

The Effects of Instruction Incorporating Repeated Reading on
Oral Reading Automaticity in a Second-Grade Classroom

Dorothy E. F. Ivey

University of Arkansas

Gentry Primary School

Abstract

The purpose of this study was to determine if focused instruction along with reading passages multiple times improved students' abilities to read aloud automatically and effortlessly and the research question that was addressed was "Does repeated reading instruction improve oral reading automaticity in one second-grade classroom?" The study took place in a second-grade regular education classroom consisting of 21 students. Oral reading accuracy was measured with the Dynamic Indicators of Basic Early Literacy Skills [DIBELS] and oral reading automaticity was measured with Rasinski's Multidimensional Fluency Scale [MDFS] both as a pre- and posttest as well as throughout the intervention as weekly or bi-weekly progress monitoring. During the intervention students engaged in focused instruction 30-45 minutes a day, four days a week along with repeated reading of specific genres of text for an eight-week period. A paired samples *t*-test for means was performed on both oral reading accuracy and automaticity at the conclusion of the study. Although student's accuracy levels improved throughout the intervention, there was not a significant difference in their pre- and posttest scores. However, there was a significant difference in students' oral reading automaticity pre- and posttest scores. Therefore, it is concluded that repeated reading instruction did improve oral reading automaticity in this study.

Keywords: repeated reading, automaticity, oral reading accuracy, DIBELS, MDFS

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Chapter I

Introduction

According to the National Assessment of Educational Progress [NAEP], (2011) which reports the results from a norm-referenced test that compares students in fourth, eighth, and twelfth grades across the United States, 68% of fourth and eighth grade students scored basic or below on the 2011 benchmark reading assessment. Students scoring at the basic level should be able to locate relevant information in the text, make simple inferences, use their understanding of the text to identify details that support a given interpretation or conclusion, and interpret the meaning of words used in a text. The NAEP results for the state of Arkansas were even more grim with 70% of students in fourth-grade and 72% of students in eighth-grade scoring Basic or below on the same assessment. Researchers (Hudson, Torgesen, Lane, & Turner, 2012; Klauda, & Guthrie, 2008; Wanzek et al., 2010), experts (LaBerge & Samuels, 1974; Rasinski, 2012), and literature (National Reading Panel [NRP], 2000; Penner-Wilger, 2008) have explored the importance of, and students deficiencies in, reading text automatically. Additionally expert Rasinski (2012) and literature by the National Reading Panel [NRP], 2000 suggest that there should be a shift in the focus of reading instruction from reading faster to automaticity and prosody which are the real keys to fluency. Other researchers (Hudson, Isakson, Richman, Lane, Arriaza-Allen, 2011; Lo, Cooke, & Starling, 2011) and literature (Common Core State Standards Initiative [CCSSI], 2012; NRP, 2000; Rasinski, 2003; Samuels, 1979) found that repeated reading has been shown to increase students' oral reading automaticity. Additionally, research by Roundy and Roundy (2009) and literature by Ming and Dukes (2008) indicate that repeated reading is an instructional strategy that benefits all learners. The new CCSSI (2012) makes the issue of reading achievement more eminent by requiring that students to comprehend texts of

greater complexity in each grade level in order to be college and career ready by the time they leave the public school system. Additionally, Common Core Foundational Standard 4b requires that students read on-level text with accuracy, appropriate rate, and expression. Lack of reading achievement is an issue that needs to be addressed so that by the time students' graduate they are ready for college or a career. Repeated reading may be a strategy teachers can use to improve automaticity.

Background of the Problem

The CCSSI (2012) requires greater levels of text-complexity at each grade-level because according to their research students are struggling with the level of text-complexity they are currently presented with on standardized assessments like the American College Testing [ACT] college admissions test. This struggle with text-complexity is also evidenced in the report from the National Assessment of Educational Progress [NAEP] (2011) which is a norm-referenced test that compares student achievement in grades 4, 8, and 12 across the United States. The NAEP report shows that both 68% of fourth-grade and 68% of eighth-grade students in the United States scored basic or below in reading. Similarly, the report from NAEP shows that students in the state of Arkansas performed even lower than the national average with 70% of fourth-graders and 72% of eighth-graders scoring basic or below. Experts (LaBerge & Samuels, 1974; Rasinski, 2012) and literature by the NRP (2000) indicate that the current focus of oral reading instruction has become to increase speed which inhibits oral reading automaticity. Furthermore, research by Hudson et al. (2012) and literature by Penner-Wilger (2008) report that a lack of automaticity when reading adversely affects fluency.

Definitions of Terms

To facilitate the understanding of this research report, the following terms are defined:

1. Automatic decoding is defined as the ability to quickly and accurately read words by recognizing the sound represented by the letters in the word (Rasinski, 2003).
2. Automaticity is defined as when the skills and sub-skills of a task, such as reading, are done automatically making it possible to shift attention to other tasks (LaBerge & Samuels, 1974). This term has been operationalized for this study to mean reading a text automatically and effortlessly as measured by the Multidimensional Fluency Scale [MDFS] sub-skill of smoothness.
3. Choral reading is defined as orally reading the same text in unison and can include any type of text (Ming & Dukes, 2008; Rasinski, 2003).
4. Echo reading is defined as a more fluent reader reading a passage one sentence or phrase at a time and the less fluent reader echoing back the text while following along in the text with their finger. (Rasinski, 2003).
5. Oral reading accuracy is defined as the ability to correctly read a word either because the reader used an effective decoding strategy or the word is a part of the reader's automatic sight word vocabulary (Penner-Wilger, 2008).
6. Oral reading fluency is defined as reading a text accurately, automatically, and with appropriate expression and phrasing (Ming & Dukes, 2008).
7. Paired reading is defined as two readers, one more fluently proficient than the other, reading the same text simultaneously (Rasinski, 2003).
8. Readers theater is defined as script reading in front of an audience without props or costumes making the only tool for creating a meaningful performance the reader's voice (Rasinski, 2003).

9. Repeated reading is defined as reading a short passage of text multiple times until an appropriate level of fluency is acquired and then repeating this procedure with a different passage (Samuels, 1979). This term has been operationalized for this study to mean reading words, phrases, and connected text multiple times using instructional approaches such as modeling, echo reading, choral reading, paired reading, and reader's theater.

Purpose and Significance of the Study

The purpose of this study was to determine if repeated reading instruction improves oral reading automaticity in a second-grade classroom. The intent was to determine if focused instruction while reading passages multiple times improved students' ability to read aloud automatically and effortlessly. Because repeated reading instruction seems to improve students' oral reading automaticity, teachers may use this procedure to increase success in students' abilities to read connected text more automatically and effortlessly. This study looked at the effects of repeated reading instruction on oral reading automaticity in one group of second-grade students and the research question that was addressed was "Does repeated reading instruction improve oral reading automaticity in one second-grade classroom?"

The research report is organized into five chapters. Chapter I offers an introduction to this study, which was to investigate the effects of repeated reading instruction on oral reading automaticity in a second-grade classroom. Chapter II provides a review of literature concerning repeated reading instruction and oral reading automaticity. Chapter III serves to explain the methodology for the study. The setting, participants, data collection, procedures, instruments, and analysis are shared. Chapter IV shares the results of this study. Chapter V draws conclusions and implications, and then makes recommendations on the results of the study

Chapter II

Review of Literature

This chapter provides a comprehensive, yet not exhaustive, review of literature on the effects of repeated reading instruction and oral reading automaticity. The intent of this chapter is to review relevant research and other literature that supports the argument that focused instruction along with students reading passages multiple times increased their ability to read aloud automatically and effortlessly. Experts LaBerge and Samuels (1979), research by Hudson et al. (2012) and literature by Penner-Wilger (2008) state that accuracy, automaticity, and prosody build on each other further argue that for reading to become automatic, additional practice is required to decrease the amount of attention needed for skills like decoding. Additionally, research (Klauda & Guthrie, 2008; Wanzek et al., 2010) found that a student's oral reading fluency is a reliable predictor of achievement on standardized reading assessments. Despite these findings, Rasinski (2012) and the NRP (2000) state that most fluency instruction focuses on reading faster, rather than automaticity and prosody which are the real keys to fluency. Other researchers (Hudson et al., 2011; Lo et al., 2011), and literature (CCSSI, 2012; NRP, 2000; Rasinski, 2003; Samuels, 1979) state that oral reading is typically taught using an ineffective round robin approach instead of other instructional strategies, such as repeated reading, that have been shown to increase students' oral reading automaticity. Research by Roundy and Roundy (2009) and literature by Ming and Dukes (2008) indicate that all readers benefit from the repeated reading instructional strategy.

This chapter is organized so that the literature on the importance of automaticity in reading comprehension and then factors that inhibit oral reading automaticity are reviewed. Next, the factors necessary for oral reading automaticity are shared. Finally, experts' recommendations

and literature which support repeated reading to improve oral reading automaticity is shared; followed by a discussion of research and literature on the benefit of using repeated reading with all learners

Importance of Automaticity in Reading Comprehension

Researchers (Klauda & Guthrie, 2008; Wanzek et al., 2010) found that oral reading fluency is an accurate indicator of performance on standardized reading comprehension assessments. Klauda and Guthrie (2008) studied word, syntactic, and passage reading and found that each of the three components of fluency were related to performance on the Gates-MacGinitie Reading Test [GMRT] Form S and T standardized reading comprehension tests. These researchers also found that the highest performing students were those who had fast recognition of individual words, were able to process phrases/sentences into syntactic units, and exhibited prosody in their oral reading. Similarly, Wanzek et al. (2010) found that oral reading fluency was a reliable predictor of achievement on both the 10th Edition of the Stanford Achievement Test [SAT-10] national assessment and the Texas Assessment of Knowledge and Skills [TAKS] state assessment.

Factors that Inhibit Oral Reading Automaticity

Literature by Rasinski (2012) and the NRP (2000) states that most fluency instruction focuses on reading faster, even though automaticity and prosody are the real keys to fluency. Rasinski (2012) suggests that the goal of fluency instruction has become a desire to increase reading speed, but that authentic fluency instruction should focus on automaticity and prosody. Literature by the NRP (2000) states that accuracy alone is not enough for a reader to become fluent, but that word reading needs to become automatic so the reader is no longer using their working memory to decode words but on making meaning from the text.

Factors Necessary for Oral Reading Automaticity

Literature (LaBerge & Samuels, 1974; Penner-Wilger, 2008) and research by Hudson et al.,(2012) suggest that oral reading fluency skills build on each other and students need more practice for the skills to become automatic. Literature by experts LaBerge and Samuels (1974) states that learning to read accurately requires large amounts of attention and that greater amounts of exposure are needed in order for the task to require less attention and become automatic. Penner-Wilger (2008) suggests that the three main components of fluency (accuracy, automaticity, and prosody) are interrelated and if there is development in one area, it affects the other components as well. Researchers Hudson et al. (2012) found that practice in lower level reading skills like phonemic blending, letter-sound fluency, and phonogram fluency, build on each other and predict decoding fluency and will move students beyond accuracy to automaticity and towards the development of text-reading fluency. Rasinski (2012) states that reading instruction should be wide (reading a variety of texts followed by discussion and activities) and deep (reading a single text repeatedly until a level of fluency is achieved, as in repeated reading) in order for students to reach the ultimate goal of reading which is comprehension.

Repeated Reading to Improve Oral Reading Automaticity

Researchers (Hudson et al., 2011; Lo et al., 2011), and literature (CCSSI, 2012; NRP, 2000; Rasinski, 2003; Samuels, 1979) state that there are instructional strategies, such as repeated reading, that can be used to increase students' oral reading automaticity. Literature (CCSSI, 2012; NRP, 2000) states that the most effective strategies for oral reading practice involve explicit instruction in repeated and guided oral reading and lists modeling, repeated reading, radio reading, paired reading, choral reading, shared reading, using recorded materials, and phrasing as examples. Rasinski (2003) explains that the most effective instructional

strategies for oral reading fluency are those that include modeling, support, practice, and phrasing and that repeated reading is an instructional approach that can target each of these components using activities such as choral reading, paired reading, reading while listening, reader's theater, high frequency words, and Fry's phrases. Samuels (1979) explains that repeated reading is a method that provides practice in reading connected text by repeatedly reading a passage until a satisfactory level of fluency has been reached. Furthermore, Samuels (1979) adds that with each additional reading, students reading speed will increase while word recognition errors will decrease. Research by Lo et al. (2011) found that adult led instruction using repeated reading combined with the previewing of difficult words, modeling, error correction, unison reading and feedback increased the oral reading fluency on 2nd grade level transfer passages. Additionally, research by Hudson et al. (2011) found that students who engaged in a repeated reading intervention that focused on an accuracy and automaticity practice condition improved more than students that focused only on accuracy.

Benefit of Using Repeated Reading with All Learners

Research by Roundy and Roundy (2009) and literature by Ming and Dukes (2008) indicate that the diversity of learners found in classrooms today all respond to and benefit from the repeated reading instructional strategy. Roundy and Roundy (2009) found that in a five-week study of a diverse sampling of 110 middle school students in grade 7, repeated reading not only increased students' confidence, but also provided practice in oral reading which helped increase students' fluency, motivation to read, and attitudes about reading. Ming and Dukes (2008) explained that students are expected to read and comprehend text more independently after leaving primary school and all levels of readers found in regular education classrooms can benefit from fluency strategies such as repeated reading to attain this goal.

Summary

Based on research (Hudson et al., 2012; Klauda & Guthrie, 2008, Wanzek et al., 2010), literature (NRP,2000; Penner-Wilger, 2008), and experts (LaBerge & Samuels, 1974; Rasinski, 2012) that explain the importance of automaticity in learning to read and in comprehension, as well as the factors that inhibit oral reading automaticity; and other research (Hudson et al., 2011; Lo et al., 2011; Roundy & Roundy,2009), literature (CCSSI, 2012; Ming & Dukes, 2008; NRP, 2000;), and experts (Rasinski, 2003; Samuels, 1979) that describe repeated reading as an effective strategy to improve oral reading automaticity with all learners, a study examining the effects of repeated reading instruction on oral reading automaticity was conducted. The next chapter details the methodology of this study.

