

The Effectiveness of Leveled Literacy Intervention on Meeting Reading Achievement Goals for
Second and Third Grade Students

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Abstract

The purpose of this study was to examine the effectiveness of the Fountas and Pinnell Leveled Literacy Intervention on reading achievement among second and third grade students who were not meeting grade level reading achievement expectations. The study used an experimental design. Students were put randomly in control and experimental groups within their second and third grade classes. The control group children read self-selected books independently while the experimental group participated in the Leveled Literacy Intervention. The instrument utilized for all assessments was the Fountas and Pinnell benchmark assessment system, but scores were converted to Scholastic Reading Inventory lexile equivalents. The mean post-test Lexiles of the Leveled Literacy Group (Mean = 469.44, SD = 58.33) did not differ significantly from the mean post-test Lexiles of the control group (Mean = 461.11, SD = 58.77) [$t(16) = .30, p = .77$]. Thus, there was no significant difference in achievement between the groups who participated in the intervention and those who did not. Significant threats to validity are discussed as well as implications for future research.

CHAPTER I

INTRODUCTION

Overview

Many schools across the United States are experiencing students who are not reading at their grade level expectation. Studies have suggested that children who fail to read well in their early school years continue as poor readers and writers in later grades. Students who are poor early readers are twice as likely to drop out of school when they reach high school (Harrison, Peterman, Grehan, Ross, & Dexter, 2008). The research in this study will investigate if the Fountas and Pinnell *Leveled Literacy Reading Intervention* is a useful tool to help students close the reading achievement gaps specifically within second and third grade students.

The first three to four years of schooling are a critical time to learn the basic skills needed to tackle a more advanced curriculum (Klingner, Urbach, Golos, Brownell, & Menon 2010). This researcher is a third grade, general education teacher so it is critical to have as many students as possible meeting grade level expectations. One intervention in use in her school for struggling readers is Leveled Literacy. She was interested in measuring its effectiveness with her students as well as second grade students.

Statement of Problem

The purpose of this study was to examine the effectiveness of a specific reading intervention, Leveled Literacy, on second and third grade students who are not meeting grade level reading achievement expectations.

Hypothesis

The null hypothesis was that there would not be any statistically significant difference in the Scholastic Reading Inventory (SRI) Lexiles of below grade level second and third grade

students who participated in the Leveled Literacy Intervention, compared to the other second and third grade students who engaged in independent reading.

Operational Definitions

Leveled Literacy Intervention

Leveled Literacy was designed to close the reading achievement gap for below grade level readers who are struggling. It is meant to be an intensive 18 week program that involves reading, comprehension and word study (Fountas, Pinnell, & Heinemann, 2009). In the current study, Leveled Literacy was in place for 13 weeks.

Below grade level in reading

Students were identified as below grade level in reading based on their Fountas and Pinnell Benchmark Assessment score that was converted into an SRI Lexile number as according to Taybron and Lee (2012). Grade level performance is operationally defined as the current Lexile level for each second and third grade student based on the time of year. Grade level performance mid- year in second grade would be a Lexile score of 450. Grade level performance mid- year in third grade would be a Lexile score of 625. Scores below these would be considered below grade level (Scholastic Inc., 2001).

CHAPTER II

REVIEW OF THE LITERATURE

This literature review will discuss the importance of reading intervention at the elementary age with a focus on the Foutnas and Pinnell's Leveled Literacy Intervention Program (Burton-Archie, 2014). The first section will explain why reading comprehension is critical to students. Research will also support the great impact of shortening the reading achievement gap by the end of third grade. Section two focuses on a few potential contributing factors to lowing comprehension rates in students. Different trends and impacts will be explored to see the connection to struggling readers. In section three various methods, activities and philosophies will be examined in order to see what a quality reading instruction program would look like in the general classroom. Finally, section four will give the description, purpose, and effectiveness of the Leveled Literacy Program.

Why Reading Comprehension is Important

Throughout any school in the United States students will be reading, writing and thinking. These skills are essential for growing into a successful adult who is a positive member of society. Schools across the United States are putting more pressure and effort into reading comprehension because of the impact it has on young children. Studies have suggested that children who fail to read well in their early school years continue as poor readers and writers in later grades. Students who are poor early readers are twice as likely to drop out of school when they reach high school (Harrison, et al., 2008). Since dropout rates have a positive correlation to reading ability, it is important to bridge those gaps. If a student were to drop out and did not wish to pursue additional schooling, in most cases they are setting themselves up for struggle. In some cases but not limited to, high-school-only graduates earn \$17,500 less per year than those with

four-year college degrees (U.S. Department of Education, 1996). Although this resource was found a number of years ago, it illustrates the financial gap based on one's level of education. Overall, reading comprehension is an essential skill in elementary school but it shows to have more of an impact that just on reading.

