

The Effect of Repeated Reading
on Accuracy, Fluency, and Comprehension

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Submitted in Partial Fulfillment of the Requirements for the
Degree of Master of Education

June 2019

Graduate Programs in Education

Goucher College

Table of Contents

List of Tables	i
List of Figures	ii
Abstract	iii
I. Introduction	1
Overview	1
Statement of the Problem	2
Statement of Research Hypothesis	2
Operational Definitions	2
II. Literature Review	4
Reading Comprehension	4
Five Pillars of Literacy	5
Fountas and Pinnell and the Four Elements of Team Teaching	8
Making a Connection Between Reading Accuracy, Fluency, and Comprehension	11
Repeated Reading and Strategies and the Impact on Comprehension	13
Summary	15
III. Methods	16
Design	16
Participants	16
Instrument	17
Procedure	19
IV. Results	21

Post Intervention Results	22
V. Discussion	24
Implications of Results	24
Theoretical Consequences	27
Threats to Validity	27
Connections to Previous Studies/Existing Literature	28
Implications for Future Research	29
Conclusion	30
References	32

List of Tables

1. Descriptive Statistics for Mean Gains Following Treatment	21
2. Descriptive Survey Replies	23

List of Figures

1. Results of Student Performance	22
2. Descriptive Statistics of Post-Intervention Survey Responses	23

Abstract

The purpose of this study was to determine if repeated reading method would increase accuracy, fluency, and reading comprehension. The measurement tool was the Fountas and Pinnell Reading Benchmark System II, 3rd Edition, comprehension: within, beyond, and about the text. This study involved use of a pretest/posttest design to compare the data between the winter F & P collection and the spring F & P collection.

CHAPTER 1

INTRODUCTION

Overview

Students who are aware of their difficulty with reading accurately and fluently are typically also aware of their difficulty comprehending the text they are reading. Students reading below grade level expectations are the majority, not the minority. Data from the U.S. Department of Education (2018) indicates that in 2017 on The National Assessment of Educational Progress (NAEP), 37% of fourth grade students performed at the level of Proficient and 9% performed at the level of Advanced. These statistics indicate that many fourth grade students are not performing at grade level expectations.

In order to help students read at grade level expectation, students need to practice reading. To increase accuracy and fluency, students need to read the presented text multiple times. In order to increase comprehension, students need to read text that is interesting and meaningful. Repeated reading is an evidenced based strategy that provides students the time to practice reading in order to improve their comprehension. Not only does repeated reading increase accuracy and fluency, but it can increase reading comprehension as well (Therrien, 2004).

The repeated reading strategy includes students reading passages aloud a specific number of times to an adult or trained peer until a satisfactory level of accuracy and fluency has been achieved. More specifically, students should read the text while the teacher or trained peer makes corrections within three seconds of an error. The student then should reread the sentence using the corrected word. This strategy increases accuracy and fluency. It is clear when a student has achieved appropriate accuracy and

fluency by the student reading at or above 98% accuracy and reading smoothly, without stopping to sound words out and reading in phrases. Students have access to different tools to practice reading accurately and fluently. Some tools include, reading along with an audio-version of the text, choral reading with a peer, and participating in reading fluency games. Using many different tools will provide students with more time spent on the repeated reading strategy.

Statement of the Problem

The purpose of the study was to determine the impact of repeated reading on accuracy, fluency, and overall comprehension as indicated by the Fountas and Pinnell Reading Benchmark System.

Statement of Research Hypothesis

The null hypothesis is that students participating in the repeated reading intervention would not gain at least one reading level and there would be no gains in reading accuracy, fluency, and comprehension before and after the intervention.

Operational Definitions

The independent variable for the study is the intervention of *repeated reading*. Repeated reading is a strategy in which students are required to read a given passage numerous times in order to improve accuracy, fluency, and comprehension. The accuracy and fluency that students achieve through this strategy is the ability to read the passage without stopping to sound words out and read in phrases. Students should sound as if they are having a conversation.

In the repeated reading intervention, students participating are given reading material within two levels below or at their individual instructional level based on the

varied levels of readers in the intervention. Students are asked to read the passages with the teacher and with trained peers in the repeated reading strategy. In addition to time spent in the intervention, students have additional repeated reading games that are accessible during independent work time.

The dependent variable for the study is the *reading comprehension* of students assessed using the Fountas and Pinnell Reading Benchmark System II, 3rd Edition. The students in the repeated reading intervention are students who have been tested using the Fountas and Pinnell Reading Benchmark System II, 3rd Edition and were found to be reading with an accuracy of less than 98% and were reading below grade level expectations. The reading system uses either a narrative or expository text for each level of reading L-Z in System 3. Students are assessed on their accuracy, fluency, and comprehension. Comprehension includes three areas that include, within the text questions, about the text questions, and beyond the text questions. Student comprehension outcomes are considered to be one of four categories, proficient, approaching proficiency, limited proficiency, and not proficient.

CHAPTER II

REVIEW OF THE LITERATURE

This literature review discusses the impact of accuracy, fluency, and repeated reading on reading comprehension as indicated by the Fountas and Pinnell Reading Benchmark System. Section one discusses reading comprehension and the five pillars of literacy. Section two provides an overview of Fountas and Pinnell's four elements of team teaching. Section three discusses reading accuracy, fluency, and the relationship to comprehension. Section four discusses repeated reading strategies and their impact on comprehension.