Chapter III

Methodology

This study investigated the effects of repeated reading instruction on students' oral reading automaticity in one second-grade classroom. The intent of this study was to determine if focused instruction along with students reading passages multiple times increased their ability to read aloud automatically and effortlessly. This chapter describes the setting, the participants, and the confidentiality procedures for the present study. How data were collected and the evaluation instruments are also described. The intervention strategy is explained and the methods for analyzing data are detailed.

District Setting

This study took place at an elementary school in Northwest Arkansas. Demographic information for the school district provided in this section is based on published information from the 2011-12 school year (Arkansas Department of Education [ADE], 2012). The school district serves students from kindergarten through grades 12. This district in which the school is located has a total number of 1,384 students in 4 schools. There are 311 primary students, 343 intermediate students, 352 middle-school students, and 378 high-school students. The ethnic breakdown for the school district is as follows: 962 White, 173 Hispanic, 115 Asian, 94 Native American/Native Alaskan, 32 two or more races, and 1 Native Hawaiian/Pacific Islander (see Figure 1). There are 154 students classified as Limited-English-Proficient, 120 students identified as gifted and talented, 151 students involved in the district's special education program, and 13 students are handicapped. 903 students receive free and/or reduced lunch which is 65.25% of the total student population and as of October 1st, 2011 the homeless population was 99 students which is 7% of the total student population.

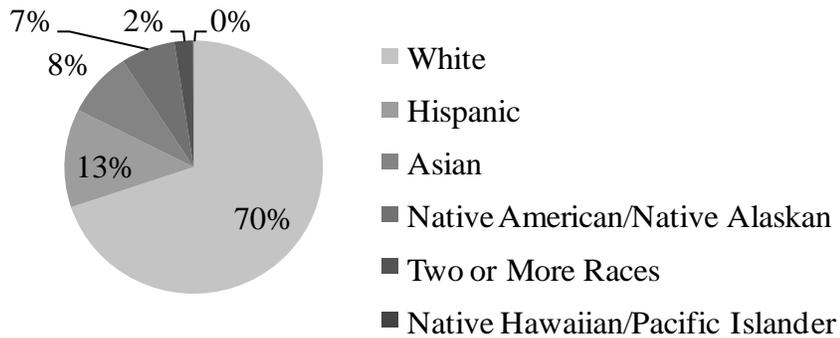


Figure 1. Racial demographics for the school district in Northwest Arkansas.

School Setting

The elementary school in this study has a total population of 311 students (ADE, 2012). The school serves students in grades kindergarten through grade 2 with 99 students in kindergarten, 110 students in first grade, and 102 students in second grade. The student population consists of 210 White, 51 Hispanic, 25 Asian, 13 Native American/Native Alaskan, 10 two or more races, and two Black (see Figure 2). The gender breakdown of this school is 173 male and 138 female. This elementary school has 29 students that receive special education services two students are handicapped and 51 students classified as Limited-English-Proficient. There are 229 students that receive free and/or reduced lunch which is 73.6% of the total student population, and as of October 1, 2011 the homeless population was 43 students which is 13.8% of the total students population. The school is a Title I school with three Title I teachers who provide school-wide progress monitoring and pull-out small group instruction for students receiving Tier II and III intervention. Four days a week each classroom teacher’s schedule includes time for 30 minutes of Tier II small group intervention.

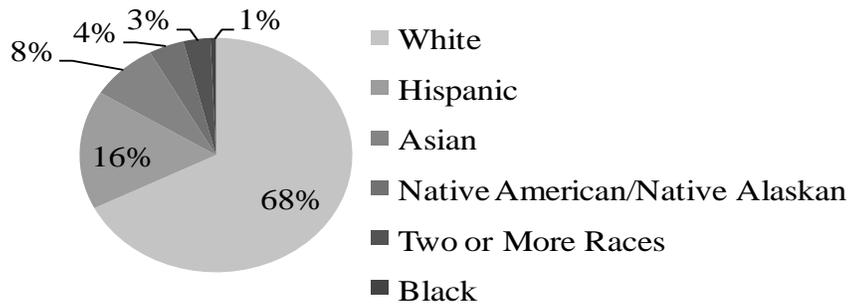


Figure 2. Racial demographics for the elementary school in Northwest Arkansas.

Participants

This study took place in a second-grade regular education classroom consisting of 21 students. There are 12 males and nine females and the racial demographics for the students in this classroom are as follows: 17 White, three Hispanic, and one Asian (see Figure 3). There are two English Language Learners in this classroom. On the English Language Development Assessment [ELDA] one student scored at the Intermediate level (3) and the other scored at the Advanced level (4). There are three students that have an Individualized Education Plan [IEP], five students receive speech and language services, two students receive on-site Occupational Therapy, two students receive pull out from an on-site therapist, and one student has a 504 plan for behavior. There are 11 students who receive free and/or reduced lunch which is 52% of the class population. Mastery of grade level skills find seven students performing at an advanced level, four students performing at a proficient level, five students performing at a basic level, and five students performing at a below basic level. There are 10 students that receive small group intervention in reading. All students in this classroom are progress monitored in oral reading fluency bi-weekly with the DIBELS (2012) ORF reading assessment.

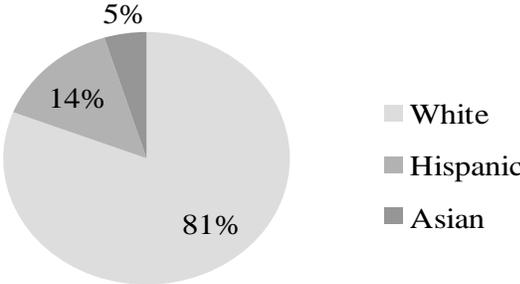


Figure 3. Racial demographics for the second-grade classroom in Northwest Arkansas.

Confidentiality

Permission to conduct this study was granted by the University of Arkansas Institutional Review Board (see Appendix A) as well as the administration of the elementary school where the study was conducted (see Appendix B). Permission to participate in this study was obtained prior to the commencement of this project. A letter (see Appendices C1 and C2) along with an Informed Consent (see Appendices D1 and D2), was sent home with each student in the appropriate language, and a signature from the parent or guardian was required before data for that child were reported. The Informed Consent explained the purpose and procedures of the study. It also explained that participation was completely voluntary and that there was no reward or penalty for participating. It explained that the child may withdraw from the study at any time without penalty. Confidentiality was maintained and assured by the researcher through the establishment of a code. Each student participant was assigned a number at random to establish the code. All data were recorded anonymously using the code. Only the researcher had access to the code, and all data were kept in a locked file cabinet in the project classroom. Once the study is defended, the code will be destroyed.

Data Collection

The proposed study was designed to determine the effects of repeated reading instruction on oral reading automaticity in one second-grade classroom. Data were collected to determine if focused instruction along with reading passages multiple times increased students' abilities to read aloud automatically and effortlessly. During the eight-week intervention period, students' abilities to read automatically were determined through oral reading passages that were read aloud scored with the Multidimensional Fluency Scale [MDFS] sub-skill of smoothness and detailed anecdotal records, in addition to the accuracy scores collected before and after the intervention with the Dynamic Indicators of Basic Early Literacy Skills [DIBELS].

Evaluation instruments. In order to measure oral reading fluency and automaticity, two different evaluation instruments were used. The instruments were the Oral Reading Fluency (ORF) subtest of the DIBELS (2012) before and after the intervention, as well as during the intervention bi-weekly to measure accuracy and the MDFS (2012) sub-skill of smoothness used before and after the intervention, as well as during the intervention weekly to measure automaticity.

DIBELS. The DIBELS (2012) (see Appendices E1-E12) was developed based on Curriculum Based Measurement [CBM] (2012) procedures created by Stan Deno and his colleagues at the Institute for Research and Learning at the University of Minnesota. The DIBELS was created and is maintained at the University of Oregon's Center on Teaching and Learning. It is a standardized test that is administered individually to assess a student's knowledge of and abilities in seven areas which are phonemic awareness, alphabetic principle, accuracy and fluency when reading connected text, reading comprehension, and vocabulary. For the purpose of this study, only the DIBELS ORF was used to determine students' oral reading

accuracy. Students are given a reading passage at their current grade level and are to read as much of the passage as they can within a 1 minute time limit. The test administrator also has a copy of the reading passage and marks words read incorrectly and self-corrections as the student reads aloud, as well as marking how far the student read when the 1 minute time limit is finished. The student's oral reading accuracy level is calculated by dividing the number of words read correctly by the total number of words read.

Oral reading accuracy rates were calculated based on the end of the year DORF benchmarks and were categorized into achievement categories as follows: 100-96% accuracy is at or above benchmark, 91-95% accuracy is below benchmark, and 0-90% accuracy is well below benchmark.

MDFS. The MDFS (2012) (see Appendix F) was developed by Zutell and Rasinski (1991) to help teachers assess oral reading fluency. The intent was to focus on the components of expression and volume, phrasing, smoothness, and pace as indicators of fluency as opposed to the traditional method of assessing only word accuracy errors. For the purpose of this study, students' automaticity was assessed using the subscales on smoothness which analyzes pauses and hesitations while sounding out difficult words. Students read aloud a passage for 1 minute. The assessor has a copy of the passage and marks through words missed or read incorrectly as well as self-corrections as the student reads aloud. The assessor uses the MDFS rubric to rate the students' automatic reading. Students are scored according to the rubric's descriptors which have four subscales. A rating of 4 indicates the student read smoothly with some breaks but self corrects difficult words and/or sentences. A score of 3 means the student reads with occasional breaks in rhythm and has difficulty with specific words and/or sentence structures. A score of 2 means the students reads with extended pauses or hesitations and has many rough spots while

reading. A score of 1 means the reader frequently hesitates while reading, sounds out words, repeats words or phrases and makes multiple attempts to read the same passage.

Oral reading scores will be categorized into achievement categories according to the MDFS subscales on smoothness. Scores will range from 1-4 with scores of 4 representing above benchmark, 3 representing benchmark, 2 representing below benchmark, and 1 representing well below benchmark.

Baseline data. In order to establish a baseline for students' oral reading accuracy, the DIBELS (2012) was administered. Student's oral reading accuracy was determined from this measurement. In order to establish a baseline for student's oral reading automaticity, the MDFS (2012) was administered. Students' oral reading automaticity was determined from this measurement. As a pretest, the DIBELS and the MDFS was administered between October 1, 2012 and October 5, 2012.

Other data collection methods. Data were collected during the intervention period to monitor and record students' progress related to their abilities to read automatically and effortlessly. Data were collected in the form of weekly averages of daily scores, weekly and bi-weekly progress monitoring, and by recording observed anecdotes related to automatic and effortless reading. Daily scores were recorded using a rubric (see Appendices G1, G2, G3, & G4) that included specific sub-skills of automaticity as students were taught different strategies for reading automatically. At the end of each week daily scores were averaged to obtain a weekly average of daily scores. Data that were recorded throughout the eight weeks was organized and analyzed to determine if focused instruction along with reading passages multiple times improved students' ability to read aloud automatically and effortlessly.

Post data analysis. In order to determine the effectiveness of repeated reading instruction on oral reading automaticity, the DIBELS (2012) was administered again to each student following the same method used before. The posttest results were examined and compared to the baseline data. A paired-samples *t*-test was conducted to determine if a significant difference existed between the pretest and posttest scores. Anecdotal records were coded and analyzed to determine patterns and themes that appeared. Weekly averages of daily scores and progress monitoring done both weekly and bi-weekly were analyzed. These scores along with the pretest and posttest assessments were carefully examined and analyzed to determine changes and trends, and then conclusions were drawn.

Intervention Strategies

During the course of this study, students participated in several repeated reading activities that took place in several settings. The scope and sequence (see Appendix H1 & H2) of the repeated reading instruction used in this study were: learning strategies for quickly decoding unknown words; repeated reading of words and phrases; repeated reading using song lyrics, tongue twisters, poetry, fiction and non-fiction text, and reader's theater. Instruction focused on students listening to texts being read aloud by an experienced reader to hear a model of what smooth and automatic reading sounds like. Students were given opportunities to support each other while reading in whole groups, small groups and in pairs. Students repeatedly read high frequency words, words in phrases, and connected text multiple times. Students practiced reading orally with support and feedback. Instruction the first two weeks served to introduce students to decoding strategies they would use during the intervention as well as the procedures for repeated reading of words in isolation, words in phrases, and connected text.

Week 1. Students were introduced to noticing errors made while reading and strategies to use when decoding unfamiliar words.

Day 1. Students were introduced to automaticity and noticing errors while reading.

Day 2. Students and learned the strategy of blending sounds to decode unknown words.

Day 3. Students learned the strategy of flipping the sound to decode unknown words.

Day 4. Students learned the strategy of using word parts to decode unknown words.

Day 5. Students were progress monitored using the DORF and the MDFS.

Week 2. Students were introduced to procedures for repeated reading of words in isolation, words in phrases, and connected text.

Day 1. Students read words in isolation with high frequency words.

Day 2. Students read words in phrases by choral reading of Fry's Phrases.

Day 3. Students read connected text by choral reading the basal text with a partner.

Day 4. Students read connected text by choral reading the basal text with a partner.

Day 5. Students were progress monitored using the DORF and the MDFS.

The next six weeks daily instruction followed the same general sequence and pattern where students learned how to read a specific type of text automatically. The genre focus for each week were song lyrics on week 3, poetry on weeks 4 and 5, reader's theater on week 6, non-fiction text on week 7, fiction text on week 8.

Day 1. Students were introduced to a type of text and given several models of automatic reading of the text. Students were asked to distinguish between automatic and non-automatic reading by rating several examples of oral reading (see Appendix I1, I2 & I3 for a Day 1 lesson plan).

Day 2. Students were taught decoding strategies to enable them to read a specific text without hesitations. Students repeatedly read a section of the text while receiving feedback from their peers (see Appendix J for a Day 2 lesson plan).

Day 3. Students were taught to self-correct difficult words. Students repeatedly read the text receiving feedback from peers or the teacher (see Appendix K for a Day 3 lesson plan).

Day 4. Students were taught to self-correct difficult sentence structures by locating the phrases in the text. Students repeatedly read the text with feedback from peers or the teacher (see Appendix L for a Day 4 lesson plan).