Reading comprehension is when a student has the ability to read a text, process it and construct meaning from what was read. This is a complex process that requires individuals to be able to read words and to apply strategies while they read. Being able to comprehend text is a skill that is continuously practiced and developed throughout schooling. Comprehension is complex and requires various "pieces" to be applied while working. To name a few components, students will need to have knowledge of letter sounds, sufficient vocabulary, background knowledge, apply before, during and after reading strategies, metacognition, and the overall question of 'did what I just read make sense?' to name a few skills that encompass reading comprehension.

According to the *Reading Rockets Organization*, without comprehension, reading is a frustrating, pointless exercise in word calling (Texas Education Agency, 2013). A major goal of reading comprehension instruction is to help students develop the knowledge, skills, and experiences they must have if they are to become competent and enthusiastic readers.

The importance of reading comprehension is growing across the nation since 2000 when the National Reading Counsel deemed reading comprehension as one of the "big ideas" of reading. According to the NCLB Act of 2001, mandated increased attention to reading skills instruction, including comprehension (Klingner, et al., 2010). Reading comprehension is an essential skill that must be continuously practiced and used. Due to the No Child Left Behind Act of 2001, professional development and reading coaches were assigned to schools to help

improve teachers' reading instruction. With hope of providing extra emphasis on student ability to comprehend, the gap of student reading levels should begin to close. Mahdavi and Tensfeldt (2013) believe the ability to read is an important prerequisite for much of what makes a person successful in modern life. Reading is necessary to obtain most jobs; to pass a test to get a license to drive; to access menus, contracts, transit schedules, and more This movement should allow students the skills and support they will need to being their journey as a successful reader.

Possible Reasons for Low Comprehension Rates

When students are in elementary school that is a critical time for them to grow and develop the foundational skills as a learner. The first three to four years of schooling are a critical time to learn the basic skills needed to tackle a more advanced curriculum (Klingner, et al., 2010). As the curriculum advances, it is beginning to leave more students farther behind. The *National Center for Education Statistics* (1996) found that 64% of fourth grade students are reading at or below the below basic level. That is claiming only 36% of fourth grade students on average across America are reading on or above grade level. Even though this statistic is from many years ago, individual school data supports these statistics. There are various factors of why reading ability is deficit in elementary aged students. In this section, the exploration of three common possibilities for lower comprehension rates will be discussed in detail, such as the rigor in curriculum, disabilities, English language learners, lack of reading strategies and simply home life impacts.

Educators, families and community members are well aware that school curriculum changes and adapts to current time. These current times are increasing the difficulty of the curriculum to ensure students are college and career ready. Educators across the states are

increasing the rigor of their teaching in order to meet new state mandated Common Core State Standards (CCSS, 2018). What educators and families are finding is that students who had difficulty with reading and school work are now showing even less growth. There is not an ‘end all be all’ of reasons behind why some students have low comprehension rates. For example, one common factor for lower reading ability would be lacking the knowledge of reading strategies and applying them automatically. Without the knowledge of reading strategies, it turns reading into pointless word recalling. The main purpose of reading is to comprehend what you are reading whether it is for pleasure or to gain knowledge on a topic.

Students with learning disabilities tend to have difficulty learning how to apply a reading strategy independently. With a learning disability, the method of practicing is necessary for students to become in the habit of using a skill independently. Students with LD tend to be inactive learners who do not monitor their learning or use strategies effectively. In addition, it is common for students with LD to have weak executive functioning and struggle with planning, organizing information and ideas, initiating and maintaining focus on activities, selecting relevant task goals, and regulating behavior (Klingner, et al., 2010). Students without learning disabilities may lack the exposure to reading strategies or lack the motivation to read. Students who do not have motivation for reading pose an additional struggle. If a student is not interested in reading, they will not see the importance of paying attention to instruction. Motivation is a key factor to being successful at most things so the same goes for reading. Teachers have access to many texts could be interesting to students whether it is a magazine article, reading with a technology device or an engaging book. According to Spear-Swerling (2016), Children with different patterns of reading difficulty also tend to benefit from different technology supports and to display different kinds of strengths that can be incorporated into the classroom. Infusing

technology into the classroom is helpful for students with various disabilities and students who lack motivation.

