and for non-Hispanic students across the same 3 years.

8. There was no difference in the manner in which Hispanic students and their non-Hispanic peers progressed through the RR early intervention program.

Recommendations

This study explored the effectiveness of the RR program meeting the literacy needs of Hispanic students. The research used a small sample population that allowed room for other research opportunities. Research opportunities such as a follow-up study that would include a larger and more diverse sample population would provide additional data on the influence of the RR Program. Another research opportunity would consider a longitudinal study to examine the long-term effect of the RR program on the reading performance of students over a period of time, first, third, and eighth grade. A study for students who perform below grade level expectation on state mandated exams after receiving full service with the RR early intervention program to be considered for additional interventions or identified as candidates for special education services. Finally, a study for school districts that elect not to implement RR as an early intervention program, due to the cost of the program, to reconsider their decision based on research findings.

REFERENCES

- Alawiye, O., & Williams, H. S. (2005). A comparative reading gains of African American students in a chapter 1 pull out program. *Reading Improvement, 42*(2), 98-104.
- Almaguer, I. (2005). Effects of dyad reading instruction on the reading achievement of Hispanic third-grade English Language Learners. *Bilingual Research Journal, 29*(3), 509-526.
- Askew, B. J., Kaye, E., Frasier, D. F., Mobasher, M., Anderson, N., & Rodriguez, Y. (2002). Making a case for prevention in education. *Literacy Teaching and Learning: An International Journal of Early Reading and Writing, 6*(2), 43-73.
- Assessment Research and Development of the Georgia Department of Education. (2012, August). *An assessment and accountability brief: 2012 CRCT validity and reliability*. Atlanta, GA: McLeod.
- Betts, J., Reschly, A., Pickart, M., Hewastad, D., Sheran, C., & Marston, D. (2008). An examination of predictive bias for second grade reading outcomes from measures of early literacy skills in kindergarten with respect to English Language Learners and ethnic subgroups. *School Psychology Quarterly, 23*(4), 553-570.
doi:10.1037/1045-33830.23.4.553
- Bifuh-Ambe, E. (2009). Literacy Skills Acquisition and Use: A study of an English Language Learner in a U.S. university context. *Adult Basic Education and Literacy Journal, 3*(1), 24-33.

- Bowman-Perrott, L. J., Herrera, S., & Murry, K. (2010). Reading difficulties and grade retention: What's the connection for English Language Learners? *Reading & Writing Quarterly*, 26, 91-107. doi:10.1080/10573560903397064
- Bufalino, J., Wang, C., Gomez-Bellenge, F. X., & Zalud, G. (2010). What's possible for first grade at-risk literacy learners receiving early intervention services. *Literacy Teaching and Learning*, 15(1/2), 1-15.
- Burroughs-Lange, S., & Douetil, J. (2007). Literacy progress of young children from poor urban settings: A RR comparison study. *Literacy Teaching and Learning*, 12(1), 19-46.
- Bursuck, W. D., & Damer, M. (2007). *Reading Instruction for Students Who Were at Risk or Had Disabilities*. Boston: Pearson/ Allyn and Bacon.
- Busbee, N. W. (2001). A study of Reading Recovery as an early intervention model for initial and sustained literacy acceleration of academically at-risk first grade students in Aiken County South Carolina public school. *UMI Microform No. 3013415*.
- Calhoun, M. B., Otaiba, S. A., Cihak, D., King, A., & Avalos, A. (2007). Effects of a peer-mediated program on reading skill acquisition for two-way bilingual first grade classrooms. *Learning Disability Quarterly*, 30(1), 169-184.
- Calhoun, M. B., Otaiba, S. A., Greenberg, D., King, A., & Avalos, A. (2006). Improving reading skills in predominantly Hispanic Title I first grade classrooms: The promise of peer-assisted learning strategies. *Learning Disabilities Research & Practice*, 21(4), 261-272.