Day 5. Students were given a new piece of text with the same structure and asked to read the text orally. Students were progress monitored while reading this text using the DORF and the MDFS sub-skill of smoothness, and their use of strategies learned during Days 1-4 were noted (see Appendix M for a Day 5 lesson plan).

Summary

When students do not develop oral reading automaticity they struggle to read connected text smoothly. If 68% of fourth and eighth graders are scoring basic or below on benchmark reading assessments, that is a fairly good indicator that too many students are not automatic readers. The Common Core State Standards require that students read more complex levels of text at each grade level in order to be college and career ready by the time they graduate. Since automatic readers are more able to focus on comprehension, automaticity is vital to preparing students for the challenging texts they will encounter with the new standards. Because of the importance of oral reading automaticity, the present study was designed to investigate the effects of repeated reading instruction on oral reading automaticity and was conducted in an elementary school in Northwest Arkansas for an eight-week period.

Chapter IV

Results

The purpose of this chapter is to provide analyses of data collected for the study designed to address the research question, “Does repeated reading instruction improve oral reading automaticity in one second-grade classroom?” Data are represented through narrative text and supported with tables and figures. The purpose of this study was to determine if focused instruction along with reading passages multiple times improved students’ accuracy and ability to read aloud automatically and effortlessly.

Twenty-one students from a local elementary school participated in the study. Over the course of eight weeks, students participated in daily reading instruction that implemented repeated reading strategies targeted at increasing oral reading automaticity while reading a connected text. The ability to read automatically was determined by analyzing students’ oral reading of words, phrases, and connected text. Daily scores for automaticity were gathered and recorded during the study using a rubric that included specific components of automaticity.

Baseline Data

Baseline data were established using two different evaluation instruments. The two instruments were the DIBELS (2012) and the MDFS (2012). The pre-assessment oral readings were completed during the week of October 1, 2012.

DIBELS. The DIBELS (2012) is a standardized test that is administered individually to assess students’ knowledge of and abilities in seven areas which are phonemic awareness, alphabetic principle, accuracy and fluency when reading connected text, reading comprehension, and vocabulary. The students were only tested on oral reading accuracy for this study. The DIBELS determines students’ accuracy by having them read a passage for one minute and

dividing the number of words read correctly by the total number of words read. These scores were collected before the commencement of the study to establish a baseline of oral reading accuracy, or automaticity, prior to repeated reading instruction.

Students' automaticity scores were derived using a percent of accuracy. The highest possible percentage was 100% and the minimum possible percentage was 0%. The maximum percentage recorded was 99.03% and the minimum recorded percentage was 7.69%. Thus the range was 91.34%. The mean score was 85.66%. The median score was 94.29%. Since each percentage occurs only once, there is no mode for this set of data (see Appendix N for individual student scores). The score of 7.69% was identified as an outlier because it was more than 1.5 times the interquartile (IQR) range below the lower quartile of the data.

The baseline automaticity scores were classified into three achievement categories: at or above benchmark, below benchmark, well below benchmark. For the purposes of comparing end results with these baseline data, these categories were given a specific range of scores that did not change when the end results were analyzed. These ranges were formulated based on the end of the year DORF benchmarks and were categorized into achievement categories as follows: 100-96% accuracy is at or above benchmark, 91-95% accuracy is below benchmark, and 0-90% accuracy is well below benchmark. There were 7 scores classified as at or above benchmark, 5 scores classified as below benchmark, and 9 scores classified as well below benchmark (see Figure 4).

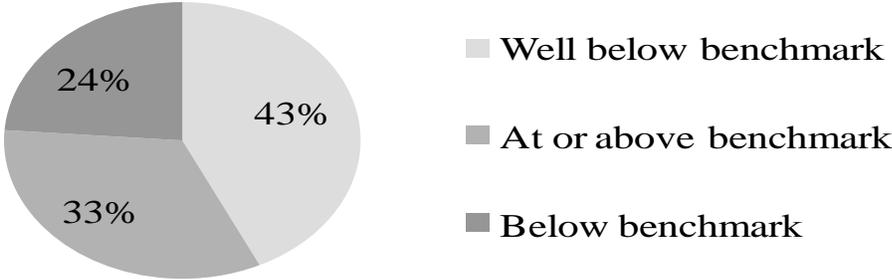


Figure 4. Percentage of students in each DIBELS achievement category.

MDFS. The MDFS smoothness section was used for the purposes of this study. The analytic scale of 1-4 is used to determine a level of automaticity as a student orally reads a passage aloud for one minute. These scores were collected before the commencement of the study to establish a baseline of oral reading automaticity prior to repeated reading instruction.

Students’ abilities to read smoothly were measured using a 4 point scale. The highest possible total points a student could receive on the MDFS was a 4, and the minimum score was 1. The maximum recorded score was 3 and the minimum recorded score was 1. Thus the range was 2. The mean score was 2.24. The median score was 2. The mode was 2 (see Appendix O for individual student scores). There was no score identified as an outlier.

The scores were classified using the baseline data into four achievement categories: above benchmark, benchmark, below benchmark, well below benchmark. In order to compare end results with the baseline data, each of these categories were given a specific range of scores that did not change when the end results were analyzed. These ranges were formulated based on the MDFS benchmarks and are categorized into achievement categories as follows: 4 indicates above benchmark, 3 indicates benchmark, 2 indicates below benchmark, and 1 indicates well below benchmark. There were 0 scores classified as above benchmark, 7 scores classified as

benchmark, 12 scores classified as below benchmark, and 2 scores classified as well below benchmark (see Figure 5).

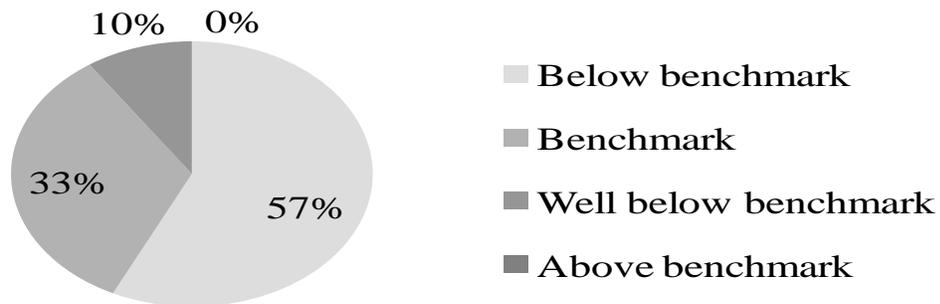


Figure 5. Percentage of students in each MDFS achievement category.

During Intervention

In order to measure students' abilities to read automatically and effortlessly during the current study, daily individual automaticity scores were recorded. In order to obtain these scores, each day student's participated in activities that focused on components of automaticity. These daily scores were averaged at the end of each week to get a weekly class mean score (see Appendix P1-P8 for individual students daily and weekly averages). The highest possible average was 100% and the lowest possible was 0%. Weeks 1 and 2 served as an introduction to the components of automaticity, but Weeks 3-8 followed the same format with introduction of a genre and recognition of automatic versus non-automatic reading on Day 1, noticing errors and decoding strategies on Day 2, self-correcting difficult words on Day 3, recognizing and using the phrases in connected text on Day 4, and assessment on a cold read on Day 5. Since new strategies were taught during Weeks 1 and 2, the weekly averages during these weeks are independent from the averages during Weeks 3-8.

There was a sharp decline between the first and second weekly averages. The highest daily average was recorded during the fourth week of intervention which was the first of two weeks when students practiced automaticity using poetry. There was a decline in scores on week 2 and then averages increased. There was another decline in scores on week 5 and then scores increased again. The second highest weekly average occurred the eighth week of the study when students practiced automaticity using fiction text. The class means of daily averages are shown in Figure 6.

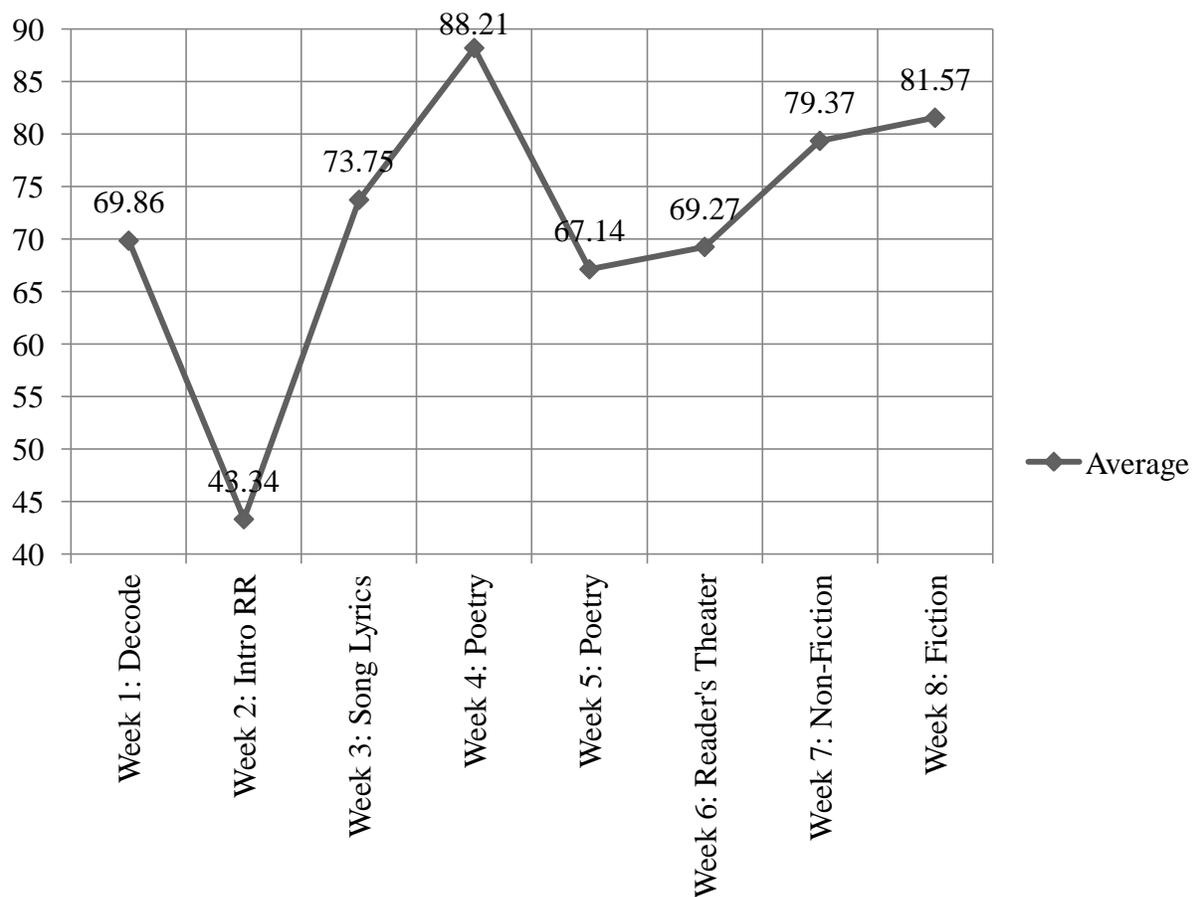


Figure 6: Weekly average of daily automaticity scores.

In order to measure students' abilities to read automatically and effortlessly during the current study, weekly and bi-weekly progress monitoring scores were recorded. In order to

obtain these weekly scores, students' oral reading was analyzed using the MDFS sub-skill of smoothness on an unfamiliar text in the same genre as the week's intervention. In order to obtain these bi-weekly scores, students' oral reading was analyzed using a DIBELS ORF passage. These weekly and bi-weekly scores were averaged at the end of each week to get a weekly and bi-weekly class mean score (see Appendices Q1 & Q2 for individual student weekly and bi-weekly averages). The highest possible average of weekly scores was 4 and the lowest possible average was 1. The highest possible average of bi-weekly scores was 100% and the lowest possible average was 0%. Since weekly and bi-weekly averages assessed the same criteria each time, the averages are not independent from each other.

After a slight decline in scores on week 2 weekly scores increased during the eight-week intervention. The highest weekly average was recorded during the fifth week of intervention when students practiced automaticity the second week of using poetry. There was another decline during the sixth week of intervention when students were practicing automaticity using reader's theater and then the weekly averages began to increase again. The second highest weekly average occurred the seventh week of the study when students practiced automaticity using non-fiction text. Bi-weekly averages steadily increased during the eight-week intervention. Students were assessed during week 2, week 4, week 6, and week 8 of the intervention. The highest weekly average was recorded during the sixth week of intervention when students practiced automaticity with reader's theater. The class means of weekly and bi-weekly averages are shown in Figure 7.

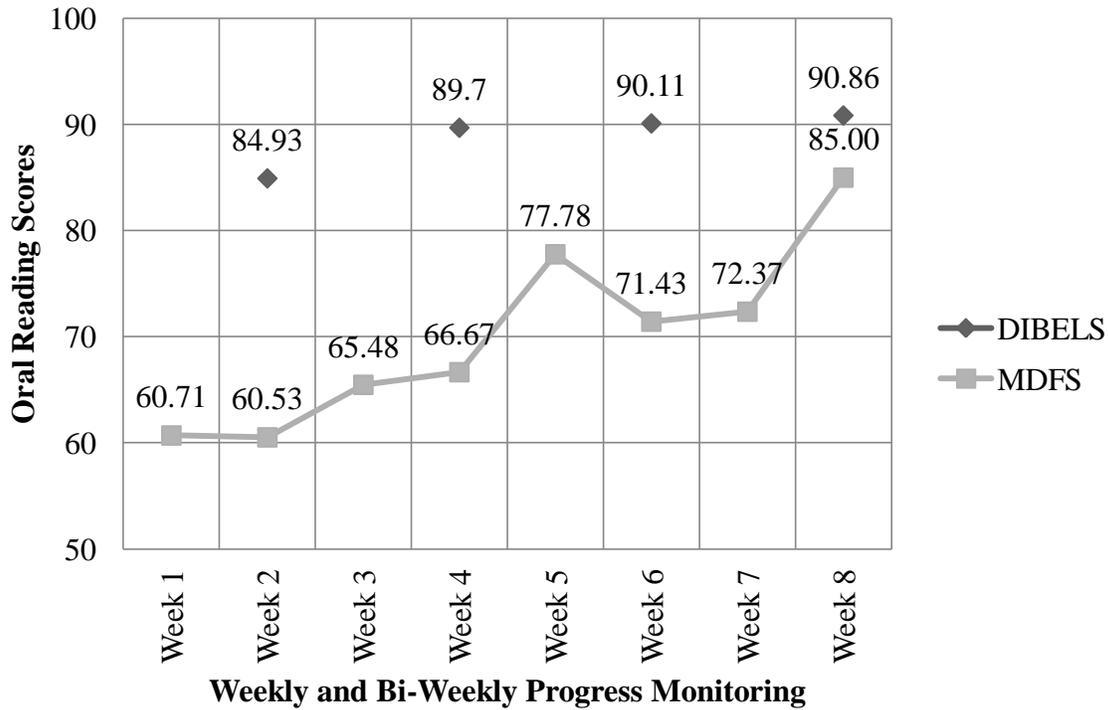


Figure 7. Weekly and bi-weekly averages of progress monitoring scores.