Lastly, families across America are experiencing poverty which puts a strain on education. According to Cunningham (2006), poverty is the largest correlate of reading achievement. If it was known how many children in a U.S. school qualify for free or reduced-price lunch, one could form an accurate guess about their test scores. Schools with large numbers of poor children seldom achieve their goals for end-of-grade literacy tests. With this statistic weighing heavily on the school systems, it weighs on the family and the student. Children who are experiencing poverty are already at a disadvantage because typically students would already be performing below grade level expectations. Poverty does not allow for an emphasis on school work because families are worrying about their next meal and how to survive day to day. The ability to be in a print rich environment is slim to none.

After exploring various factors for low comprehension rates in elementary school children, the research would support that these students would benefit from a reading intervention service that was provided by the school.

Current Strategies to Promote Reading Comprehension in Regular Instruction

Teaching students to read has long been described as the most important responsibility of elementary schools (Reutzel, Petscher, & Spichtig, 2012). For decades, children have been required to receive schooling at the elementary, middle and high school levels. There are options of home schooling and receiving a General Education Diploma. Currently, the educational expectations continue to rise and all students are required to receive a high quality education. According to the No Child Left Behind Act of 2001 students are now able to receive additional services to help them achieve more in the classroom before creating a 504 or IEP. Since reading

was deemed a “big idea”, teachers are required to deliver high quality instruction to all students (Klingner, et al., 2010).

Over the past two decades, a substantial amount of research has been conducted in the area of reading. As a result, many reading researchers agree that the essential components of early elementary reading instruction should target phonics, phonemic awareness, fluency, comprehension, and vocabulary. Yet, in spite of the advances in knowledge about effective reading instruction, a large number of US students still experience great difficulties learning to read (Begeny, Krouse, Ross, & Mitchell., 2009). This research supports the idea that students who are struggling in reading need additional resources within the classroom and maybe even an intervention.

One way for a teacher to deliver quality reading comprehension instruction is by creating a print rich environment that will promote reading. In this print rich environment, the teacher will be able to demonstrate and allow students to practice whole group, in small groups and independently. Such skills may include, before, during and after reading strategies. The early years of school are focused on building the phonemic awareness and phonological skills as well as developing the reading fluency of young students so that they can later read and understand text independently (Mahdavi & Tensfeldt., 2013).

The use of metacognition, synthesizing, visualizing, questioning and inferring are a few complex skills that students of all age would benefit from applying. In later grades of elementary school, the students could grow and benefit from automatically applying the complex skills. McGregor, the author of *Comprehension Connections (2007)* recognizes the importance of reading comprehension and developed strategies to which elementary students could connect. McGregor’s book is a guide to developing children’s ability to fully understand texts by making

the comprehension process achievable, accessible, and incremental. She is aware reading comprehension is not a walk in the park but the development of her visual, tangible, everyday lessons make abstract thinking concrete. Children will be more effective in using reading comprehension strategies and be able to go deeper into the text.

Teachers have access to Professional Development resources such as trainings, school personnel and academic libraries. As teachers teach reading, they are able to give various assessments to help determine if a student is in need for additional assistance that could be supported within the classroom. Teachers could give *Qualitative Reading Inventory*, comprehension checks, projects or written responses that allow the student to display their current academic level. It is essential for a teacher to know their students well in order to determine what type of learner they are. Klingner, et al., (2010) has noted that an increase in professional development has been allotted in all schools across America. Classroom teachers are now able to utilize the Reading Specialist in their building to help co-teach, provide resources, and or implement an intervention. Making the most use out of all resources that are provided to teachers is necessary for students to reach their academic reading potential.

Interventions to Improve Reading Comprehension

Providing the highest quality reading instruction for all students is a central focus of current educational research. With the advent of the No Child Left Behind Act of 2001 (2002) and increasing use of response to intervention models in classrooms and schools, the urgency of identifying effective instructional interventions and practices to help struggling readers succeed has also increased (Reutzel, et al., 2012).

Important components of reading include phonemic awareness, word decoding, fluent text reading, vocabulary, and listening comprehension. The first step in determining a struggling

reader's pattern involves assessment of these abilities that underlie reading development (Wills, Kamps, Abbott, Bannister & Kaufman, 2010). Burton-Archie 2014, determined that early literacy is vital. A well designed and researched based intervention and prevention should be implemented during the earliest signs of reading difficulty.