Reading Comprehension

According to Snow (2002), "We define reading comprehension as the process of simultaneously extracting and constructing meaning through interaction and involvement with written language" (p. 11). Reading comprehension in its simplest terms is the ability to process what has been read, understand what has been read, and make a connection between oneself and what has been read. However, this is not a simple task for all students. There are as many differences in the way in which readers are capable of reading as there are children themselves. Reader differences include fluency in word recognition, oral language capacity, background knowledge, as well as motivation and purpose for reading which all impact reading comprehension. There are many components that are essential for reading comprehension. Based on the differences in student's abilities to read, teachers must instruct based on the individual needs of students. This proves to be challenging in today's classrooms.

Five Pillars of Literacy

In 1997, a panel, now known as the National Reading Panel (NRP), was authorized by Congress to conduct research regarding the effectiveness of the different approaches of teaching in schools. The findings of the NRP determined that there were five main areas related to literacy and reading instruction. The following are the five areas, now known as the five “pillars” of reading: phonemic awareness, phonics, fluency, vocabulary, and comprehension.

The first of the “pillars” is phonemic awareness. This refers to the ability to concentrate on and manipulate individual phonemes in spoken words. It is not an innate ability, but something that needs to be systematically taught and practiced regularly until mastery has been achieved. It is an essential component of reading. Adams (1998) proposed that the level of phonemic awareness a child has upon entering school is the “single most powerful determinant of the success she or he will experience in learning to read and the likelihood that she or he will fail” (p. 304). The study conducted by the NRP found a correlation between phonemic awareness and letter knowledge. They determined that these abilities were two of the best predictors of reading success in the first two years of school. As a result, recommendations were given about what the learning environment should include. Environments should be rich in print, engage students in reading and writing, include oral language activities as well as written language activities, provide instruction in the alphabetic principle, and engage students in authentic reading and writing activities (Cassidy, Valdez, & Garrett, 2010).

The second of the “pillars” is phonics. Phonemic awareness is often mistaken for phonics. However, phonics uses a sound-symbol relationship, rather than individual

phonemes being manipulated to make words. The NRP found that systematic phonics instruction was better than nonsystematic instruction. The instruction was most influential in young students in Kindergarten and First grade (Cassidy et al. 2010).

Fluency is the third “pillar”. Fluent readers read in phrases and use syntax. Processing the meaning during reading and phrasing are important indicators of good fluency. Fluency is comprised of three components. Rate, the pace at which words are read, prosody, the ability to use inflection and feeling when reading, and lastly automaticity, which is recognizing words automatically. These are all key components in reading fluently. When instructing in the area of fluency, there are two main methods. One is the use of repeated reading and the other is independent reading. The use of repeated reading with the guidance from a teacher or trained adult has a tremendous positive impact on word recognition, fluency, and overall comprehension. While independent reading allows students to make personal choices and make connections to what they choose to read about. As stated by the NRP, there is a “close relationship between fluency and comprehension” (Cassidy et al. 2010). The more opportunities students have to practice reading accurately and fluently, the more likely they are to increase their comprehension.

Vocabulary acquisition is the fourth “pillar”. There is a relationship between vocabulary and reading comprehension; vocabulary actually predicts comprehension (Cassidy et al. 2010). Vocabulary needs to be taught in direct and indirect methods. Within those instructional methods, tiered vocabulary can be taught. Tier one words are everyday words that are part of typical conversations and do not need to be directly

taught. However, Tier two words are often found in textbooks and content texts, such as in Science or Social Studies. These words should be directly instructed. Tier three words are words that will be used very infrequently and directly instructed as needed. Success can be found in vocabulary acquisition because it plays an important role in everyday life in the real world.

The fifth “pillar” is comprehension. In simplest form, comprehension is the ability to process what has been read, understand what has been read, and make a connection between oneself and what has been read. The NRP identified three components that make up reading comprehension: “it is a complex cognitive process that includes vocabulary, instruction, and development, it includes actively working through a strategic process, and it is also the training of teachers in reading comprehension” (Cassidy et al. 2010). Explicit instruction is key in student understanding. Without it, students would not have the foundation of learning necessary to be independent.

The five pillars of literacy have the potential to impact each and every student. The first four “pillars” impact the fifth “pillar”, comprehension. Foundational learning is one of the most important factors in reading. Therefore, when students have difficulty with the first pillar, phonemic awareness, they may continue to have difficulty reading beyond primary education. Pillar two also impacts students in their ability to progress in reading. If students are unable to understand and master the sound symbol relationship, they may have to rely on whole word language in order to read. Encountering new words may prove to be difficult for these students because they do not have the knowledge to use word parts in order to decode new, unfamiliar words. Pillar three is an important area of literacy as well. Many students have the ability to comprehend what they have read

without being a fluent reader. However, students who are fluent, who read with prosody and automaticity, often do not struggle with reading comprehension, indicating that fluency is a factor in comprehension. Vocabulary acquisition has a great impact on comprehension also. The more a student knows, they more likely they are to use their personal knowledge and background information to make connections and inferences within text.

Fountas and Pinnell and the Four Elements of Team Teaching

Fountas and Pinnell (2018) are widely known for their approach to literacy in the classroom. They believe that there should be a system in place that reaches for high levels of literacy for all students. They believe that there are four essential elements that should be included in every school's system of literacy learning.