Post Intervention

To determine the effectiveness of repeated reading instruction after the intervention, students’ oral reading was analyzed and scored using the DIBELS (2012) and the MDFS (2012) at the conclusion of the intervention.

DIBELS. The DIBELS (2012) ORF was administered in the same manner as before the intervention. The students’ accuracy levels were analyzed to determine if repeated reading instruction improved their ability to read automatically. The assessment was administered during the week of December 3, 2012.

Students read a passage aloud for one minute to determine their word reading accuracy. The highest possible points a student could receive on was 100% and the minimum score was 0%. The maximum recorded score was 99.22% and the minimum score was 27.27%. The range

was 71.95%, the mean score was 88.45%, and the median score was 93.94%. Since each percentage occurs only once, there is no mode for this set of data. The scores of 27.27% was identified as an outlier because it was more than 1.5 times the interquartile (IQR) range below the lower quartile of the data (see Appendix R for individual DIBELS post-intervention scores).

Figure 8 illustrates individual student pre- and post- intervention oral reading accuracy scores as measured by the DIBELS.

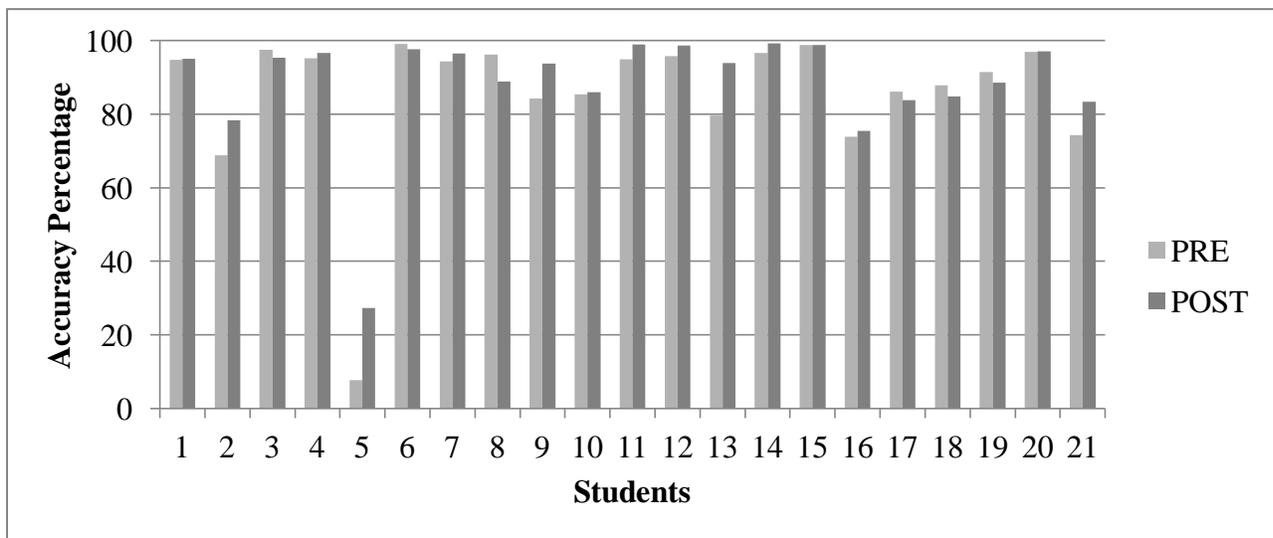


Figure 8. Individual student pre- and post- oral reading accuracy percentages.

Post-intervention data were also organized into three achievement categories: at or above benchmark, below benchmark, and well-below benchmark. eight students scored at or above benchmark, four students scored below benchmark, and nine students scored well-below benchmark (see Appendix S for individual DIBELS student achievement scores. The number of scores of at or above benchmark increased by one, the number of scores at below benchmark decreased by one, and the number of scores at well-below benchmark remained the same. Figure 9 illustrates the percentages of students in each achievement category for both pre- and post-intervention data.

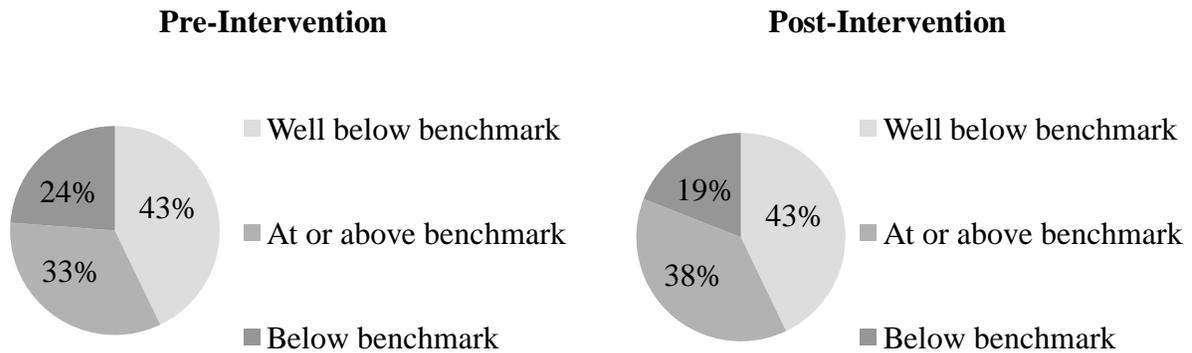


Figure 9. Percentage of students in each oral reading accuracy achievement category.

MDFS. To determine the effectiveness of repeated reading instruction after the intervention, the MDFS (2012) was administered at the conclusion of the intervention. The students’ automaticity was measured according to the MDFS sub-skill of smoothness and analyzed to determine if guided repeated reading instruction improved their ability to read automatically. The assessment was administered during the week of December 3, 2012.

Students’ automaticity was scored using an analytic scale of 1-4 to determine a level of automaticity as they orally read a passage aloud for one minute. The highest possible score a student could receive was a 4 and the minimum score was 1. The maximum recorded score was 4 and the minimum score was 2. The range was 2, the mean score was 3.24 and the median score was 3. The mode was 3. There was no student identified as an outlier for this set of data (see Appendix T for individual MDFS post-intervention scores). Figure 10 illustrates individual student pre- and post- intervention oral reading automaticity scores as measured by the MDFS.

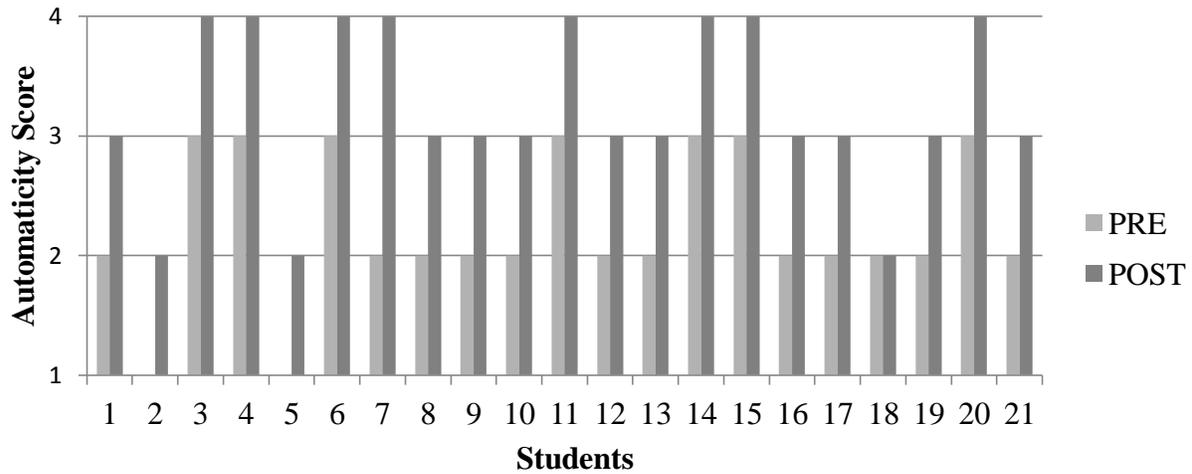


Figure 10. Individual student pre- and post- oral reading automaticity percentages

Post-intervention data were also organized into four achievement categories: at or above benchmark, benchmark, below benchmark, and well-below benchmark eight students scored at or above benchmark, 10 students scored benchmark, three students scored below benchmark, and no students scored well-below benchmark (see Appendix U for individual MDFS student achievement scores). The number of scores of at or above benchmark increased, the number of scores at benchmark increased, the number of scores at below benchmark decreased, and the number of scores at well-below benchmark decreased. Figure 11 illustrates the percentages of students in each achievement category for both pre- and post-intervention data.

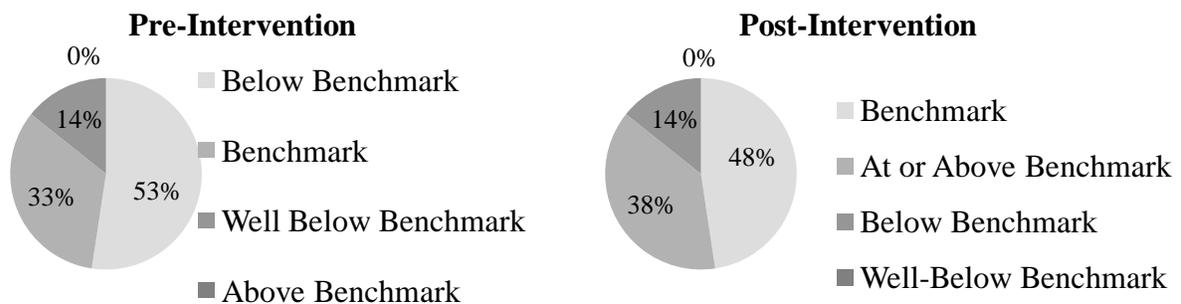


Figure 11. Percentage of students in each oral reading automaticity achievement category.

Data Analysis

In order to measure students' ability to read automatically, two oral reading assessments were administered before and after the implementation of the intervention. Those two assessments were the DIBELS (2012) and the MDFS (2012).

DIBELS. In order to measure the students' oral reading accuracy, the DIBELS ORF was administered before and after the implementation of the intervention. The score of 0.07% on the pretest was identified as an outlier because it was more than 1.5 times the interquartile (IQR) range below the lower quartile of the data. Before guided repeated reading instruction was implemented, the average accuracy percentage of the participants measured by the DIBELS was 89.31%. After the intervention, the mean accuracy percentage according to the DIBELS was 91.51%. These results were analyzed using a paired samples *t*-test with an alpha level set at 0.5. This analysis did not reveal a significant difference between the pre-and post-intervention oral reading accuracy scores, $t(20) = 2.093$; $t \text{ Stat} = -1.84$; $p < .05$. The mean increased 2.20% which was not a significant increase (see Appendix V for the complete results). The *t*-test results for oral reading accuracy are presented in Figure 12.

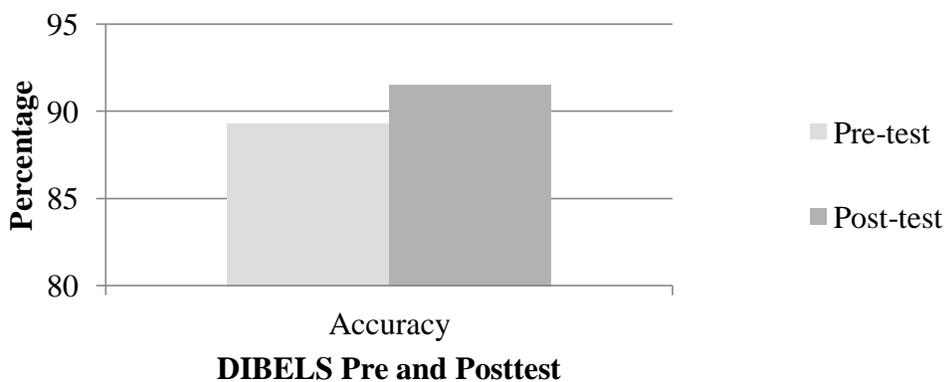


Figure 12. DIBELS pre- and posttest results.

MDFS. In order to measure the students’ oral reading automaticity, the MDFS using the sub-skill of smoothness was administered before and after the implementation of the intervention. Before guided repeated reading instruction was implemented, the average automaticity of the participants measured by the MDFS sub-skill of smoothness was 2.24. After the intervention, the mean accuracy percentage according to the MDFS sub-skill of smoothness was 3.24. These results were analyzed using a paired samples *t*-test with an alpha level set at $p < .001$. This analysis revealed a highly significant difference between the pre-and post-intervention oral reading automaticity scores, $t(21) = 3.85$; $t\ Stat = -14.49$; $p < .001$. The mean increased 1 on the posttest scores which was a highly significant increase (see Appendix W for the complete results). The *t*-test results for oral reading automaticity are presented in Table 1.

Table 1

Results Obtained from *t*-test for MDFS Oral Reading Automaticity

<u>Pre-test</u>		<u>Post-test</u>		<i>t</i>	<i>t Stat</i>	<i>p</i>
N	Mean	N	Mean			
21	2.24	21	3.24	3.85	-14.49	.000000000045385

$p < .001$

Subpopulations

The DIBELS (2012) oral reading accuracy and MDFS (2012) oral reading automaticity scores of subpopulations were also analyzed to determine if there were any relationships in the findings in terms of gender and Special Education services received. Pretest and posttest scores were compared within each subpopulation to determine if there were significant differences in growth.