Leveled Literacy Intervention (LLI) program is designed as a short-term, small group and intensive intervention for children in kindergarten through third grade who are having difficulty with reading and applying early reading skills. Although this program is geared towards elementary students, any reader could benefit from this instruction. LLI is meant to quickly bridge the reading gap of struggling readers who are not meeting grade- level expectations to making them successful (Burton-Archie, 2014).

LLI is a classroom supplement that uses engaging leveled books that follow F&P scale that have systematically designed lessons for teachers to follow. The small group should consist of 3-4 students for 30 minutes 4 days a week for 18 weeks. With the meaningful intervention, the program provides an at home connect. The students participating in the group will be given a book to take home that was read earlier in the day from the kit. The student will then practice reading the book to his/herself or a family member. This at home component will eliminate the struggle that students in poverty experience. A new book will go home each day in exchange for another one. The Leveled Literacy Intervention has seven leveled kits. The kits range from Level A through Level Z on the Fountas and Pinnell scale.

The lessons follow a two part framework. On day one the focus of the lesson is on an instructional level text; day two focuses on writing about the instructional level text from the day before. In LLI lessons, fiction and nonfiction books are matched to student's reading level. Students read two to three books during every lesson. Each day students read books at their

independent and instructional levels. Fifteen minutes of each lesson is spent on reading leveled texts. Research suggested that in order for children to become better readers they must spend time reading a rich variety of text that is not too difficult (Burton-Archie., 2014). Each lesson focuses on vocabulary instruction, phonemic awareness, phonics, fluency and comprehension. With this detailed focus, Harrison, et al., (2008) believes LLI is a productive method of closing the reading gap for students who are struggling in regular education, students with special needs and even students who are English Language Learners.

In past research, researchers have found Leveled Literacy Intervention to be a meaningful and purposeful intervention especially for students in elementary school in urban, title one and suburban school systems. Once Professional Development was provided, teachers felt confident in executing the program successfully (O'Connor, Harty, & Fulmer, 2005). As for students, Harrison, et al. (2008) found that students' reading abilities that were measured by the GMRT assessments improved after attendance in the LLI program. These achievement gains were significant for all three groups of students—kindergarteners, first-graders, and second-graders. When students consistently attend the intervention group and complete the home component, the student has a higher probability of reading closer to grade level by the end of the 18 weeks. LLI raises the reading ability of students who struggle to read. When the program is executed properly, young students have an increased chance in reading closer to their grade level expectation.

SUMMARY

In conclusion, students who do not meet grade level reading expectations by the end of third grade are at a higher risk for not graduating high school. The impact that a systematic reading intervention would have on a student when applied early enough could alter their life in a

positive way. Closing the reading gap will help students prepare for college or career goals. The use of an intervention during elementary school is a critical time for students to grow and develop the foundational skills as a learner. Research supports the implementation of the Fountas and Pinnell's Leveled Literacy Intervention as an effective support for students so they can reach grade level reading expectations.

CHAPTER III METHODS

The purpose of this study was to examine the effectiveness of a specific reading intervention, Leveled Literacy, on second and third grade students who are not meeting grade level reading achievement expectations.

Design

The researcher used an experimental design for this study. The researcher generated two randomly assigned groups of second and third grade students. The sampling was purposive in that all subjects were reading below grade level. Within each grade level, the eight to ten lowest reading achievers who had not yet received the Leveled Literacy Intervention were randomly assigned to either the experimental group or control group.

The independent variable in this study was whether or not the students received the *Leveled Literacy Intervention* by Fountas and Pinnell. The dependent variable was the reading comprehension scores for the second and third grader participants after the experimental group had completed 13 weeks of intervention.

The baseline data was gathered by using the Fountas and Pinnell Benchmark reading assessment during the middle of the year. The intervention began at the end of testing and continued until the end of the school year which was approximately 13 weeks.

Participants

The students in this study are second and third grade students who read below grade level according to Fountas and Pinnell reading levels. The researcher conducted this study in one elementary school in a middle class suburban neighborhood in the mid- Atlantic region that consists of students from diverse ethnic backgrounds. Only students who completed the entire intervention program were included in this study. If students entered or left the group during the

study, their data was not included in the analyses.

In this study, a total of 18 students were included in the data. Of the 18 students, 8 were in second grade and 10 were in third grade. In the second grade control group, there were three males and one female; two Caucasian, one African American and one Hispanic. One of which was considered an English Language learner. In the second grade experimental group, there were two males and two females; three Caucasian and one African American. In the third grade control group, there were three males and two females; one African American, one Hispanic and three Caucasian. One of which was considered an English Language Learner. In the third grade experimental group, there were three females and two males; three African Americans and two Caucasian.