The first element is a shared vision and a set of core values. It is believed that if teachers have the same set of values, a solid foundation of research and data, observable evidence of reading and writing behaviors exhibited by students, and good common sense, teachers can find the balance between what they know to work and what has been mandated. A shared vision is important for guiding instruction and collaborating with peers and students. Teachers are the most essential aspect of literacy achievement. "They make instructional decisions based on evidence gained from systematic observation and ongoing assessment data and then teach using a coherent set of evidence-based instructional practices in whole-class, small-group, and individual contexts" (Fountas & Pinnell, 2018, p.8). There is a process to developing a core set of values. It requires a consensus among the participants and a commitment for all parties involved. Fountas and Pinnell (2018) believe that when core values and beliefs regarding literacy are

established, the outcome is that the principle guides decision about what is most important for student learning.

The second element is a common goal, common language, and a collective responsibility. When a common vision and core values has been established, teachers can collaborate and learn together. The result forms a common language. This common language allows for collective collaboration, clarified communication, and coherence of expectations for teaching and learning (Fountas & Pinnell, 2018). With an established common goal and common language, a community is formed. Students can observe teachers supporting one another, collectively working, sharing resources, and being mutually respectful. This shares a message that literacy is important and that teachers are invested in the learning process and the potential growth each student has. A collective responsibility is created. This collective group includes all teachers in the school. “All the educators in your school take responsibility for the success of all the students every year through caring, leadership, and collective expertise” (Fountas & Pinnell, 2018, p. 9). Working together in a community makes the load lighter and helps to improve student achievement.

The third element is teachers having a high level of expertise. Demands in the 21st century require more complex thinking and learning. Fountas and Pinnell (2108) believe adults must have a global perspective, a deep understanding within very specific contexts, strong problem-solving abilities, and be able to communicate and collaborate effectively with peers.

Within the third element, there are four areas of knowledge that teachers must have for literacy achievement. The first of the four areas is a repertoire of techniques for

student observation and assessment. The more a teacher knows about a student, the more they can help build literacy skills. “Data-informed teaching requires your skill in observation and analysis of reading and writing behaviors” (Fountas & Pinnell, 2018, p. 9). The second of the four areas is a clear vision of proficiency in reading, writing, and speaking. Fountas and Pinnell (2018) have created a way to think about reading; think within the text, beyond the text, and about the text. When these skills are mastered, a student is considered to be a proficient reader. Students must also think about the writing process for both narrative and expository writing which includes, planning, drafting, revising, and editing. When these skills are mastered, a student is considered to be a proficient writer. To be considered a proficient speaker, students must be able to speak clearly and coherently about a variety of text types. The third of the four areas is to have a deep understanding of texts, the characteristics of the text, and the demands of the text. Fountas and Pinnell (2018) suggest using a multi-text approach, which includes a diverse group of short and long texts, leveled and non-leveled, and used for different purposes. Most teachers need to collect media over time. Teachers should offer a variety of fiction and non-fiction texts, including Interactive Read-Aloud books. Providing large texts so the entire class can partake in the reading helps create a cohesive reading community. Teachers should provide a high-quality leveled text that can be used in guided reading. The collection of texts should be varied, be of high interest, engaging, read independently, read aloud, and have a mix of text lengths. No matter the type of text, students must be able to analyze the demand of the book. The fourth of the four areas is expertise in implementing research-based instructional practices. Students need opportunities to engage in reading through a variety of texts. Teachers need to know

where a student is and where they need to go. “Responsive teaching meets students where they are and takes them where they need to go to next in their learning” (Fountas & Pinnell, 2018, p.16). Teachers need to be responsive and continually strive toward providing the highest level of instruction, so student success can be achieved.

The fourth element is that a culture of continuous professional learning must be established. Fountas and Pinnell (2018) believe that even if there is vision, a common goal and language, a high degree of expertise, there still needs to be a culture that builds the capacity for professional learning so that teaching can be sustained. Teachers must see themselves as part of their peers community and learning. Teachers, students, and their families are supported and are held accountable within the culture of the classroom. Trust, respect, and teamwork are all strong components of creating a culture of professional learning.

Making a Connection Between Reading Accuracy, Fluency, and Comprehension

There is an evident connection between a student’s ability to accurately and fluently read with good comprehension. Students with poor decoding and fluency often also have difficulty with reading comprehension. Wolf & Katzir-Cohen (2001) stressed that reading fluency is based on the rapidity of sub-skills, such as knowing letter-sound rules, letter combinations and what they mean, and only when these skills become automatic can comprehension skills be honed. When a student is able to accurately decode the text, more time can be spent thinking about the text, or comprehending. Comprehending requires a large amount of cognitive processing. Students must synthesize and put words together in a way that makes meaning. “When a student is familiar with the task of oral reading and decodes automatically, he or she will generally

read with expression and comprehension and recall what has been read” (Samuels, 2008, p.1138).

Accurate and fluent reading are two important indicators of reading ability. There are various techniques, or strategies that can be implemented in the classroom to increase reading accuracy and fluency abilities. One of the first ways is to model what good reading sounds and looks like. Interactive read-aloud provide students with an effective reading model while still questioning for comprehension. When good accuracy, fluency, and expression are modeled, students have the ability to simply think about what reading should sound and look like as if they were doing it themselves.

The second technique is not often used as part of whole-group instruction in today’s classroom. However, it can be seen in a small group-learning environment. Choral reading is when the teacher reads aloud and the students re-read the passage with the teacher, attempting to keep pace with the teacher’s fluency and expression. The third technique is echo reading. The teacher reads aloud and the students read it to themselves an additional time. The fourth technique is repeated reading. The teacher reads the passage in order to show what fluent reading looks like. Following the modeled read, students re-read the passage several times out loud. The fifth technique is the use of rapid word recognition. This is when a student quickly reads sight words not in context. The sixth technique is reading with audio-books. Students are able to listen using a technology device. Listening to fluent and accurate reading while viewing the text can help students pair what they hear with what they see. The seventh and last technique is to encourage independent reading on high interest topics. Students should have access to

many different types of texts so they are more likely to choose a book, read it from beginning to end, and be motivated to continue reading again.