DIBELS for gender. The DIBELS oral reading accuracy scores were noted with regards to gender. The score of 0.07% was identified as an outlier because it was more than 1.5 times the interquartile (IQR) range below the lower quartile of the data. The differences in the pre- and post-intervention mean scores of female students was 2.74 while the difference in the mean scores of male students was 1.77. Oral reading accuracy scores for females increased .97 points more than oral reading accuracy scores for males (see Appendix X for male and female pre- and post-intervention accuracy scores). These results were analyzed using a paired-samples *t*-test assuming unequal variances with an alpha level set at .05, and this analysis did not reveal a significant difference between the growth in male and female oral reading accuracy scores (see Appendix Y for complete results). Figure 13 illustrates the pre- and post-intervention means of male and female students for oral reading accuracy scores.

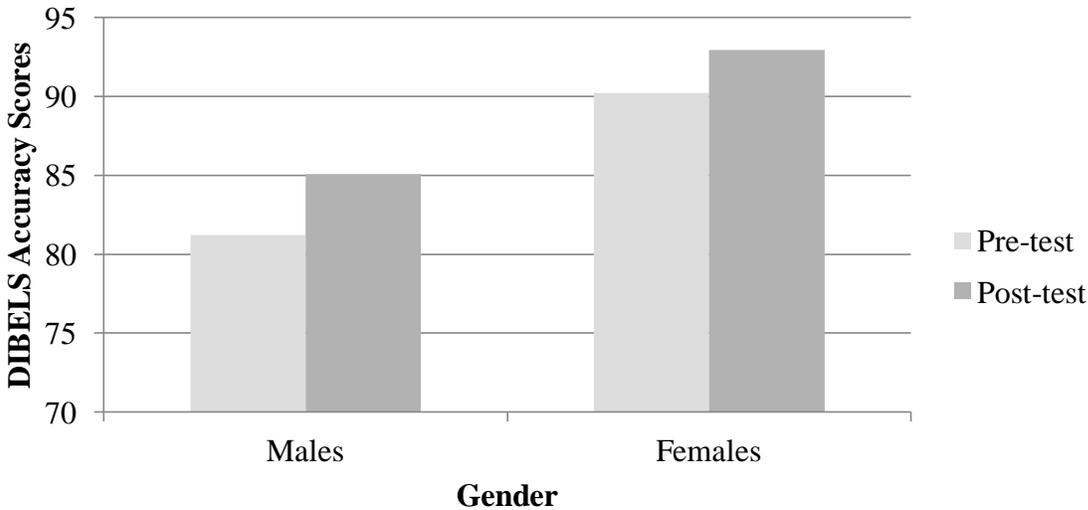


Figure 13. Pre- and post- DIBELS oral reading accuracy scores by gender.

MDFS for gender. The MDFS oral reading automaticity using the sub-skill of smoothness scores were noted with regards to gender. There was no score identified as an outlier

in the data. The differences in the pre- and post-intervention mean scores of female students was 1.11 while the difference in the mean scores of male students was 0.92. Oral reading automaticity scores for females increased 0.19 more than oral reading automaticity scores for males (see Appendix Z for male and female pre- and post-intervention automaticity scores). These results were analyzed using a paired-samples *t*-test assuming unequal variances with an alpha level of .05, and this analysis did not reveal a significant difference in the change in oral reading automaticity according to gender (see Appendix AA for complete results). Figure 14 illustrates the pre- and post-intervention means of male and female students for oral reading automaticity scores.

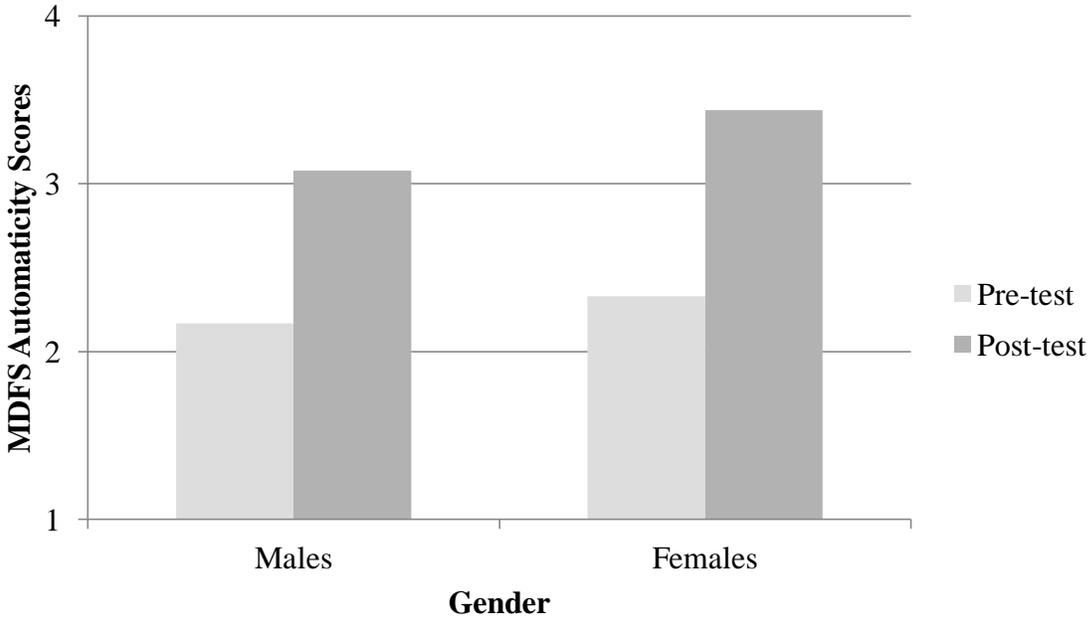


Figure 14. Pre- and post-MDFS automaticity scores by gender.

DIBELS for Special Education services received. The DIBELS oral reading accuracy scores were noted with regards to Special Education services. The score of 68.75% in students not receiving Special Education services was identified as an outlier because it was more than

1.5 times the interquartile (IQR) range below the lower quartile of the data. The differences in the pre- and post-intervention mean scores of students receiving Special Education services was 7.48 while the difference in the mean scores of students not receiving Special Education services was 1.20. Oral reading accuracy scores for students receiving Special Education services increased 6.28 more than oral reading accuracy scores for students non receiving Special Education services (see Appendix BB for Special Education students and non-Special Education students' pre- and post-intervention accuracy scores). These results were analyzed using a paired-samples *t*-test assuming unequal variances with an alpha level of .05, and this analysis did not reveal a significant difference between the growth in Special Education students and non-Special Education students' oral reading accuracy scores (see Appendix CC for complete results). Figure 15 illustrates the pre- and post-intervention means according to Special Education students and non-Special Education students for oral reading accuracy scores.

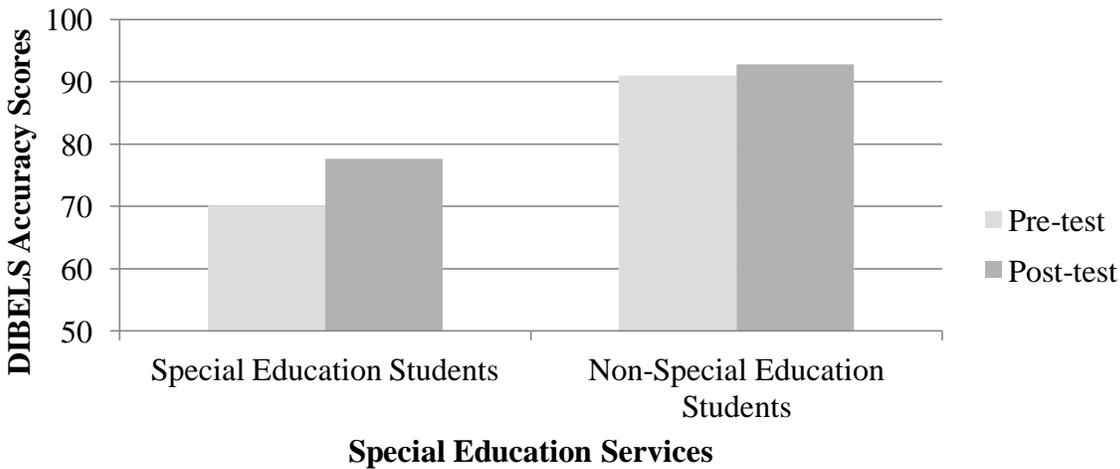


Figure 15. Pre- and post-DIBELS accuracy scores by Special Education services.

MDFS for Special Education services received. The MDFS oral reading automaticity using the sub-skill of smoothness scores were noted with regards to Special Education services. There was no score identified as an outlier in the data. The differences in the pre- and post-

intervention mean scores of Special Education students was 0.83 while the difference in the mean scores of non-Special Education students was 1.07. Oral reading automaticity scores of Special Education students increased 0.24 more than oral reading automaticity scores for non-Special Education services (see Appendix DD for Special Education and non-Special Education students’ pre- and post-intervention automaticity scores). These results were analyzed using a paired-samples *t*-test assuming unequal variances with an alpha level of .05 and this analysis did not reveal a significant difference between the growth in Special Education students and non-Special Education students’ oral reading automaticity scores (see Appendix EE for complete results). Figure 16 illustrates the pre- and post-intervention means of Special Education students and non-Special Education students for oral reading automaticity scores.

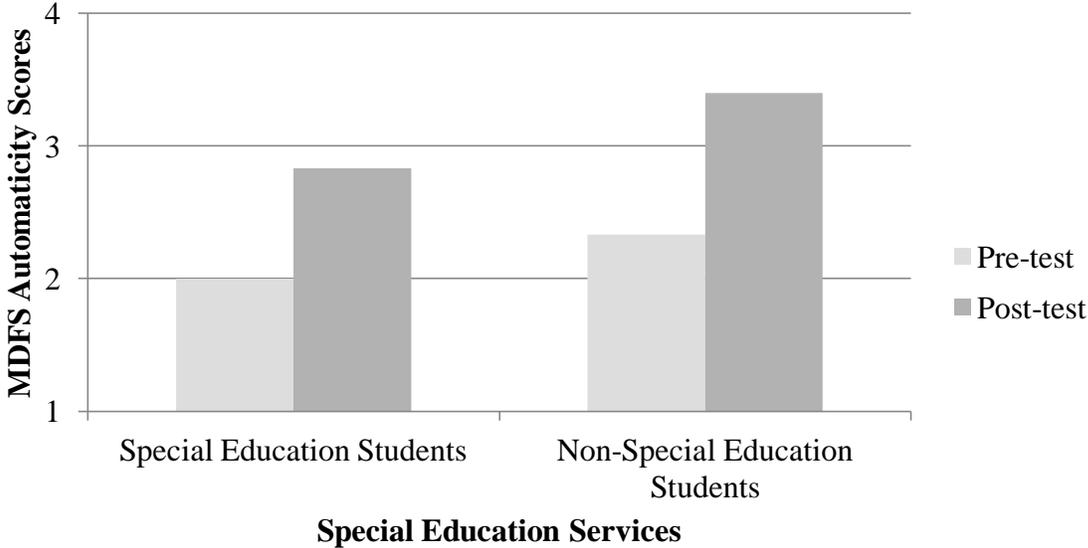


Figure 16. Pre- and post- MDFS automaticity scores by Special Education services

Anecdotal Records

Anecdotes related to automaticity were recorded during the eight-week intervention to addressing the research question, “Does focused instruction along with reading passages multiple

times improve students' ability to read aloud automatically and effortlessly?" Records were analyzed and then organized into four different categories according to patterns and themes which emerged. These categories were behaviors seen in groups of varying sizes and ability levels, importance of instructional level text, an increase in metacognitive abilities while reading and an increased understanding of the text's meaning (see Appendix FF1, FF2, FF3, & FF4 for observed anecdotes).

Throughout the course of the intervention, students' behaviors varied depending on the type of group setting and the ability of students in the groups. Students were more actively engaged while being instructed in a whole-group setting. For example, on October 10, 2012 students were very enthusiastic to volunteer letters, digraphs, and combinations that make more than one sound when learning that about the flip a sound decoding strategy. Also, on October 17, 2012 students were very attentive while watching student 3 model the correct way to read a passage multiple times with a partner in a fishbowl conference and later incorporated the techniques modeled when working with their partners. Additionally, on October 31, 2012 while student 1 modeled how to self-correct difficult words, the whole group actively engaged in asking her at the end of each sentence "Did everything make sense?" When students worked in groups of two or three of similar ability levels, they required lots of assistance to remain on task. For example, on October 17, 2012 while reading with a peer, students 4, 8, 11, 12, 15, and 18 struggled to remain on task and spent their time playing with their partner. Additionally, on November 1, 2012 students were placed in groups of two or three to find phrases in connected text. Students 4, 7, 8, 12, 15, 18, and 20 chose to work independently instead of working together, and several struggled with staying on-task. Also, on November 13, 2012 while reading a reader's theater script, students 2 and 6 became very frustrated when their partner, student 11,

would not read loudly or pay attention when reading resulting in a verbal exchange with hurtful words from all three students. However, when students worked in group of two or more of varying ability levels, there was more success. For example on November 13, 2012 student 19 explained how his partner had helped their group by saying “We didn’t know what “solo” meant, but student 14 told us all that you wanted us to read together there.” Additionally, on November 14, 2012 when placed in a group to read a reader’s theater, students 9 and 11 struggled to get started. After reminding them of the reader’s theater format, they were allowed more time to practice and finally figured out how to read the text together. When listening to them read, student 11 was observed keeping student 9 on task while saying “It’s your turn to read now.” Students showed growth when working independently from the beginning to the end of the intervention. For example, on October 8, 2012 when working on noticing errors while reading, students were actively engaged during guided instruction, but when working independently seemed confused and needed additional help. However, by November 8, 2012 while selecting and practicing their chosen poem for the poetry slam students remained on-task while working independently. Additionally, on November 29, 2012 when independently engaged in repeated reading of a self-selected page from the basal text, most students remained on task for the duration of their independent practice.