The methodology for choosing students for the treatment and control group were based on their reading achievement scores determined by Fountas and Pinnell. None of the students were meeting grade level expectations. The eight students from second grade and the ten students from third grade who were performing the lowest in their grades were randomly assigned to the treatment and control group. A number was generated for each student and the first number drawn was assigned to the treatment group, the next number was assigned to the control. This methodology was used for assigning all students to a group in each grade level. Due to a limited number of openings in the intervention group and time, only four or five could be chosen from each grade level to participate in this round of interventions. The control group was to receive the intervention after the study was completed if time within the school year allowed. If time does not allow for the control group to receive intervention services during this school year, they will be included in the intervention during the fall of the next school year. For the purpose of data analysis, the data of the second and third graders were combined.

Prior to the intervention, the SRI Lexile's of the leveled literacy group (Mean = 302.78, SD = 19.17) did not differ significantly from the control group (Mean = 322.22, SD = 31.73) [$t(16) = 1.35, p = .20$]

Instrument

Beginning reading levels were measured by the Fountas and Pinnell Benchmark Assessment System 1. During the Benchmark Assessment, in a private testing environment with limited distractions, each student would read a leveled text while a running record was completed by the test examiner. The testing environment consisted of one student and the researcher. In second grade, the second grade teacher administered the test. A student's instructional reading level was determined by the ability to accurately read words from a leveled text and to provide verbal answers to the specific comprehension questions provided from the assessment.

The criteria for each leveled book takes into account the accuracy rate and the comprehension score to determine a student's reading level. Overall, a student would need to receive an accuracy rate of 90% or above and score between a 5 and 10 in the comprehension section. This would allow the student to pass the level. If the above criteria is not met, the student would have frustrated at that level and would need to be tested a one level back. More criteria information for each particular level can be found in the manual for more specific information on finding the instructional or independent level.

The reading levels in System 1 cover A-N (grade K-2). Fountas and Pinnell Benchmark Assessment System 2 was needed for some students who showed a reading level of N or beyond by the end of the study. A few third grade students from the control and experimental group utilized the assessment from System 2. System 2 covers the reading levels from M-Z (grade 3-8).

For a research and statistical purpose, Fountas and Pinnell scores were converted to a Lexile number score that corresponds to the reading level given by the Benchmark assessment (Taybron & Lee, 2012).

The researcher used a conversion chart created by two educators (Taybron & Lee, 2012) that provided Lexiles to correspond to Fountas and Pinnell reading level scores. The researcher does not have additional information on the source so there is no reliability or validity data to support this conversion method; however other educators at the researcher's school use the same chart to identify the reading level of a student. The impression of this researcher is that this conversion method appears to provide a good estimation of Lexiles. Reading levels were again assessed for all students in the study after the experimental group had completed the intervention in June.

The Fountas and Pinnell Benchmark has been evaluated by test critiques and has been found to be valid and reliable. "To determine whether the Fountas & Pinnell Benchmark Assessment System is a valid assessment of a student's reading level, a formative evaluation was conducted with a broad spectrum of classroom readers in different regions across the United States. This formative evaluation generated ongoing and immediate feedback from field test examiners and readers that was used during the continued development of the program to ensure that it met standards of reliability and validity. In summary, after two and a half years of editorial development, field testing, and independent data analysis, the Fountas & Pinnell Benchmark Assessment System texts were demonstrated to be both reliable and valid measures for assessing students' reading levels" (Fountas & Pinnell, 2010).

Procedure

As a teacher, this researcher facilitated the third grade intervention group and a teacher in

second grade facilitated the other intervention group. Both teachers also provide general education reading instruction to the treatment and control group together as well. All staff who administered the Leveled Literacy Intervention had received adequate and ongoing training on the program.

The researcher conducted a Fountas and Pinnell Benchmark Reading Assessment on all students in her third grade reading class and the second grade teacher gave the assessment to her second grade reading students. After compiling the data from each grade level, the 8 lowest performing second graders and the 10 lowest performing third grade students were identified. Students from each grade level were randomly assigned a number. Half of the students in each grade level were chosen to join the Leveled Literacy Intervention which takes place during Silent Reading time for 30 minutes directly after lunch. During the intervention the students in the control group were reading self-selected books independently at their appropriate reading level.