- Carlo, M. S., August, D., McLaughlin, B., Snow, C., Dressler, D., Lippman, D., & White, C. E. (2008). Closing the gap: Addressing the vocabulary needs of English Language Learners in bilingual and mainstream classrooms. *Journal of Education, 189*(1/2), 57-76.
- Cates, G. L. (2005). Effects of peer versus computer-assisted drill on mathematics response rates. *Psychology in the Schools, 42*(6), 637-646.
- Clay, M. M. (1991). *Becoming Literate: The Construction of Inner Control*. Portsmouth, NH: Heinemann.
- Clay, M. M. (1993). *An Observation Survey of Early Literacy Achievement*. Portsmouth, NH: Heinemann.
- Clay, M. M. (2001). *Change Over Time in Children's Literacy Development*. Portsmouth, NH: Heinemann.
- Clay, M. M. (2005). *Literacy Lessons: Designed for Individuals. Part One: Why? When? and How?* Portsmouth, NH: Heinemann.
- Compton-Lily, C. (2011). Counting the uncounted: African American students in Reading Recovery. *Journal of Early Childhood Literacy, 11*(1), 3-24.
doi:10.1177/1468798410384775
- David, J. L. (2011). After-school programs can pay off. *Educational Leadership, 68*(8), 84-85.
- Dong, Y. R. (2009). Linking to prior learning. *Educational Leadership, 66*(7), 26-31.
- Dufrene, B. A., Reisener, C. D., Olmi, D. J., Zoder-Martell, K., McNutt, M. R., & Horn, D. R. (2010). Peer tutoring for reading fluency as a feasible and effective

- alternative in response to intervention systems, *Journal of Behavior Education*, 19, 239-256.
- Dunn, M. (2010). Response to intervention and reading difficulties: A conceptual model that included Reading Recovery. *Learning Disabilities: A Contemporary Journal*, 8(1), 21-40.
- Ethnicity. (n.d.). In *Merriam-Webster's online dictionary* (11th ed.). Retrieved from <http://www.m-w.com/dictionary/ethnicity>.
- Farver, J. M., Lonigan, C. J., & Eppe, S. (2009). Effective early literacy skill development for young Hispanic-speaking English Language Learners: An experimental study of two methods. *Child Development*, 80(3), 703-719. doi:10.1111/j.1467-8624.2009.01292.x
- Fien, H., Santoro, L., Baker, S., Park, Y., Chard, D. J., Williams, S., & Haria, P. (2011). Enhancing teacher read aloud with small group vocabulary instruction for students with low vocabulary in first grade classrooms. *School Psychology Review*, 40(2), 307-318.
- Fountas, I. C., & Pinnell, G. S. (1996). *Guided Reading: Good First Teaching for All Children*. Portsmouth, NH: Heinemann.
- Gardner, C. D. (2010). *Impacts of a Reading Recovery intervention on the reading achievement of low-income students on a standardized examination* (Doctoral Dissertation). Retrieved from ProQuest Dissertations & Thesis. (Order No. 3447355)
- Garcia, E. E., Jensen, B. T., & Scribner, K. P. (2009). The demographic imperative. *Educational Leadership*, 66(7), 8-13.