The importance of instructional level text became evident throughout the time of the intervention. When students were reading text that was too easy, they were not able to practice strategies being learned. For example, on October 8, 2012 students 3 and 14 were not able to practice noticing errors in text because the text was too easy for them and they made no errors while reading. Similarly, on October 23, 2012 students 6, 9, and 15 were not able to practice self-correcting as they read because the text was too easy and they were not making any errors.

Conversely, if the text was too hard, students became frustrated while reading and were spending more time decoding unfamiliar words than reading the passage multiple times. For example, on October 24, 2012 student 5 used a pre-primer text and for the first time started noticing errors and when the words he was reading didn't make sense. On October 26, 2012 three different levels of song lyrics were used for weekly progress monitoring and there was a positive difference in students' ability to read the text smoothly. However, on November 27, 2012 when student 5 practiced repeated reading with a non-fiction text that was too challenging he tried at first, but quickly became disengaged. When self-selecting text, students were more actively engaged during instruction when the text they chose was more instructionally appropriate. For example, on November 29, 2012 students had much success while practicing repeated reading using a fiction text by selecting a page from the basal story to read multiple times. Conversely, on November 30, 2012 students self-selected a text from the classroom library for repeated reading practice, and those who selected texts that were too easy quickly became bored and strayed off-task. Students 1, 2, 9, 13, and 21 chose texts that were too easy and when reading orally they were observed not paying attention to the text which resulted in more errors and less smoothness.

Throughout the course of the intervention, students' metacognitive abilities while reading improved. Students were able to describe the characteristics of automatic and non-automatic oral reading. On October 20, 2012 students worked together to create an anchor chart of automatic and non-automatic reading characteristics. Words used to describe automatic reading were: smooth, like ocean waves, no mistakes, no skipping lines, and sounds like talking. Words used to describe non-automatic reading were: mistakes, like a robot, skipping lines, skipping words, no self-correcting, not like a human, and doesn't sound like real talking. The students' abilities to

describe and defend automatic and non-automatic reading improved. For example, after hearing *An Autumn Greeting* being read on November 5, 2012, student 4 commented that “You were self-correcting when you read, which is a good thing, but that made it not sound automatic.” Additionally, student 19 agreed that the reading was non-automatic and explained that it was because “You read this and then went back and read it again.” Students’ abilities to describe and defend automatic and non-automatic reading when hearing a peer read also improved. On November 5, 2012 student 13 explained that she didn’t feel the reading of her peer was automatic because “it sounded broken.” In the beginning of the intervention, observations made during oral reading showed that some students did not notice errors made while reading. For example, on October 11, 2012 students 2 and 5 did not recognize several errors even though the words they read made no sense in the context of the sentence. Similarly, on October 30, 2012, students 13 and 21 were observed sounding out errors and continuing on even though their decoding was unsuccessful and the words they read still did not make sense in the text. Students gradually began to notice more errors throughout the course of the intervention. For example on October 17, 2012 while working with partners, students noticed more errors while reading. Also, On October 23, 2012 student 1 commented when trouble words she had found earlier in the text were encountered in the text again saying, “There that word is again, just circle it!” Additionally, on November 15, 2012 student 2 noticed the errors her partner, student 18, was making while reading and asked “Does that look right? Make sense? Let’s go back to the beginning.” When Student 18 self-corrected a difficult word, Student 2 pointed out what he did and offered her praise by saying, “You know you just self-corrected!” to which he replied “Yay!” Throughout the intervention, students increasingly began to describe their thinking while reading. For example, on October 23, 2012 students were observed actively using decoding strategies while

reading orally, but needed prompting to get them to explain how they were solving the unknown words. Then on October 31, 2012 student 21 explained how he decoded the word “squeaky” by saying “I sounded it out, but it still didn’t work out, so I flipped the sound.” Then on November 20, 2012 student 11 described his thoughts while decoding the word “domesticated” by saying “I see “dome” in it, and “cat”, and “ed” ...” Teacher and whole group created anchor charts served students as reference points when determining how to decode unfamiliar words. For example, on October 24, 2012 most every student was observed referring to the anchor charts when deciding how to decode unfamiliar words. In addition, on October 30, 2012 everyone was actively using decoding strategies while reading connected text, and the anchor charts were used often as a reference.

Eventually, students moved beyond reading the words to thinking about the meaning of the text. Students began to notice when the words they were reading didn’t make sense. For example, On October 24, 2012 student 5 circled words in the pre-primer text he was reading that didn’t make sense. This was the first time he had ever recognized any errors. During the course of the intervention, students began to discuss observations made while reading. For example, on October 30, 2012 student 4 noticed that the words “Wynken”, “Blynken”, and “Nod” were capitalized in the text and commented saying “Wynken, Blynken, and Nod must be the names of the people in the poem, because their names have capital letters.” Student 8 added to her observation saying “and Wynken, Blyken, and Nod are all things that you do too!” as he demonstrated winking, blinking, and nodding. Additionally, on November 30, 2012 when student 5 was working diligently to decode the text *Why a Dog?* he sounded out the words “Dogs Slobber” and got tickled when he understood the meaning. Students also began to make connections with other texts that had been read. For example, On November 5, 2012 student 7

noticed in the poem *An Autumn Greeting*, the words “Wind” and “Leaves” were capitalized and asked “Why?” Student 8 responded with “the Wind and the Leaves are the characters in this poem like Wynken, Blynken, and Nod were the characters in that poem. That’s why they are capitalized.”

Summary

This chapter presented an analysis of all data collected for the purpose of measuring if students’ reading accuracy and automaticity scores after guided repeated reading instruction were significantly higher than their scores prior to guided repeated reading instruction in one second –grade classroom.. The next chapter provides conclusions and implications drawn from the study, recommendations for further implementations and further research, as well as limitations imposed on the research.

Chapter V

Discussion

The ability to read automatically is an important skill that will enable students to become more fluent readers. Researchers (Hudson, et al., 2012; Klauda & Guthrie, 2008; Wanzek et al., 2010), experts (LaBerge & Samuels, 1974; Rasinski, 2012), and literature (NRP, 2000; Penner-Wilger, 2008) highlight the importance of reading text automatically and the negative impact of student deficiencies in this area. Additionally, Rasinski (2012) and literature by the NRP (2000) suggest that there should be a shift in the focus of reading instruction from reading faster to automaticity which is one of the real keys to fluency. Other researchers (Hudson et al., 2011; Lo et al., 2011) and literature (CCSSI, 2012; NRP, 2000; Rasinski, 2003; Samuels, 1979) posit that repeated reading has been shown to increase students' oral reading automaticity. Additionally, research by Roundy and Roundy (2009) and literature by Ming and Dukes (2008) indicate that repeated reading is an instructional strategy that benefits all learners. The purpose of this study was to examine the effects of repeated reading instruction on the oral reading automaticity of one group of second-grade students.

This study was designed to address the research question, "Does repeated reading instruction improve oral reading automaticity in one second-grade classroom?" The results of the present study suggest that focused instruction along with reading passages multiple times improved students' abilities to read text automatically and effortlessly. The results obtained by analyzing the weekly average of daily scores revealed that scores improved with many variances from the beginning to the end of the eight-week intervention. The highest weekly average of daily scores was 88.21% which occurred on week 4 and the lowest weekly average of daily scores was 43.34% which occurred on week 2. Students scored lowest when being introduced to

repeated reading with words, phrases, and connected text, and students scored highest the first week of using poems to practice repeated reading.

The results obtained by analyzing weekly MDFS (2012) automaticity progress monitoring showed a steady increase in scores throughout the intervention with the exception of week 5 in which accuracy scores were notably higher. The highest weekly MDFS scores were 85% which occurred on week 8, and the lowest weekly MDFS scores were 60.53% which occurred on week 2. Students scored highest on the week when practicing repeated reading using fiction text, and students scored lowest when being introduced to repeated reading with words, phrases, and connected text. The second highest MDFS score was 77.78% and occurred on week 5 which was the week during the intervention in which the scores were notably higher. This second highest score occurred during the second week of using poetry to practice repeated reading and in which the students participated in a Poetry Slam to perform a self-selected poem for their classmates.

The results obtained analyzing bi-weekly DIBELS (2012) accuracy progress monitoring showed an increase in scores throughout the intervention. The highest DIBELS scores were 90.86% and occurred on week 8, and the lowest DIBELS scores were 82.93% and occurred on week 2. Students' accuracy scores were highest on the last progress monitoring of the intervention, and students accuracy scores were lowest on the first week of progress monitoring of the intervention.

The DIBELS pre- and post-tests did not reveal a significant increase in student's abilities to read with accuracy. The results showed that repeated reading instruction is equally effective for both males and females. The average means of both male and female oral reading accuracy scores improved from pre- to post-test; however, one group did not grow significantly more than

the other. The average means of both students receiving Special Education services and students not receiving Special Education services oral reading accuracy scores improved from pre- to post-test; however, one group did not improve significantly more than the other.

Before the study, there were seven scores categorized as at or above benchmark, five scores categorized as below benchmark, and nine scores categorized as well-below benchmark. After the study, eight scores were categorized as at or above benchmark, four scores were categorized as below benchmark, and nine scores categorized as well-below benchmark.

The MDFS sub-skill of smoothness pre- and post-tests revealed a highly significant increase in student's abilities to read with automaticity. 95% of the participants improved in reading automatically after repeated reading instruction. Most students' scores improved regardless of their gender or whether they receive Special Education services. The average means of both male and female oral reading accuracy scores improved from pre- to the post-test; however, one group did not grow significantly more than the other. The average means of both students receiving Special Education services and students not receiving Special Education services oral reading automaticity scores improved from pre- to the post-test; however, one group did not improve significantly more than the other.

Before the study, there were no students categorized as at or above benchmark, seven students were categorized as benchmark, 12 students were categorized as below benchmark, and two students were categorized as well-below benchmark. After the study there were eight students categorized as at or above benchmark, 10 students were categorized as benchmark, three students were categorized as below benchmark, and no students were categorized as well-below benchmark.

Results were also obtained by reviewing anecdotal records and finding common themes. Behaviors were noted as students worked in groups of various sizes and ability levels. Students were most engaged during whole group activities and while working in groups of two or three of different ability levels. When students were placed in groups of two or three with students of similar ability level, they required more guidance. At the beginning of the intervention, students struggled when working independently, but by the conclusion they were able to work independently to practice reading passages multiple times. Additionally, students gained confidence and were less frustrated when reading texts that were at their instructional level. At the beginning of the intervention, students did not notice errors made while reading and needed prompting to explain their thinking when decoding unknown words. By the end of the intervention, students were more successful at noticing errors being made by themselves and their peers and were more frequently overheard discussing their thinking while reading. Throughout the intervention, students became more cognizant of when words read incorrectly didn't make sense in the context of the text. Additionally, students began to move beyond reading words as units and towards making meaning from the text as a whole.

Conclusions

Based on the results of this study, it appears that repeated reading instruction did improve these students' abilities to read automatically. Results of the present study revealed that these students were able to read text more automatically after focused instruction along with reading passages multiple times for eight-weeks.

DIBELS (2012) pre- and posttest scores did not reveal a significant increase in oral reading accuracy. Some students' accuracy levels increased while others decreased resulting in achievement categories remaining mostly the same from pretest to posttest. Male and female

scores improved equally from pre- to posttest. Special Education students and non-Special Education students' scores improved equally from pre- to posttest. Repeated reading instruction increased oral reading automaticity equally for males, females, Special Education students, and non-Special Education students.

MDFS (2012) pre- and posttest scores revealed a highly significant difference in oral reading automaticity scores after repeated reading instruction. All students with the exception of one that remained the same, improved in reading text automatically. Male and female scores improved equally after repeated reading instruction. Special Education students and non-Special Education students also improved equally in oral reading automaticity from pre- to posttest. Repeated reading increased oral reading automaticity equally for males, females, Special Education students, and non-Special Education students. Before the intervention, there were no students categorized as at or above benchmark, but after the intervention there were eight students categorized as at or above benchmark. Additionally, before the intervention there were two students in the well-below benchmark achievement category, but after the intervention, there were no students categorized as well-below benchmark.

Weekly and bi-weekly progress monitoring were also recorded throughout the study. The bi-weekly DIBELS (2012) scores showed that repeated reading instruction increased oral reading accuracy after eight-weeks. The lowest recorded DIBELS accuracy score was during week 2, which was the first week of progress monitoring, and the highest score was recorded on week 8, which was the last week of progress monitoring. Weekly progress monitoring of automaticity occurred with the MDFS (2012) sub-skill of smoothness. These results indicate a steady increase in reading automaticity with a notable increase in scores on recorded on week 5 of the intervention. Week 5 was the second of two weeks using the genre of poetry to practice repeated

reading and students ended the week with a Poetry Slam in which they performed a self-selected poem for the whole group.

Weekly averages of daily scores were also recorded throughout the study. These scores varied from week to week, but showed an overall improvement from week 1 to week 8. The highest weekly average occurred on week 4 which was the first of two weeks using the genre of poetry to practice repeated reading. The lowest recorded average was on week 2 when students were introduced to the repeated reading strategy using words, phrases, and connected text.

These results indicate an overall improvement in the students' abilities to read with automaticity, from the beginning of the intervention to the end of the intervention. The overall improvement of all scores and anecdotal records suggest that students benefitted from focused instruction along with reading passages multiple times. Repeated reading was more effective in a whole group setting or with groups of two or three of different ability levels. Repeated reading also improved students' abilities to work independently throughout the eight-week period. Students' metacognitive ability and ability to make meaning from the text improved throughout the eight-week intervention. These results are similar to the study conducted by Hudson et al. (2012) which found that practice in lower level skills like blending and decoding increase accuracy and when accuracy is increased, students move towards reading text automatically. Students' exhibited increased confidence and decreased frustration when instructional leveled texts were used. The present study results also support the findings of Roundy and Roundy (2009) who found that repeated reading can increase student's confidence and provides practice which serves to increase attitudes about reading. It can be concluded that students' reading automaticity improved after focused instruction along with reading passages aloud multiple times for eight- weeks.

Limitations

As with any study there were factors over which the researcher had no control that may have affected the results of this study. It is important to interpret the findings of this study with full knowledge of these limitations. Some factors may have positively impacted the results, and other may have negatively impacted the results. There were also factors which had an unknown impact on the results.