In the LLI program, fiction and nonfiction books are matched to student's reading level as a group. Students were grouped according to their reading level so all were within a similar range. Although not all students were on the exact same level, the Leveled Literacy lessons are structured so that the same lesson is appropriate for the two previous levels. For example, if the group was completing lessons for the 350 level, some of the books would be at the 275 and 300 levels in order to give the students variations in books being read independently and instructionally. Students read books at their independent and instructional levels during the intervention block. On average, students read two books during every lesson. They read a book from a past lesson and then the new book for the day. Each lesson focused on vocabulary instruction, phonemic awareness, phonics, fluency and comprehension. All lessons were broken up into a two part framework. The first 10 minutes were spent working with sound patterns and

syllables. Twenty minutes of each lesson was spent on reading leveled texts and having a discussion. Students were asked to whisper read independently, read with a partner, and read as a choral group throughout the reading intervention.

The students within the treatment group were given a book to take home that was read earlier in the day from the intervention session to bridge families into the learning. The students were expected to practice reading the book to himself or herself or to a family member but documentation was not required. Even though documentation was not required, often, students came back to school and expressed who they read to the night before or explained how much their younger siblings enjoyed listening to the book. Control group; students were recommended to read for 15 minutes at home of a book of their choice. Families for students within the control group were required to sign their agenda to acknowledge the reading was completed. Most students consistently had their agenda books while a few rarely had it signed.

Once the groupings were determined, the treatment group received Leveled Literacy Intervention 4 days per week for 13 weeks. The Benchmark Reading Assessment was given after every 10 ten lessons to track student progress who are in the treatment group. On average, every 4 weeks, the students in the treatment group were ready to be tested to see if moving to the next reading level was appropriate. The Benchmark Assessment shared information on if the student is progressing as a reader while reading on his or her own. Treatment group students were required by the program to be assessed before graduating to the next level. All students participating in the study was assessed in February at the start of the study and once at the end of the study to see their ending reading level. Consequently, the treatment group had two additional Fountas and Pinnell assessments during the course of the study that the control group did not have. Each assessment follows the same framework regardless of level and fiction/ nonfiction

but uses different text. The student would read aloud the first few pages of the text, then read the remaining few pages independently and lastly answered comprehension questions.

Students in second grade who were part of the treatment group had a range of scores between 275 and 350. Specifically, two students were reading at a level of 275, one student at 300 and the last student at 350. All students in the treatment group started the intervention in February reading text at the 300 level which was the best starting point based on teacher judgment. The level 300 is equivalent to a reader in first grade during the 8th month (1.8). By the end of the study, the treatment group received reading instruction up to level 425 (2.3) during intervention which is three levels higher than the starting point. The control group had the same range of levels but of the four students each were reading at either 275, 300, 325 or 350. According to Taybron & Lee , students in second grade by the middle of the year should be reading a 450 Lexile. Consequently, students in the treatment and control group were a half of a year or greater below grade level expectations.

The third grade students in the treatment group had a range of reading scores between 275 and 350 which were close enough to allow a common level of instruction. Specifically, one student started at 275, two students at 300 and two more at 350. All students in the treatment group started the intervention in February reading text at the 350 level which was the best starting point based on teacher judgement. The level 350 is equivalent to a reader in second grade (2.0). By the end of the study, the treatment group received reading instruction through level 500 (2.7) during intervention which is three and a half levels higher than the starting point. The control group had the same reading range as the treatment group. Of the five students, 1 started at 275, another was at 325 and the last three scored 350. According to Taybron & Lee, students in third grade by the middle of the year should be reading a 625 Lexile. Consequently,

students in the treatment and control group were a year or greater below grade level expectations.

The students from second and third grade who were part of the control group were able to bring books from home or choose text to read from the classroom library. Both grade levels have a leveled classroom library by Lexile's. Students were able to self-select text at a reading level that best fit them. Students within the control group varied the level of text they were reading. For higher interest text, they were able to read a higher Lexile due to the high interest and background knowledge. Students were encouraged to use the "5 Finger Rule" to pick a just fit book. When finding a just fit book, students read the first page of the text and if they were unsure of how to read 3 or more words, that book was considered too difficult to read independently. If students had trouble with 0-2 words per page, then the book was considered a just right book to read independently. The students within the control group knew their Lexile level in the beginning of February so they used that as a starting point for choosing text.

The Benchmark Assessment scores of the two groups, converted to Lexile's from the assessment at the end of the intervention were compared by independent samples t- test.

CHAPTER IV RESULTS

The purpose of this study was to examine the effectiveness of the Fountas and Pinnell Leveled Literacy Intervention, on reading achievement among second and third grade students who were not meeting grade level reading achievement expectations. The researcher compared the post-intervention SRI Lexiles between the treatment group of students who were receiving the intervention and the control group of students who were instead engaged in independently reading during the 13 week period.