Readers who have difficulty with accuracy and fluency often need adult support to increase both. Just as accurate and fluent modeling can be done, teachers can model how to self-monitor. Students who are able to self-monitor demonstrate more accurate and fluent reading. “Reading practice is a very important factor for enhancing reading fluency, but self-monitoring is an important factor of self-regulation of reading that enables improvement” (Kolic-Vehovec, 2002, p. 135).

For reading accuracy and fluency to increase, feedback is essential. Feedback to a student must be provided immediately following an error, no more than a 3 second gap between error and correction. Chang and Millet (2013) stated that to enhance the effectiveness of fluency-building activities, it is important to follow specific guidelines. The instruction must be systematic, regularly provided, and adult guided if gains are to be expected. Students who are corrected quickly, are more likely to remember the correction rather than the error. Appropriate feedback is essential.

Repeated Reading Strategies and the Impact on Comprehension

Repeated reading directly impacts reading comprehension. When students spend a great deal of time and attention decoding words in the text, it hinders their ability to process and understand the information read. With structured, consistent focus on repeated reading, students have a greater likelihood of increasing their comprehension than without repeated reading. The repeated reading strategy is effective for typically developing students, students with disabilities, and English Language Learners.

There are a few techniques for repeated reading instruction, but they all loosely follow the same structure of implementation. Therrien (2004) has an appropriate format for the repeated reading strategy. After identifying a student's reading level, a text or passage is read over and over until a particular rate of words is achieved. Teachers, paraprofessionals, and well-trained peer tutors can provide the repeated reading intervention. It can be done as a whole group or a pullout format. The intervention should be completed three to five times per week for approximately 10-20 minutes per session. Passages should be read aloud by the student with fluency difficulties to a competent tutor/educator. Quick and appropriate feedback should be provided without hesitation. Following the cue, the student should repeat the word accurately. If a student omits a word, the provided word can be given after the reading is completed but before the next reading has begun. The student rereads the passage until the determined criterion is reached. The criterion should be selected based on the student's instructional reading level and include two areas, speed (fluency) and accuracy. The outcomes for the repeated reading strategy are generally optimistic. There is evidence that repeated reading is effective in increasing reading rates and comprehension.

Therrien (2004) indicated that repeated reading might also improve a student's ability to fluently read and comprehend new, unfamiliar passages. The repeated reading strategy helps students stop reading word for word and helps them read in larger chunks. The accuracy gained can be transferred to new passages. When repeated reading is effectively taught and utilized, students can learn to generalize the technique and increase comprehension in other content areas. Reading a small amount of text is just as effective as reading large amounts of text, and reading a wide range of material exposes students to

a larger quantity of words as well as unique words, which can influence vocabulary growth and reading comprehension. In a study conducted by O'Connor, White, and Swanson (2007), students achieved improvement in reading rate, word identification, and reading comprehension over forty-two 15 minutes sessions. A recommendation was given that for very poor readers who have low reading rates, teachers must include oral reading practice as part of an overall reading program. Overall, repeated reading helps students become more fluent readers, which allows them to focus on gaining meaning from what was read. The repeated reading strategy can increase growth in reading achievement.

Summary

This chapter reviews a variety of studies and components that are part of reading accuracy, fluency, repeated reading, and comprehension. There are five “pillars” of reading that include: phonemic awareness, phonics, fluency, vocabulary, and comprehension. In the 21st century classroom, instruction looks very different from even ten years ago. According to Fountas and Pinnell (2018), there are four elements that are essential to today’s classroom and learning environment. The elements include: a shared vision and a set of core values; a common goal, common language, and a collective responsibility; a high level of expertise for teachers; a culture of continuous professional learning. Reading accuracy, fluency, and the repeated reading strategy are interrelated. Reading accuracy and fluency are the building blocks for comprehension. Repeated reading is a means to increase reading comprehension.

CHAPTER III

METHODS

The purpose of this research study was to determine if repeated reading instruction resulted in a statistically significant improvement in the reading accuracy, fluency, and overall comprehension of fourth grade students as indicated by the Fountas and Pinnell Reading Benchmark System. The researcher's null hypothesis was that students participating in the repeated reading intervention would not gain at least one reading level and there would be no gains in reading accuracy, fluency, and comprehension before and after the intervention.

Design

In order to determine if repeated readings had an impact on accuracy, fluency, and comprehension in fourth grade students, the researcher implemented a quasi-experimental design. The design included a pretest and posttest for the treatment group after which Fountas and Pinnell scores were compared in the areas of accuracy, fluency, and comprehension. The treatment group participated in the repeated reading intervention for six weeks. The independent variable for the study is the intervention of *repeated reading*. The dependent variable for the study is the *reading comprehension* of students assessed using the Fountas and Pinnell Reading Benchmark System II, 3rd Edition.