Factors which may have boosted oral reading automaticity were additional reading instruction from other teachers, additional phonics instruction, and natural maturation. During the intervention, six students received additional reading instruction from other certified teachers as either Tier II intervention or in accordance with their Individualized Education Plans. Students also received additional daily phonics instruction with the Saxon phonics program which may have increased their ability to decode words automatically, thereby boosting post-intervention scores. Finally, this study was conducted over an eight-week period, so it is possible that some of the students' growth could be attributed to natural maturation.

Factors which may have negatively impacted automaticity scores include student disabilities and interference during the intervention. Several students in this class have speech-related issues. Student 10 has articulation errors, student 16 has articulation errors and phonological awareness issues, and students 5, 9, and 11 have problems with language and pragmatic skills. Additionally, student 18 has a 504 plan for behavioral concerns and students 5 and 9 have weekly sessions with an on-site therapist. Students 5 and 9 also meet twice weekly with an occupational therapist. Each of these disabilities may have negatively impacted these students' abilities to read text automatically and effortlessly. This intervention took place during the months of October and November which interfered with regular implementation of the

intervention. During the intervention period students celebrated both the Halloween and Thanksgiving holidays. Students were preoccupied with the holidays and breaks from school and both of these factors may have negatively impacted students' abilities on daily and weekly tasks.

Factors which may have had an unknown impact towards students' abilities to read automatically and effortlessly include subjective grading on the MDFS daily assessments, pretest, and posttest and the discontinuation of mid-morning snack during the time of the intervention. The MDFS scores were obtained using a subjective grading system which might reflect some bias from the researcher. Additionally, students had been receiving a mid-morning snack since the beginning of the school year. During the second week of the intervention, the mid-morning snack was discontinued in compliance with a recommendation from the school district's wellness committee. It is unknown whether the lack of a mid-morning snack had an effect on students' attentiveness during the intervention as well as their ability to read with automaticity.

Implications

The results of this study imply that repeated reading instruction may increase students' oral reading automaticity. Results suggest that focused instruction along with reading passages multiple times does increase students' ability to read text automatically. Furthermore, it appears that having students read passages multiple times lessens the amount of time needed for decoding unfamiliar words, hence increasing automaticity. Results suggest that repeated reading instruction may be equally effective for males, females, Special Education students, and non-Special Education students.

Scores taken during the intervention suggest that repeated reading is more effective with certain genres of text such as song lyrics, poetry, and non-fiction text and when using the same

genre of text for two weeks. Anecdotal records taken during this study imply that students were more successful when instruction occurred in a whole group setting or when placed in groups of two or three of different ability levels. Students' abilities to work independently also increased throughout the intervention suggesting that more time allowed reading passages independently results in increased ability to work independently. When students used instructional level texts throughout the intervention, it was observed that their frustration when reading decreased and confidence levels increased. Students' increasingly described and discussed strategies being used to decode difficult words. Repeated reading helped increase students' metacognitive abilities while reading. Additionally, students' became more successful at noticing their reading errors and when the words they were reading did not make sense in the context of the sentence. Furthermore, students began to comment on their observations related to the text's meaning. Repeated reading develops students abilities to make meaning from the text being read. As indicated by the DIBELS and MDFS post-intervention scores, reading passages multiple times increased students' abilities to read aloud automatically and effortlessly.

Recommendations

Based on the results of the present study, recommendations are made regarding future intervention in the classroom and future research.

For the classroom. It is recommended that focused instruction along with students reading passages multiple times be used with all groups of students to improve their ability to read text automatically and effortlessly. Since students improved in their ability to read automatically, it is recommended that teachers use repeated reading to improve all students' ability to read text automatically. Because students showed higher weekly averages when using certain genres of text for practicing repeated reading, it is recommended that teachers include a

variety of genres, but especially song lyrics, poetry, and fiction text. Not only does repeated reading improve oral reading automaticity, but it can be used effectively in several situations. Repeated reading should be used in whole group settings, with groups of two or three of different abilities, and independently. Additionally, repeated reading can be used to increase students' confidence and attitudes about reading. It is recommended that students practice repeated reading with instructional level text as well as be given guidance on how to choose an appropriate leveled text when self-selecting. Repeated reading increases students' metacognitive abilities and ability to make meaning from the text while reading. The use of teacher and students created anchor charts listing strategies to use when reading, frequent reminders to make sure what they are reading makes sense, and providing opportunities for students to discuss their thinking are highly recommended.

For further research. Recommendations for future research include implementing with other grade levels, duration of the study, direct instruction on decoding strategies, length of time with each genre, and impact of repeated reading in other content areas. Since repeated reading improved second-grade students' ability to read automatically, it is suggested that repeated reading be used with other grade levels to test if the results are similar for students on higher and lower grades. Because students' oral reading automaticity increased from the pre- to the posttest, but there was not a significant difference in oral reading accuracy, it is suggested that repeated reading be implemented over a longer period of time, In order for students to improve in oral reading accuracy, direct instruction on multiple strategies to decode unfamiliar words is recommended to provide students more strategies to use when unknown words are encountered. Since students daily scores improved when practicing repeated reading with song lyrics, poetry, and fiction text, it may be beneficial to increase the length of time spent using these genres.

Furthermore, it is recommended that repeated reading be used with other genres and in other content areas to determine if repeated reading is a strategy that can be used effectively with them as well.

It is recommended that repeated reading be implemented in lower elementary grades due to the foundations of reading that are being taught at this level. It is also recommended that repeated reading instruction be used along with direct reading instruction to supplement and enhance the reading curriculum.

Summary

This chapter has examined the conclusions of the study, along with the implications of the study, and recommendations for further research. Additionally, the possible limitations of the study were discussed. Overall, conclusions and implications from the present study suggest that focused instruction along with students reading a passage multiple times does improve their ability to read aloud automatically and effortlessly. These results that showed repeated reading instruction improved oral reading automaticity in this study may be useful for other elementary teachers.

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Appendix A**IRB Approval Letter**

September 26, 2012

MEMORANDUM

TO: Dorothy Ivey
Linda Eilers

FROM: Ro Windwalker
IRB Coordinator

RE: New Protocol Approval

IRB Protocol #: 12-09-104

Protocol Title: *The Effects of Repeated Reading Instruction on Oral Reading Automaticity in a Second-Grade Classroom*

Review Type: EXEMPT EXPEDITED FULL IRB

Approved Project Period: Start Date: 09/26/2012 Expiration Date: 09/25/2013

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. This form is available from the IRB Coordinator or on the Research Compliance website (<http://vpred.uark.edu/210.php>). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

This protocol has been approved for 21 participants. If you wish to make *any* modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior to* implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 210 Administration Building, 5-2208, or irb@uark.edu.

Appendix B

Letter from School

Gentry Primary School

... a strong foundation for lifelong learning.

Gayla A. Wilmoth, Principal

Mailing Address: 201 South Giles Avenue

Physical Address: 1295 Pioneer Lane

Gentry, AR 72734

Phone 479-736-2380

FAX 479-736-0316

Date: September 17, 2012

To Whom It May Concern:

I am aware that Dorothy Ivey is conducting an action research project entitled "The Effects of Repeated Reading Instruction on Oral Reading Automaticity in a Second-Grade Classroom" at my school, Gentry Primary School in Gentry, AR. This project has been approved by Dr. Linda H. Eilers, the University Professor, and Dorothy Ivey has my permission to conduct this project pending approval of the University of Arkansas Institutional Review Board.

Respectfully,

Gayla Wilmoth
Principal

Appendix C1**Parent Letter**

Peabody 216 ♦ Fayetteville, Arkansas 72701 ♦ (479) 575-4209 ♦ (479) 575-6676 (Fax)
Department of Curriculum & Instruction, College of Education & Health Professions

Dear Parent/Guardian

I am currently working on a Master's degree in Elementary Education at the University of Arkansas. As part of the requirements for the M. Ed. program I am conducting a research project. I will be conducting my student project to determine the effects of repeated reading instruction on oral reading automaticity.

Your child will read a passage and be evaluated using Rasinski's Multidimensional Fluency Scale to determine his/her smoothness and pace while reading connected text and the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) to determine his/her reading rate and accuracy levels. Your child will participate in daily instruction that will implement repeated reading strategies targeted at increasing oral reading automaticity while reading a connected text. This instruction will take place 45 minutes a day, four days a week, for nine weeks. The potential benefit of the project is to improve your child's oral reading automaticity.

While each child will participate in the explicit fluency instruction activities, I can only include your child's work and scores in my project findings with your signed consent. Participation is voluntary and there are no negative consequences if you choose to not let your child participate. By signing and returning the attached form, you grant permission for me to use your child's work and scores in the results of this project. Please note that confidentiality will be maintained and that your child's name will not be used in recording or reporting results. All results will be recorded and reported anonymously.

The attached informed consent form contains a more detailed description of this project. Please take time to read it over, read it with your child and discuss it thoroughly. Feel free to call me (479) 736-2380 regarding any questions you may have.

I am excited about the activities and lessons that I have planned for this project and look forward to getting to work with your child.

Sincerely,

Dorothy Ivey
University of Arkansas M. Ed. Candidate

Appendix C2**Parent Letter in Spanish**

Peabody 216 ♦ Fayetteville, Arkansas 72701 ♦ (479) 575-4209 ♦ (479) 575 a 6676 (Fax)
Departamento de Currículo e Instrucción, Colegio de Profesionales de Educación y Salud

Estimado Padre / Tutor

Actualmente estoy trabajando en un título de Maestría en Educación Elemental de la Universidad de Arkansas. Como parte de los requisitos para la Ed M. Programa que estoy llevando a cabo un proyecto de investigación. Voy a llevar a cabo mi proyecto de los estudiantes para determinar los efectos de la enseñanza de la lectura repetida en automaticidad lectura oral.

Su hijo va a leer un pasaje y se evaluó utilizando la Escala Multidimensional Fluidez Rasinski para determinar su / su suavidad y ritmo durante la lectura de texto conectados y los Indicadores Dinámicos de Habilidades Básicas de Alfabetización Temprana (DIBELS) para determinar su / su velocidad de lectura y niveles de precisión. Su hijo participará en la instrucción diaria que implementará repetidas estrategias de lectura dirigidos a aumentar la automaticidad lectura en voz durante la lectura de un texto conectado. Esta instrucción se llevará a cabo 45 minutos al día, cuatro días a la semana, durante nueve semanas. El beneficio potencial del proyecto es mejorar la automaticidad de su hijo la lectura oral.

Si bien cada niño participará en las actividades de instrucción fluidez explícitas, sólo puedo incluir el trabajo de su hijo y las puntuaciones en mis conclusiones del proyecto con su consentimiento firmado. La participación es voluntaria y no hay consecuencias negativas si decide no permitir que su hijo participe. Al firmar y devolver el formulario adjunto, usted concede permisos para mí utilizar el trabajo de su hijo y puntajes en los resultados de este proyecto. Tenga en cuenta que se mantendrá la confidencialidad y que el nombre de su hijo no va a ser utilizado en la grabación o informar de los resultados. Todos los resultados serán registrados y reportados anónimamente.

El formulario de consentimiento informado adjunto contiene una descripción más detallada de este proyecto. Por favor, tome tiempo para leerlo otra vez, léalo con su hijo y discutir a fondo. No dude en llamarme (479) 736-2380 con respecto a cualquier pregunta que usted pueda tener. Estoy muy emocionado acerca de las actividades y las lecciones que hemos planeado para este proyecto y esperamos poder empezar a trabajar con su hijo.

Atentamente,

Dorothy Ivey
Universidad de Arkansas M. Ed. Candidata

Appendix D1

Informed Consent

Informed Consent

Title: The Effects of Explicit Fluency Instruction on Students' Oral Reading Rate and Accuracy in a Second-Grade Classroom

Researcher:

Dorothy Ivey, B.S.E., M.Ed., Graduate Student
 Dr. Linda H. Eilers, Faculty Advisor
 University of Arkansas
 College of Education and Health Professionals
 Department of Curriculum and Instruction
 216 PEAH
 Fayetteville, AR 72701-1201
 (479) 736-2380
 deivey@uark.edu

Compliance Contact Person:

Ro Windwalker, Compliance Coordinator
 Research and Sponsored Programs
 Research Compliance
 University of Arkansas
 ADMN 210
 Fayetteville, AR 72701-1201
 (479) 575-2208
 irb@uark.edu

Description: The present study is an action research project designed to determine if reading passages multiple times until a predetermined level of accuracy is met will improve students' ability to read aloud automatically and effortlessly. Before and after explicit instruction, students will read a passage and be evaluated using Rasinski's Multidimensional Fluency Scale to determine their smoothness and pace while reading connected text and the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) to determine their reading rate and accuracy levels. Students will participate in daily instruction that will implement repeated reading strategies targeted at increasing oral reading automaticity while reading a connected text. This instruction will take place 45 minutes a day, four days a week, for nine weeks.

Risks and Benefits: There are no risks, other than those associated with regular classroom instruction, anticipated with this project. The potential benefits include improving your child's oral reading automaticity while reading connected text.

Voluntary Participation: Your child will participate in all classroom activities during this research project. However, the decision to allow your child's grades and scores to be used in recording and analyzing data for this project is completely voluntary.

Confidentiality: Your child's scores and grades will remain confidential throughout the project. All scores and grades will be recorded using a code. Neither your child nor his/her scores or grades will be personally identified.

Right to Withdraw: If you choose to allow your child's scores to be used now, but at any time and for any reason change your mind, you may withdraw your consent. In that case, your child's scores and grades would not be recorded in the project data. There would be no negative consequences for this decision.

Informed Consent: I, _____, have read the description of this study.
 (please print your name here)

I understand the purpose of the study, the procedures to be used, the potential risks and benefits, how confidentiality will be established and maintained, as well as the option to withdraw. I have read and discussed this study with my child _____.

(please print your child's name here)

My signature below indicates that my child and I freely agree for his/her scores and grades to be recorded and analyzed as a participant in this study.

 (Parent/Guardian Signature)

 Child/Participant Signature

 Date

Appendix D2

Consentimiento Informado

Consentimiento Informado

Título: Los resultados de la Instrucción Explícita en la fluidez, velocidad y precisión de la lectura en los estudiantes del Segundo Grado.