The mean post-test Lexiles of the Leveled Literacy Group (Mean = 469.44, SD = 58.33) did not differ significantly from the mean post-test Lexiles of the control group (Mean = 461.11, SD = 58.77) [$t(16) = .30, p = .77$]. Consequently, the null hypothesis that there would not be any statistically significant difference in the SRI Lexiles of below grade level second and third grade students who participated in the Leveled Literacy Intervention, compared to the other second and third grade students who instead engaged in independent reading and received regular, in class reading instruction, failed to be rejected. See Table 1.

Table 1. Means, Standard Deviations, and t-Test Results comparing post-test SRI Lexile scores of the Leveled Literacy and Control Groups

Group	N	Means	Standard Deviations	t-test results
Leveled Literacy	9	469.44	58.33	.30 (NS)
Control	9	461.11	58.77	

NS = non-significant at $p \leq .05$

CHAPTER V

DISCUSSION

The null hypothesis was that there would not be any statistically significant difference in the reading Lexile levels of below grade level second and third grade students who participated in the Leveled Literacy Intervention, compared to the other second and third grade students who engaged in independent reading failed to be rejected. Students in both groups made growth from the beginning to the end of the study, but there was no significant difference in their post- test scores after the intervention.

Implications of Results

The results of this study showed that students who participated in the Fountas and Pinnell Leveled Literacy Intervention made growth in the area of reading, but their final performance was not significantly better than the control group of students reading self-selected books independently. If curricular decisions were being made based on the results of these findings alone, it would not support the use of the Leveled Literacy Intervention, particularly since Leveled Literacy is available only to a limited number of students at a time and requires increased resources in terms of teacher instructional time and the cost of materials.

Observational data suggests, however, there were some benefits to the intervention to which the Lexile outcome measure may not have been sensitive. During the window of the study, teacher notes were captured about the treatment and control group from each grade level. The researcher found the students who were involved with the Leveled Literacy Intervention were more enthused about reading text and being part of a “book club”. Also, the students shared their thoughts about the book selections that were used in the intervention. All students except one thought the books were about interesting topics and they were able to read a wide range of

stories. The most popular books were the ones that had a story but also a Readers Theater that the group would get to perform to a younger grade level.

The researcher noticed the control group having the freedom to self-select text but having less supervision of the reading rate and if the book was at their correct level. Findings suggest that school resources could be spent by increasing the variety of texts within classroom libraries to allow students to experience more types of text. Potential added texts could be poetry, reader's theaters, and nonfiction books. However, students should be given guidance as to which texts are at their independent reading level. In this way, students would get the benefits of a diverse reading selection appropriate to their reading level without needing to participate in the Leveled Literacy Intervention. This is important since the Leveled Literacy Intervention is designed only for small groups, and with limitations in the number of teachers, it would not be possible for all students to do Leveled Literacy.

Overall, the researcher believes that the findings from this study support that the students who were part of the treatment group seemed to be more engaged and excited to read compared to the control group. It was noted that the attitudes of readers in both treatment groups became more positive throughout the course of research compared to the control group. Although the observational data about increased interest is not sufficient information to support additional school resources being used on the Leveled Literacy Intervention, it does suggest the need for continued research to see if this increase in interest can be proved and if it has an impact on long-term reading achievement.

Threats to Validity

The study contained multiple threats to validity. One threat to validity included the amount of instructional time lost due to absences, schedule changes and school closings. Due to

these situations, the full 18-week intervention could not occur resulting in the intervention lasting for only 13 weeks. Consequently, these results cannot be generalized to interventions in which students participated in the full 18 weeks.

The administrator of the assessment varied between second and third grade, but the leader of the intervention group assessed the specific grade level they worked with. Although there are standardized procedures for test administration, there may have been some variation in the way the tests were administered.

All groups received a Pretest and Posttest Fountas and Pinnell assessment. The treatment group received an additional two assessments throughout the study to track progress which is a threat for repeat testing. This impacts the validity because the treatment group had more exposure to the test even though different text assessments were used. The students were able to become more familiar with the testing expectation and format.

Furthermore, scores received from the Fountas and Pinnell testing was converted into a numeric Lexile score. Although this is for practice that educators use to obtain a general idea of the Lexile score a student could obtain, there is no reliability or validity data for this method. Other educators within the researcher's school utilize this conversion chart as well. Consequently, the Lexile levels used in the analysis had reduced the reliability and validity. The results of this study cannot be directly compared to study in which actual SRI Lexile scores were the outcome measure.