- Georgia Department of Education (GaDOE). *Georgia Student Assessment Program Student Assessment Handbook 2011-2012*. Retrieved on October 3, 2011. (http://www.gadoe.org/ci_testing.aspx?PageReq=CI_TESTING_CRCT)
- Gilbertson, D., Maxfield, J., & Huges, J. (2007). Evaluating responsiveness to intervention for English Language Learners: A comparison of response modes on letter naming rates. *Journal of Behavior Education, 16*(3), 259-279.
doi:10.1007/s10864-007-9039-9
- Gyovai, L. K., Carledge, G., Kourea, L., Yurick, A., & Gibson, L. (2009). Early reading intervention: Responding to the learning needs of young at-risk English Language Learners. *Learning Disability Quarterly, 32*(3), 143-161.
- Hagaman, J. L., Luschen, K., & Reid, R. (2010). The “RAP” on reading comprehension. *Teaching Exceptional Children, 43*(1), 22-29.
- Harris, C. B. (2001). A study of the transition of discontinued Reading Recovery students from grade one to grade two. *UMI Microfilm No. 3064493*.
- Hartry, A., Fitzgerald, R., & Porter, K. (2008). Implementing a structured reading program in an afterschool setting: Problems and potential solutions. *Harvard Educational Review, 78*(1), 181-210.
- Herman, S., & Stringfield, S. (1997). *Ten promising programs for educating all children: Evidence on impact*. Arlington, VA: Educational Research Service.
- Hicks, C. P., & Villaume, S. K. (2000). Finding our own way: Critical reflections on the literacy development of two Reading Recovery children. *The Reading Teacher, 54*(4), 398-412.

- Hiebert, E. H. (1994). Reading Recovery in the United States: What difference does it make to an age cohort? *Educational Researcher*, 23(9), 15-25.
- Hispanic. (n.d.). In *Merriam-Webster's online dictionary* (11th ed.). Retrieved from <http://www.m-w.com/dictionary/Hispanic>.
- Hurry, J., & Sylva, K. (2007). Long-term outcomes of early reading intervention. *Journal of Research in Reading*, 30(3), 227-248.
- Isherwood, R. S., & Barger-Anderson, R. B. (2008). Factors affecting the adoption of co-teaching models in inclusive classrooms: One school's journey from mainstreaming to inclusion. *Journal of Ethnographic & Qualitative Research*, 2, 121-128.
- Iverson, S., & Tunmer, W. E. (1993). Phonological processing skills and the Reading Recovery program. *Journal of Educational Psychology*, 85(1), 112-126.
- Kamps, D., Abbott, M., Greenwood, C., Willis, H., Veerkamp, M., & Kaufman, J. (2008). Effects of small group reading instruction and curriculum differences for students most at risk in kindergarten: Two-year results for secondary and tertiary level interventions. *Journal of Learning Disabilities*, 41(2), 101-114.
- Kelly, P. R., Gomez-Valdez, C., Klein, A. F., & Neal, J. C. (1995). Progress of first and second language learners in an early intervention program. *ERIC Document Reproduction Service No. ED 394296*.
- Klingner, J. K., Artiles, A. J., & Barletta, L. M. (2006). English Language Learners who struggle with reading: Language acquisition or LD? *Journal of Learning Disabilities*, 39(2), 108-128.

- Kourea, L., Cartledge, G., & Musti-Rao, S. (2007). Improving the reading skills of urban elementary students through total class peer tutoring. *Remedial and Special Education, 28*(2), 95-107.
- Linan-Thompson, S., Vaughn, S., Prater, K., & Cirino, P. T. (2006). The response to intervention of English Language Learners at risk for reading problems. *Journal of Learning Disabilities, 39*(5), 390-398.
- Macaruso, P., & Rodman, A. (2011). Efficacy of computer-assisted instruction for the development of early literacy skills in young children. *Reading Psychology, 32*, 172-196.
- Malloy, K., Gilbertson, D., & Maxfield, J. (2007). Use of brief experimental analysis for selecting reading intervention for English Language Learners. *School Psychology Review, 36*(2), 291-310.
- Mayers, C. (2006). Public law 107-110 no child left behind act of 2001: Support or threat to education as a fundamental right? *Education, 126*, 449-462.
- Meichenbaum, D., & Biemiller, A. (1998). *Nurturing Independent Learner: Helping Students Take Control of Their Education*. Cambridge, MA: Brookline Books.
- Miller, D., Topping, K., & Thurston, A. (2010). Peer tutoring in reading: The effects of role and organization on two dimensions of self-esteem. *British Journal of Educational Psychology, 80*, 417-433.
- Merriam, S. B. (1998). *Qualitative Research and Case Study Applications in Education*. San Francisco: Jossey-Bass.