Participants

The participants in this study were fourth grade students enrolled and attending a suburban school in Maryland during the 2018-2019 school year. There were four hundred thirty-eight students enrolled. The race breakdown is as follows: 2.97% Multi-Racial, 9.82% African-American, 0.45% Pacific Islander, 1.14% Asian, 2.51% Hispanic, 83.10%

Caucasian, 7.07% Special Education, 0.45% English Language Learner, 5.02% 504 Plan, and 15.52% Free and Reduced Meal Students (FARMS). Of the educators in the school, 19% hold a Standard Professional Teaching Certificate, 81% hold an Advanced Professional Teaching Certificate, and 13.5% are National Board Certified Teachers. In 2016-2017, there was a 2.38% student gain, in 2017-2018 there was a 1.80% student loss, and in 2018-2019 there has been a 2.23% student loss.

The participants in the study were all in the fourth grade co-taught multi-level reading class. Of the twenty-three students in the reading class, seven participated in the repeated reading intervention. The breakdown is as follows for the repeated reading intervention group: one (14%) African-American, one (14%) Hispanic, five (71%) Caucasian, one (14%) 504 Plan, four (57%) female, and three (43%) male. The students were reading between Level P and Level S, according to the Fountas and Pinnell Reading Benchmark System II, 3rd Edition. All students were chosen due to their accuracy level being below 98% accuracy and were reading within one year of grade level expectations. Six of the students were reading between 95% and 97% accuracy and one student was reading below 95% accuracy.

Instruments

The Fountas and Pinnell Reading Benchmark System II, 3rd Edition was the measure used for the pre-assessment and post-assessment. The Fountas and Pinnell Reading Benchmark System is mandated by Anne Arundel County and is to be used in the winter and spring of every school year to determine student reading levels. At the beginning of fourth grade, students should be reading at level Q, level R mid-year, and level S at the end of the year.

The assessment consists of a summary of scores that include: accuracy, self-correction, fluency, and comprehension. The student and teacher sit in a quiet area of the classroom or another area within the school building for the length of the assessment.

Students read either a fiction or non-fiction passage aloud to the teacher. Depending on the level, students may read the passage entirely aloud or part of the passage aloud. The teacher times the student as he or she reads, listening for miscues related to meaning, syntax, and/or visual errors. Self-corrections are indicated but not counted as a reading error. Reading Fluency is monitored and given a score between 0 and 3, using a prescribed rubric. Following the reading, students are asked comprehension questions related to key understanding of information from Within the Text (information directly found in the text), Beyond the Text (inferential type questions from the text), and About the Text (questions related to the deeper meaning of the text). Specific prompts can be given as needed. A score of 0 to 3 is given in each of the three categories to indicate an overall understanding of the text. Based on the student's scores in accuracy and comprehension, the reader will move up or down a level/s to determine the student's independent, instructional, and frustration level. Upon completion of the assessment, students are considered to be demonstrating proficiency, approaching proficiency, limited proficiency, or not proficient for each level of reading comprehension.

Throughout the intervention, the researcher took individual conferring notes on student fluency and accuracy on "cold" reads and "familiar" reads during the 15-minute instructional period. The post-assessment was administered approximately eight weeks after the pre-assessment and six weeks after the start of the intervention to determine the

effectiveness of the intervention. The Fountas and Pinnell Reading Benchmark System II, 3rd Edition was used to determine accuracy, fluency, and overall comprehension.

Procedure

The study took place over a six-week period. The study did not include the time it took to complete the post-assessment following the intervention period.

The fourth grade students were assessed using the Fountas and Pinnell Reading Benchmark System II, 3rd Edition in the winter session between January 22, 2019 and February 28, 2019. This score was used as the pre-assessment. Once the students were identified as reading below, at, or above grade level expectations, the researcher reviewed the below level reader's Fountas and Pinnell results. The researcher first looked at the accuracy level of the below level readers. Next, the researcher eliminated students who were considered to be reading more than one year below grade level expectations, regardless of accuracy. Last, this left seven students who were reading within one year of grade level expectations but reading below 98% accuracy.

Instruction using the repeated reading strategy started within one month of the conclusion of the Fountas and Pinnell testing window closing. The researcher used another classroom next door to the co-taught reading classroom for the intervention. Students sat at a table during any instruction and during oral reading practice. Students used flexible seating when reading to themselves and when partner reading. A number of strategies were used throughout the repeated reading intervention.

Students used text taken from the Florida Center for Reading Research resources for fluency reading. During one session, students were instructed on how to become effective peer reader/teachers. When students peer read, they were assigned to be Student

A or Student B. The Student A roll was to listen and make corrections while Student B read aloud. Once the student read the text completely, the roles were reversed. Student A corrected any errors for Student B within 3 seconds of the error being made. Student B re-read the sentence in entirety with the correction. Students read the text two times to themselves prior to reading for a peer.

When whole group reading with the teacher, students used Macmillan/McGraw-Hill Treasures leveled reader R non-fiction text. A variety of formats were used to listen to and read aloud. Students read with a peer, read as one side of the table, or read as a whole group. During all teacher led practices, all students whisper read even when another student was reading aloud for the researcher to take conferring notes. During these sessions, the students worked with the teacher to summarize what was read. Students had to determine main idea from details and complete a box and bullet chart with the researcher for each section read. Students then worked together to verbally provide a summary of each section of the chapter.

During the spring window, the students were administered the post-assessment using the Fountas and Pinnell Reading Benchmark System II, 3rd Edition. The researcher collected data on each student's accuracy, fluency, and overall comprehension. The results were compared to the pre-assessment results to determine the effectiveness of the repeated reading intervention.