In addition, students were given a home component but the documentation for the two groups were different. Within the treatment group, students were given one book to take home that was read during the day. Reading for 15 minutes at home was required but it was recommended to read the text sent home to help practice fluency. Students from the control

group were required to read 15 minutes each night, but an adult needed to sign off on the homework being completed. Although both groups were required to read 15 minutes each night, the documentation for the groups varied.

Lastly, students who were participating in SSR independently had less guidance and supervision when selecting text. Students within the control group started the study knowing their specific reading level and how to use the Five Finger Rule correctly. The students were given the tools to be most successful during independent reading time, but due to the lack of intensive supervision of book selection and reading rate, students may have been reading books that would not best support them as readers.

Connections to Previous Studies

The researcher found a similar study Waldera (2017) that focused on the effectiveness of the Leveled Literacy Intervention in first and second grade title one students in the same geographic region as the current study. The readers from both studies were all determined to be reading below grade level. Both studies researched and compared the end reading levels of the control group to the group who received the Leveled Literacy Intervention. Waldera also looked at the growth made between treatment and control participants. It is unknown what the control group was doing in the other study. Both studies were able to show student growth in the area of reading, but neither study found a significant difference between the intervention and the control group based on the final reading levels. A distinction from the 2017 study to this study, was the demographics of the student's involved. Student's in the 2017 study were from a Title One school and were not chosen randomly for the sampling. Both studies used the Fountas and Pinnell Benchmark Assessment to track student data.

Harrison, et al. (2008), found LLI to raise the reading ability of students who struggle to

read. This study saw the impact of LLI on their students. This study was able to use a large population from different regions. The population consisted of nine schools from a rural community in Georgia and four schools from a suburban area in New York for a total population of 427 students K-2. Students were predominantly at an economic disadvantage and 84% of students that were in the study qualified for free and reduced meals. The students were randomly assigned to the LLI group or the group that received no additional services besides regular classroom-based instruction. 222 students joined the treatment group and 205 students joined the control group. The researcher collected data from Fall- Winter and then began a new group from Winter to Spring of the same school year. The teachers who ran a group received eight days of professional development and the intervention was able to run the full 18 weeks. This researcher utilized the Fountas and Pinnell reading assessment benchmark but also collected data using various other assessments to track for specific reading skills. This study varied from the current study because of the region of students and the assessment to track progress. The researcher claims that the use of the other subtests did not factor into the success rating of the intervention. When the program is executed properly, young students have an increased chance in reading closer to their grade level expectation by the end of the 18 week program. The difference between the Harrison findings and the current results may be partially explained by the shortened intervention in the current study and the population size.

Implications for Future Research

Future research could continue focusing on the same problem statement but including more students in the study and including a reading inventory survey. Widening the population could offer more data and a more accurate depiction if the intervention could significantly impact the success of reading levels. If possible, running more intervention groups within primary grade

levels could be an option. Schools would be required to train and provide more professional development opportunities to staff who would be instructing the group.

Using a reading inventory survey could shed light on how enthused a reader would be at the beginning and end of the intervention. A reader's enthusiasm could have a positive correlation to improved reading achievement within elementary students.

For future research, it would be important to allow the control group the opportunity to receive intervention services within the same school year. The researcher has wondered if the results of the study would have been different if the study took place during the first 18 weeks of the school year instead of the last 18 weeks. If research were to continue it is most important that the intervention would run consistently on a regular basis and for the full recommended time of 18 weeks to ensure the most accurate data. Research could also look at the use of the home component of the Leveled Literacy Intervention program and for the group who is reading independently. Both groups could follow the same home component documentation that either group used. The treatment group would still be receiving a daily book to take home so they would stay in compliance with the intervention expectations. The study could rework the use of the home component to create less variation between group expectations.

Conclusion

In this study, second and third grade students who read below grade level and participated in a 13 week Leveled Literacy Intervention group did not perform better on Fountas and Pinnell assessment according to the reading levels (converted to Lexile levels) than a control group of similar students who were reading self-selected materials independently. Although the two groups did not differ on the outcome measure, observational data suggested that the children in the Leveled Literacy Intervention group were more enthusiastic about reading. There were

also some concerns about the validity of the study. Consequently, it will be important for there to be future research on Leveled Literacy Intervention because it may be an additional tool to increase reading enthusiasm due to the interesting topics and wide range of reading material which could potentially lead to better reading skills.

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