- Nakamoto, J., Lindsey, K. A., & Manis, F. R. (2008). A cross linguistic investigation of English Language Learners' reading comprehension in English and Hispanic. *Scientific Studies of Reading, 12*(4), 351-371.
- Nelson-Royes, A. M., & Reglin, G. L. (2009). After-school tutoring for reading achievement and urban middle school students. *Reading Improvement, 105-116*.
- Non-Hispanic. (n.d.). In *Merriam-Webster's online dictionary* (11th ed.). Retrieved from <http://www.m-w.com/dictionary/Non-Hispanic>.
- O'Day, J. (2009). Good instruction was good for everyone- or was it? English Language Learners in a balanced literacy approach. *Journal of Education for Students Place at Risk, 14*, 97-119. doi:10.1080/10824660802715502
- Pinnell, G. S. (1989). Reading Recovery: Helping at-risk children learn to read. *The Elementary School Journal, 90*(2), 160-183.
- Quay, L. C., Steele, D. C., Johnson, C. I., & Hortman, W. (2001). Children's achievement and personal and social development in a first-year Reading Recovery program with teachers in training. *Literacy Teaching and Learning, 5*(2), 7-26.
- Reynolds, M., & Wheldall, K. (2007). Reading Recovery 20 years down the track: Looking forward, looking back. *International Journal of Disability, Development and Education, 54*(2), 199-223. doi:10.1080/10349120701330503
- Reynolds, M., Wheldall, K., & Madelaine, A. (2009). The devil was in the detail regarding the efficacy of Reading Recovery: A rejoinder to Schwartz, Hobsbaum, Briggs, and Scull. *International Journal of Disability, Development and Education, 56*(1), 17-35. doi:10.1080/10349120802681580

- Ross, S. G., & Begeny, J. C. (2011). Improving Latino, English language learners' reading fluency: The effects of small group and one-on-one intervention. *Psychology in the Schools, 48*(6), 604-617.
- Rumbaugh, W., & Brown, C. (2000). The impact of Reading Recovery participation on students' self-concepts. *Reading Psychology, 21*, 13-30.
- Saine, N., Lerkkanen, M., Ahonen, T., Tolvanen, A., & Lyytinen, H. (2011). Computer-assisted remedial reading intervention for school beginners at risk for reading disability. *Child Development, 82*(3), 1013-1028.
- Schmitt, M. C., & Gregory, A. E. (2005). The impact of an early literacy intervention: Where were the children now? *Literacy, Teaching, and Learning, 10*(1), 1-20.
- Schwartz, R. M., Hobsbaum, A., Briggs, C., & Scull, J. (2009). Reading Recovery and evidence-based practice: A response to Reynolds and Wheldall (2007). *International Journal of Disability, Development and Education, 56*(1), 5-15.
doi:10.1080/10349120802681564
- Scrugg, T. E., Mastropieri, M. A., & McDuffie, K. A. (2007). Co-teaching in inclusive classrooms: A metasynthesis of qualitative research. *Exceptional Children, 73*(4), 392-416.
- Sileo, J. M. (2011). Co-teaching: Getting to know your partner. *Teaching Exceptional Children, 43*(5), 32-38.
- Slavin, R. E. (1987). Cooperative learning and the cooperative school. *Educational Leadership, 46*(2), 31-33.
- Tissington, L., & LaCour, M. (2010). Strategies and content areas for teaching English Language Learners. *Reading Improvement, 47*(3), 166-172.

- Wasik, B. A., & Slavin, R. E. (1993). Preventing early reading failure with one-to-one tutoring: A review of five programs. *Reading Research Quarterly*, 28, 179-200.
- Wyatt, E. J. (2008). *A study of the long range effects of Reading Recovery on student achievement on the Arkansas Benchmark Examination* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Thesis.