CHAPTER IV

RESULTS

The purpose of this research study was to determine the impact of repeated reading on accuracy, fluency, and overall comprehension as indicated by the Fountas and Pinnell Reading Benchmark System. It was hypothesized that students participating in the repeated reading intervention would not gain at least one reading level and there would be no gains in reading accuracy, fluency, and comprehension before and after the intervention.

The results reported in Table I below reflect the mean gains in reading level, accuracy, fluency, and comprehension according to the initial data collected from the Winter Fountas and Pinnell Assessment to the final data collected from the Spring Fountas and Pinnell Assessment. The results suggest that there was a gain in reading level following the completion of the treatment.

Table 1
Descriptive Statistics for Mean Gains Following Treatment

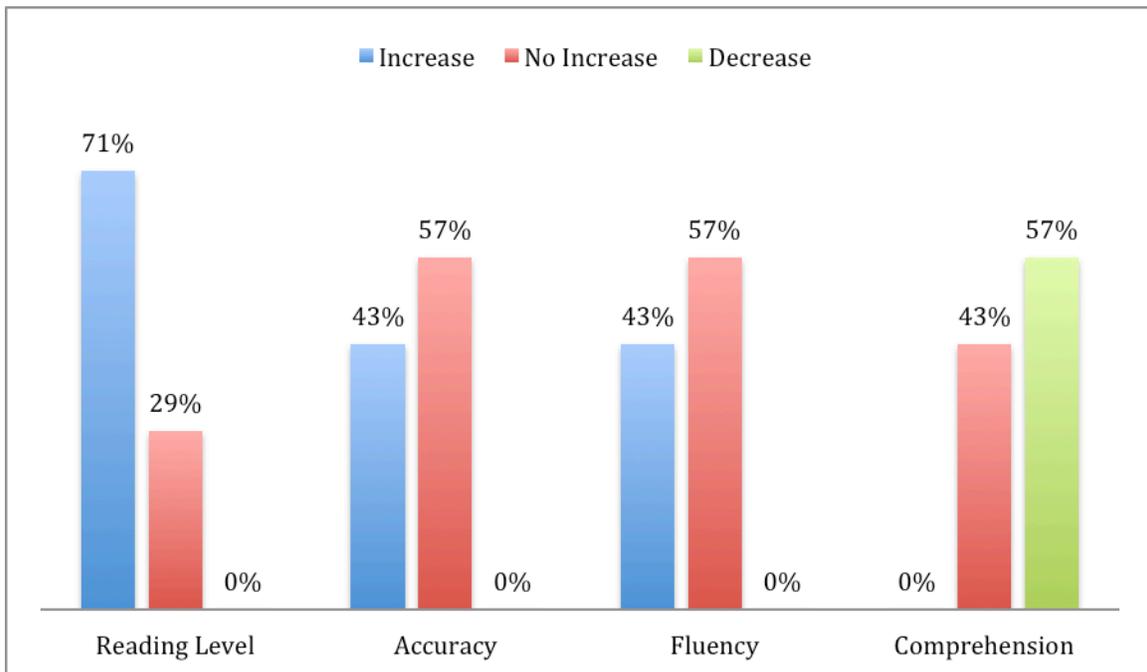
Statistics				
	Level Increase	Accuracy Increase	Fluency Increase	Comp Increase
Student Count	7	7	7	7
Mean	1.43	1.00	0.57	-0.71
Median	1.00	0.00	0.00	-1.00
Are the medians significantly different between winter and spring F&P?	Yes*	No	No	No
P value	0.039	0.102	0.102	0.059

*Students grew at least one level

It was notable that the mean data indicates an increase in reading level, even though there was not significant gain in reading accuracy, fluency, and comprehension.

Figure 1

Results of Student Performance



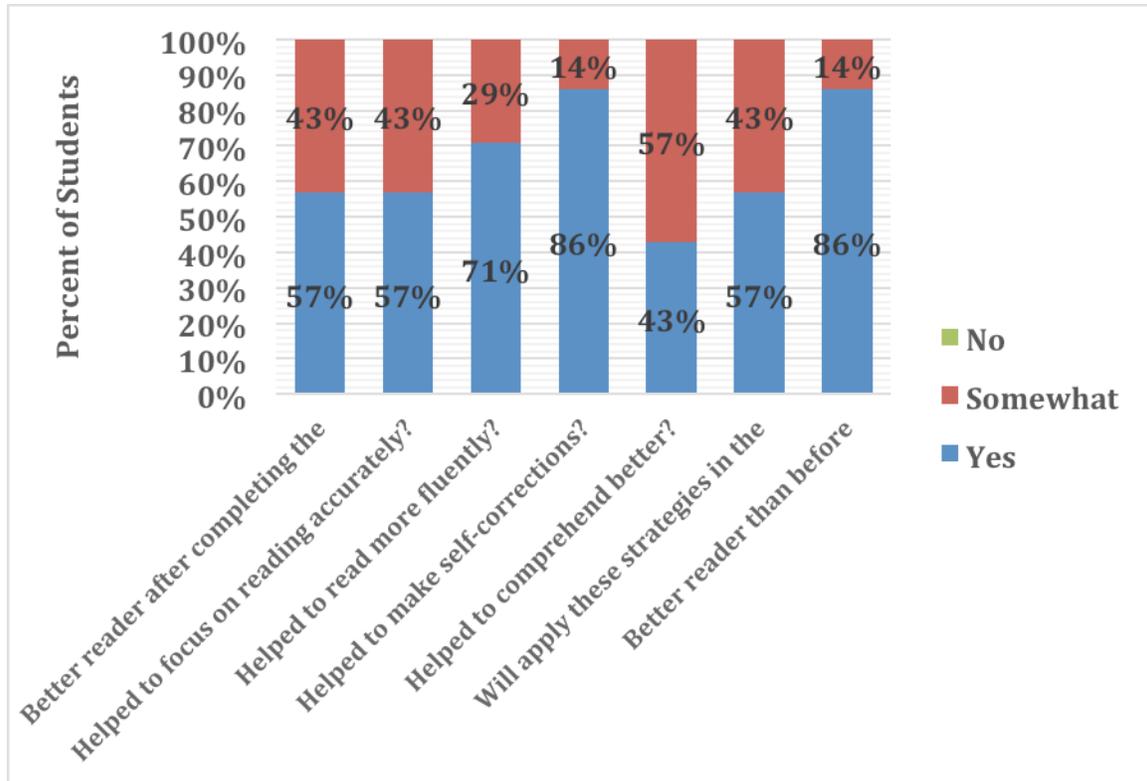
Student performance varied in each of the following categories, accuracy, fluency, and comprehension. Overall, the results suggest that reading accuracy and fluency did not have a significant impact on overall reading performance.

Post-Intervention Survey Results

Students were given a post intervention survey, which was created by the researcher. Each of the seven students in the treatment group was given a post-assessment to gauge their feelings about the repeated reading instruction and activities. Their response to items 1-7, were rated from 1 (strongly disagree) to 2 (no opinion) to 3 (strongly agree) and were summarized by descriptive statistics in Figure 2.

Figure 2

Descriptive Statistics of Post-Intervention Survey Responses



Participants in the treatment group were also asked to reply to three open-ended questions on the survey.

Table 2

Descriptive Survey Replies

Item	Summary of Answers
What was something you liked about the intervention?	Timed readings, playing games, working together, overall help with reading
What was something you didn't like about the intervention?	Reading with partners, making mistakes, not reading a lot of books, choral reading
What could I do differently next time?	Play more games, read more books, don't change anything

CHAPTER V

DISCUSSION

The purpose of this research study was to determine if there was a statistically significant improvement in the reading accuracy, fluency, and overall comprehension of fourth grade students as indicated by the Fountas and Pinnell Reading Benchmark System following the repeated reading intervention. The researcher's null hypothesis was that students participating in the repeated reading intervention would not gain at least one reading level and there would be no gains in reading accuracy, fluency, and comprehension before and after the repeated reading intervention. The null hypothesis was rejected. There is evidence to support that the implementation of repeated reading instruction did improve the overall reading ability of the participants in the intervention regardless of the evidence that the reading accuracy, fluency, and comprehension did not statistically improve.

Implications of Results

The results of this study revealed that there was a statistically significant difference between the Winter Fountas and Pinnell (F & P) and Spring Fountas and Pinnell results. This implied that the six-week intervention of repeated reading instruction did improve the participants reading level of at least one reading level on the Spring F & P assessment.

Participants in the intervention were given a survey at the conclusion of the intervention. The survey was developed so the researcher could gain an understanding of the student's experiences with the repeated reading intervention. The survey assessed the

participant's opinions about the intervention using a rating scale from one (No) to 2 (Somewhat) to 3 (Yes). Students in the intervention group responded to:

Question 1: "Do you feel that the repeated reading intervention helped you to be a better reader?" fifty-seven percent of the student's indicated that yes, it did help them become a better reader and 43% indicated it helped them to somewhat become a better reader.

Question 2: "Do you feel that the repeated reading intervention helped you to focus on reading accurately?" Fifty-seven percent of the students indicated that yes, it did help them read more accurately and 43% indicated they are somewhat more accurate.

Question 3: "Do you feel that the repeated reading intervention helped you to read more fluently?" Seventy-one percent indicated that yes, it did help them read more fluently and 29% indicated that it helped them somewhat.

Question 4: "Do you feel that the repeated reading intervention helped you to make self-corrections?" Eighty-six percent indicated that yes, it did help them make self-corrections and 14% indicated that it somewhat helped them to correct errors.

Question 5: "Do you feel that the repeated reading intervention helped you to comprehend what you read better than before the repeated reading intervention?" Forty-three percent indicated that yes, it did help them and 57% indicated that it somewhat helped them.

Question 6: "Do you think you will apply these reading strategies in the future when you are reading?" Fifty-seven percent indicated that yes, they will apply the strategies in the future and 43% indicated that they may use the strategies in the future.

Question 7: “ Overall do you think you are a better reader now than before you started the repeated reading intervention?” Eighty-six percent indicated that they feel they are better readers following the intervention and 14% indicated that they somewhat feel they are better readers. Of the students surveyed, none of the seven indicated “No” as a response.

When writing responses to the open-ended questions, the intervention group was asked:

Question 1: “Tell me something you liked about the repeated reading intervention.” The responses are summarized as follows: I liked the timed games, reading together, how much you helped us through all of it, playing games together, helped me read what was on the pages, it helped me and was fun, and playing timed games.

Question 2: “Tell me something you didn’t like about the intervention.” The responses are summarized as follows: reading with partners over and over again, messing up the words, how we only read one book, not being able to work together, didn’t get to finish our book, wasted work time, and choral reading because of the pace of other students.

Question 3: “Tell me something I could do differently next time.” The responses are summarized as follows: play more games, explain stuff more easily, read 2-3 books over the year, nothing-keeping doing the way you did it with us, play more games, be more active and raise my hand (the student did not appropriately respond to the question), and do more games and compete against each other.