Appendix A
Permission Form

Tift County School District
Tift County Primary Schools
c/o Superintendent Atwater
Tifton, Georgia 31794

November 8, 2013

Dear Superintendent,

I am a doctoral candidate at Valdosta State University and I am currently conducting research for my dissertation, which is on the effect of Reading Recovery on literacy needs of Hispanic English Language Learners. I need your permission, indicated by a letter of approval, to obtain Criterion Reference Competency Test scores of students that have attended Tift County Public School System for three consecutive years starting in 2008-09 and End of Year Reading Recovery status for the year 2008-09. I assure you that the information collected will be confidential.

I have enclosed a copy of my Research Protocol Review Form that will explain how I will conduct this research study. If you have any questions, please feel free to contact me. I will be happy to share my findings with your district. Thank you in advance for your time. Your cooperation is greatly appreciated.

Sincerely,

Victoria Melton
Principal,
Omega Elementary School

Appendix B

Institutional Review Board Oversight Screening Form

Valdosta State University Graduate School
Institutional Review Board Oversight Screening Form
for Graduate Student Research

Project Title: Effect of Reading Recovery on the Literacy Needs of Hispanic English Language Learners

Name: Victoria Melton

Faculty Advisor: Dr. Ellen Wiley

Department: Curriculum and Instruction

Please indicate the academic purpose of the proposed research:

E-mail: vmelton@mchsi.com

- Doctoral Dissertation
 Master's Thesis
 Other:

Telephone: 229-392-6140

1. YES NO Will you utilize *existing identifiable private* information about living individuals? "*Existing*" information is data that were previously collected for some other purpose, either by the researcher or, more commonly, by another party. "*Identifiable*" means that the identities of the individuals can be ascertained by the researcher by name, code number, pattern of answers, or in some other way, regardless of whether or not the researcher needs to know the identities of the individuals for the proposed research project. "*Private*" information includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place or information provided for specific purposes that the individual can reasonably expect will not be made public (e.g., a medical record or student record).

Note: If you are using data that: (1) are publicly available; (2) were collected from individuals anonymously (i.e., no identifying information was included when the data were first collected); (3) will be de-identified before being given to the researcher, (i.e., the owner of the data will strip identifying information so that the researcher cannot ascertain the identities of individuals); or (4) do not include any private information about the individuals, regardless of whether or not the identities of the individuals can be ascertained, your response to Question 1 should be NO.

2. YES NO Will you *interact* with individuals to obtain data? "*Interaction*" includes communication or interpersonal contact between the researcher and the research participant, such as testing, surveying, interviewing, or conducting a focus group. It does not include observation of public behavior when the researcher does not participate in the activities being observed.

3. YES NO Will you *intervene* with individuals to obtain data? "*Intervention*" includes manipulation of the individual or his/her environment for research purposes, as well as using physical procedures (e.g., measuring body composition, using a medical device, collecting a specimen) to gather data for research purposes.

If you answered YES to ANY of the above questions, your research is subject to Institutional Review Board oversight. Please discard this form and complete and submit an IRB application. Do not begin your research until your application has been reviewed by the IRB and you are informed of the outcome of the review.

♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦

If you answered NO to ALL of the above questions, your research is not subject to Institutional Review Board oversight. Stop here, sign below, secure your faculty advisor's signature, and submit this form to the Graduate School. Please remember that, even though your project is not subject to IRB oversight, you should still observe ethical principles in the conduct of your research.

STUDENT CERTIFICATION: I certify that my responses to the above questions accurately describe my proposed research.

Student's Signature: Victoria Melton Date: 10/23/13

FACULTY ADVISOR CERTIFICATION: I have reviewed the student's proposed research and concur that it is not subject to Institutional Review Board oversight.

Faculty Advisor's Signature: Ellen Wiley Date: 10/23/13