Following the completion of the intervention, two of the seven students frequently asked when the researcher would work with them again and could they play more games.

Taking into account the written survey and some of the student's requests to continue the group, it is believed that the repeated reading intervention helped the students to feel more confident in their reading abilities.

Theoretical Consequences

Based on the review of literature in Chapter II, it appeared that repeated reading would be an effective teaching strategy to improve student's reading. The results did support this belief. Although there was a statistical gain between the Winter F & P and the Spring F & P results, students did not have a statistical improvement in the individual areas of accuracy, fluency, and comprehension.

Threats to Validity

One major threat to the internal validity of this design was the conditions surrounding the treatment. During the repeated reading intervention with the treatment group, there were schedule conflicts, which impacted the intervention scheduled for five days per week over the course of six weeks. As a result of this variation in weekly schedules, the intervention took place for a total of 5 weeks and 2 days. In addition, Partnership for Assessment of Readiness for College and Careers (PARCC), English Language Arts (ELA) was conducted. Due to testing constraints, reading instruction could not be provided during that time.

The researcher did her best to group the students who were reading within two levels of each other. However based on the students who were reading with less than 98% accuracy, the spread of reading levels spanned five reading levels. Two students were reading one level ahead of the end of fourth grade expectations and five students were reading below expectations. All students in the group ranged from 95% to 97% accuracy.

The fluency range was from one to two out of three, and comprehension ranged from four to six out of nine. Although the students were specifically chosen based on the results of the Winter F & P accuracy, the reading level span may have been too great for some students to overcome as the instructional level used in the intervention was a level R. There was one other reading class with similarly grouped students. The researcher could have reviewed those student's Winter F & P results and determine if the group could have included more students or students closer in reading level.

The differences in accuracy, fluency, and comprehension may have been the result of their primary reading teacher conducting the F & P reading assessment rather than the researcher who provided the intervention.

The major threat to the external validity of this study is the difficulty generalizing these results to a larger population of fourth grade students. The study took place in one elementary school in South Anne Arundel County with only seven fourth-grade participants. This most likely limits the generalizability of the results to larger groups. In addition, the findings were limited to fourth grade students in the researcher's classroom. The findings may be beneficial for similar sized groupings.

Connections to Previous Studies/Existing Literature

Reading accurately and fluently are two key indicators of reading ability. Reading accuracy is simply reading the words exactly as they are written on the page. Reading fluency is reading with appropriate speed, accuracy, and proper expression. It is important to read in phrases with good intonation. When all of these components are combined, students are more likely to comprehend what they read.

The results of this study revealed that the repeated reading intervention in one classroom in South Anne Arundel County did significantly impact the overall reading ability of students participating in the intervention. The NRP (2000) conducted a study of two different basic reading approaches. One approach was repeated reading while the other was where students were encouraged to spend more time in sustained silent reading. “The NRP reported clear evidence that the oral reading methods such as repeated readings led to improvement in reading fluency as well as overall performance” (Yurick, Robinson, Cartledge, Lo & Evans, 2006).

In another study conducted by Speece and Ritchey (2005) research findings indicated that guided repeated oral reading procedures were effective in improving reading fluency and overall reading achievement (Barber, Cartledge, Council, Konrad. Gardner, & Telesman, 2018). This study’s focus was on the effects of a computer software program, Reading RACES (Relevant and Culturally Engaging Stories) on the oral reading fluency and comprehension of urban first graders who were English language learners.

Implications for Future Research

Future research about the effect of repeated reading on accuracy, fluency, and overall comprehension might be modified for the length of time in which the intervention is provided both in time per day and complete length of time. In addition, ensuring carry-over of the intervention into the reading classroom. One additional implication is when one teacher provides the instruction and another conducts the assessment.

Another consideration for future research would be to complete a more thorough background check of the potential participants. A survey could be conducted to determine if students are willing to accept the additional instruction.

Additionally, the sample chosen for the study could be modified. For this study, the range of students may have been too wide. Although the chosen students were taken from two different reading groups within the one reading class, the group included students reading below and on grade level. It is likely that students who were considered on grade level did not have difficulty with comprehension. Therefore, those students may have benefited more from a combination of repeated reading instruction as well as continued support in reading comprehension.

Conclusion

The results of this study support prior research on the relationship between repeated reading and student performance. These findings are useful for primary teachers seeking to increase the reading accuracy, fluency, and comprehension of their students. With the time constraints that exist daily within a classroom, educators must be knowledgeable of the most effective techniques available to increase student success in reading. This study provides support for implementing a repeated reading intervention in the classroom. They should expect to see progress if done with thought and fidelity.

This study had value for the researcher because in Anne Arundel County, teachers are assessing students twice per year on their ability to read accurately, fluently, and comprehend what they have read. When teachers review the first F & P assessment, they are able to use the data to determine the individual needs of students and implement

reading interventions as needed. Teachers can use this study as a guide for the repeated reading strategy.

Observations and survey data suggested that the repeated reading intervention was easy to plan for and implement. The students were engaged in the daily reading tasks and activities. The researcher found that, given training, peer tutors encouraged students to be actively engaged in their own progress as well as their peer's progress. This was particularly evident when upon completion of the intervention, several students requested to continue meeting for the treatment. During the treatment, all students appeared to gain confidence in their ability to read more accurately and fluently.

Overall, the results suggested that the intervention was well received and the review of the literature indicated that reading accuracy and fluency have a significant impact on the ability to comprehend. Therefore, further research addressing the effects of reading accuracy and fluency on comprehension appears warranted.

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