Investigador:

Dorothy Ivey, BSE, M.Ed., Estudiante Graduado
 Dr. Linda H. Eilers, Profesora Consejera
 Universidad de Arkansas
 Facultad Profesional en Educación y Salud
 Departamento de Currículo e Instrucción
 216 PEAH
 Fayetteville, AR 72701-1201
 (479) 736-2380
 deivey@uark.edu

Persona Cumplimiento de contacto:

Ro Windwalker, Coordinador de Cumplimiento
 Asesor de Investigación y Programas Patrocinados
 Cumplimiento de Investigación
 Universidad de Arkansas
 ADMN 210
 Fayetteville, AR 72701-1201
 (479) 575-2208
 irb@uark.edu

Descripción: El presente estudio es un proyecto de investigación diseñado para determinar si la lectura de pasajes en múltiples ocasiones hasta un nivel predeterminado de precisión se cumple mejorará la capacidad de los estudiantes para leer en voz alta automáticamente y sin esfuerzo. Antes y después de la instrucción explícita, los alumnos leerán un pasaje y evaluarse utilizando Multidimensional Escala Fluidez Rasinski para determinar su suavidad y ritmo durante la lectura de texto conectados y los Indicadores Dinámicos de Habilidades Básicas de Alfabetización Temprana (DIBELS) para determinar su velocidad de lectura y niveles de precisión. Los estudiantes participarán en la instrucción diaria que implementará repetidas estrategias de lectura dirigidos a aumentar la automaticidad lectura en voz durante la lectura de un texto conectado. Esta instrucción se llevará a cabo 45 minutos al día, cuatro días a la semana, durante nueve semanas.

Riesgos y beneficios: No existen riesgos distintos de los asociados a clases regulares, se anticipa con este proyecto. Los beneficios potenciales incluyen la mejora de la automaticidad de su hijo la lectura en voz durante la lectura de textos relacionados.

Participación voluntaria: Su hijo participará en todas las actividades en el aula durante este proyecto de investigación. Sin embargo, la decisión de permitir que las calificaciones de su hijo y los resultados que se utilizarán para el registro y análisis de datos para este proyecto es completamente voluntaria.

Confidencialidad: Los puntajes de su hijo y las calificaciones se mantendrá confidencial a lo largo del proyecto. Todas las puntuaciones y calificaciones serán registradas mediante un código. Ni su hijo ni su / sus calificaciones o grados será personalmente identificado.

Derecho de Retiro: Si usted decide permitir que las calificaciones de su hijo a usar ahora, pero en cualquier momento y por cualquier motivo cambia de opinión, puede retirar su consentimiento. En ese caso, las calificaciones de su hijo y las calificaciones no se registran en los datos del proyecto. No habría consecuencias negativas de esta decisión.

Consentimiento informado:

Yo, _____, he leído la descripción de este estudio.

(Por favor escriba su nombre aquí)

Entiendo que el propósito del estudio, los procedimientos a ser utilizados, los riesgos y beneficios potenciales, como la confidencialidad será establecida y mantenida, así como la opción de retirarse. He leído y discutido este estudio con mi hijo

 (Por favor, escriba el nombre de su hijo aquí)

Mi firma abajo indica que mi hijo y yo libremente de acuerdo a sus calificaciones y su / grados que se registró y analizó como participante en este estudio.

 Firma del Padre / Guardian)

 Niño / Participante

 Fecha Firma

Appendix E1

DIBELS Pre-Assessment Passages

Benchmark 1.1
DIBELS® Oral Reading Fluency

Mom's New Job

Yesterday my mom started her new job. Her job is to drive a	13
school bus every morning. She took driving classes to get ready	24
for her new job. She had to get a special license, too. She wears a	39
dark blue uniform with a yellow vest.	46
Now that she is driving a school bus, my mom has to get up	60
even earlier than we do. She has to be at work on time or the	75
children won't get to school on time. She does her best to get	88
everyone to school on time.	93
When I came down to the kitchen for breakfast yesterday,	103
Dad and Mom were eating cereal and drinking coffee together.	113
Since Mom has to leave early, I knew she wouldn't have time to	126
make my breakfast anymore. I sat down and fixed myself a bowl	138
of cereal.	140
"Did you make my lunch, Mom?" I asked.	148
"I made it for you," said Dad. "I made mom's and mine,	160
too."	161
"We're all going to take turns making lunches," Mom said.	171
"Next week you'll get to make all three lunches."	180
That afternoon when I came home from school, I smelled	190
something good. There was mom in the kitchen, taking chocolate	200
chip cookies out of the oven.	206
"I made a treat for our lunches tomorrow," she said. "Here,	217
you may have one."	221
"How was your second day on the job, Mom?" I asked.	232
"Just great, honey. I love my new job," she said.	242

Total words: _____ – errors: _____ = words correct: _____

_____ WCPM

_____ % ACCURACY

Appendix E2**DIBELS Pre-Assessment****Mom's New Job**

Yesterday my mom started her new job. Her job is to drive a school bus every morning. She took driving classes to get ready for her new job. She had to get a special license, too. She wears a

dark blue uniform with a yellow vest.

Now that she is driving a school bus, my mom has to get up even earlier than we do. She has to be at work on time or the children won't get to school on time. She does her best to get everyone to school on time.

When I came down to the kitchen for breakfast yesterday, Dad and Mom were eating cereal and drinking coffee together. Since Mom has to leave early, I knew she wouldn't have time to make my breakfast anymore. I sat down and fixed myself a bowl of cereal.

"Did you make my lunch, Mom?" I asked.

"I made it for you," said Dad. "I made mom's and mine, too."

"We're all going to take turns making lunches," Mom said.

"Next week you'll get to make all three lunches."

That afternoon when I came home from school, I smelled something good. There was mom in the kitchen, taking chocolate chip cookies out of the oven.

"I made a treat for our lunches tomorrow," she said. "Here, you may have one."

"How was your second day on the job, Mom?" I asked.

"Just great, honey. I love my new job," she said.

Appendix E3

DIBELS Pre-Assessment

Benchmark 1.2

DIBELS® Oral Reading Fluency

My Handprints

We have our handprints hanging on the wall at our house.	11
When my brother and I were little we made them for Mother's	23
Day we each pushed our hands into the wet clay. After the clay	36
dried, our teacher wrote our names on them. She made holes to	48
hang the handprints up. After they were finished, we gave them	59
to our mom. Mom said they were beautiful works of art.	70
Once we took a vacation to the Southwest. We saw how the	82
Zunis used their handprints to tell stories. We visited caves	92
where there were handprints all over the walls. The prints were	103
very, very old. Some were little and some were big. The Zunis	115
dipped their hands in colored clay that looked like paint. Then	126
they pressed their hands on the walls of the cave.	136
Each handprint was like writing a name on the wall. Today	147
the handprints are like history books. They tell the stories of the	159
people who used to live there. We didn't touch the handprints	170
because even one fingerprint could ruin them.	177
We wanted to bring home reminders of our visit. We went to	189
the Zuni gift shop. My mother bought a pin that is shaped like a	203
handprint. I bought a book about a boy my age. He lived in one	217
of the caves many years ago. The book told about how he lived	230
and how he helped his family.	236

Total words: _____ – errors: _____ = words correct: _____

_____ WCPM

_____ % ACCURACY

Appendix E4**DIBELS Pre-Assessment****My Handprints**

We have our handprints hanging on the wall at our house. When my brother and I were little we made them for Mother's Day. We each pushed our hands into the wet clay. After the clay dried, our teacher wrote our names on them. She made holes to hang the handprints up. After they were finished, we gave them to our mom. Mom said they were beautiful works of art.

Once we took a vacation to the Southwest. We saw how the Zunis used their handprints to tell stories. We visited caves where there were handprints all over the walls. The prints were very, very old. Some were little and some were big. The Zunis dipped their hands in colored clay that looked like paint. Then they pressed their hands on the walls of the cave.

Each handprint was like writing a name on the wall. Today the handprints are like history books. They tell the stories of the people who used to live there. We didn't touch the handprints because even one fingerprint could ruin them.

We wanted to bring home reminders of our visit. We went to the Zuni gift shop. My mother bought a pin that is shaped like a handprint. I bought a book about a boy my age. He lived in one of the caves many years ago. The book told about how he lived and how he helped his family.

Appendix E5**DIBELS Pre-Assessment****Benchmark 1.3**
DIBELS® Oral Reading Fluency**Meals on Wheels**

Last Friday I didn't have to go to school so my mom asked	13
me to go with her to deliver Meals on Wheels. Meals on Wheels	26
is for elderly people who have difficulty cooking for themselves.	36
Some of them don't have any children or family to look after	48
them. Volunteers bring meals to their homes. My mom	57
volunteers every Friday.	60
My mom and I went to the Meals on Wheels office and	72
picked up the dinners. The dinners had meat loaf, potatoes,	82
gravy, bread, salad, a piece of cake, juice, and milk. It made me	95
hungry to smell them. We set off in the car to deliver the dinners.	109
We were careful to wear our seat belts.	117
Mom let me carry the food up to the door. She introduced me	130
to each person. I put the food down on the table and opened the	144
milk and juice cartons. Some people were in wheelchairs and	154
some used walkers. Some could answer the door but not walk	165
very well. Everyone was nice. One lady was extra nice. She	176
asked my mom if I could have a piece of candy for helping.	189
Mom said I could.	193
Besides bringing a hot dinner, my mother checks to make	203
sure that each person is all right. Mom says sometimes the Meals	215
on Wheels volunteer is the only visitor who comes to their house	227
all week. I asked Mom if I could help again some time. I really	241
liked the people, and it made me feel proud to help. She smiled	254
and said yes.	257

Total words: _____ – errors: _____ = words correct: _____

_____ WCPM

_____ % ACCURACY

Appendix E6**DIBELS Pre-Assessment****Meals on Wheels**

Last Friday I didn't have to go to school so my mom asked me to go with her to deliver Meals on Wheels. Meals on Wheels is for elderly people who have difficulty cooking for themselves. Some of them don't have any children or family to look after them. Volunteers bring meals to their homes. My mom volunteers every Friday.

My mom and I went to the Meals on Wheels office and picked up the dinners. The dinners had meat loaf, potatoes, gravy, bread, salad, a piece of cake, juice, and milk. It made me hungry to smell them. We set off in the car to deliver the dinners. We were careful to wear our seat belts.

Mom let me carry the food up to the door. She introduced me to each person. I put the food down on the table and opened the milk and juice cartons. Some people were in wheelchairs and some used walkers. Some could answer the door but not walk very well. Everyone was nice. One lady was extra nice. She asked my mom if I could have a piece of candy for helping. Mom said I could.

Besides bringing a hot dinner, my mother checks to make sure that each person is all right. Mom says sometimes the Meals on Wheels volunteer is the only visitor who comes to their house all week. I asked Mom if I could help again some time. I really liked the people, and it made me feel proud to help. She smiled and said yes.

Appendix E7**DIBELS Post-Assessment**

Benchmark 3.1
DIBELS® Oral Reading Fluency

If I Had a Robot

If I had a robot, he would do everything I don't like to do.	14
First, he'd brush his teeth. Then, he'd get dressed for school. I	26
would stay in bed. He would make my lunch. He knows pizza	38
and cookies are my favorite. My robot would carry my books	49
and lunch for me. He might even carry my friend's books.	60
At school, my robot would tell me all the right answers. He	72
would take my spelling test for me and get all of the words right.	86
During recess, my robot would do extra credit while I played. I	98
would eat the lunch my robot made. Everyone would want to	109
trade for my cookies. I'd make my robot eat everything I didn't	121
like.	122
When school was over, my robot would do my homework. It	133
would be perfect and in his best handwriting. I would play	144
outside with my dog. After dinner, my robot would do my	155
chores. He would pick up my clothes. He would empty the	166
garbage. He would feed the cat and the dog. I would watch TV	179
and play chess with my dad. My robot would bring me a big	192
piece of chocolate cake.	
196	
My robot would take a bath and wash his hair. Then my	208
robot would brush his teeth. I would hug my dad and kiss my	221
mom goodnight. My robot would have to hug my little brother.	232

Total words: _____ – errors: _____ = words correct: _____

_____ WCPM

_____ % ACCURACY

Appendix E8**DIBELS Post-Assessment****If I Had a Robot**

If I had a robot, he would do everything I don't like to do. First, he'd brush his teeth. Then, he'd get dressed for school. I would stay in bed. He would make my lunch. He knows pizza and cookies are my favorite. My robot would carry my books and lunch for me. He might even carry my friend's books. At school, my robot would tell me all the right answers. He would take my spelling test for me and get all of the words right. During recess, my robot would do extra credit while I played. I would eat the lunch my robot made. Everyone would want to trade for my cookies. I'd make my robot eat everything I didn't like.

When school was over, my robot would do my homework. It would be perfect and in his best handwriting. I would play outside with my dog. After dinner, my robot would do my chores. He would pick up my clothes. He would empty the garbage. He would feed the cat and the dog. I would watch TV and play chess with my dad. My robot would bring me a big piece of chocolate cake.

My robot would take a bath and wash his hair. Then my robot would brush his teeth. I would hug my dad and kiss my mom goodnight. My robot would have to hug my little brother.

Appendix E9

DIBELS Post-Assessment

Benchmark 3.2
DIBELS® Oral Reading Fluency

My Grandpa Snores

It's hard to get a good night's rest at my grandma and	12
grandpa's house because my grandpa snores. Grandma says he	21
snores so loudly that he almost snores his head off. Grandpa	32
sleeps in a bedroom all by himself because his snoring keeps	43
Grandma awake.	45
Grandpa's snore is so loud he sounds like a big bull elephant.	57
He sounds like the largest lion in the zoo giving his loudest roar.	70
He's as loud as a huge grizzly bear or an old moose.	82
Anyway, he's very loud.	86
Grandma says that when she wants to get a good night's	97
sleep she just puts in her earplugs and shuts her bedroom door.	109
When I spent the night, I didn't get very much sleep. I tried	122
putting my pillow over my head. Then I got all the way under the	136
covers. Then I crawled under the bed. No matter what I did, I	149
could still hear Grandpa. His snoring kept me awake almost all	160
night long.	162
By morning I was so tired that I fell asleep at the breakfast	175
table. I almost hit my cereal bowl with my chin. Grandma had to	188
shake me awake.	191
"Wake up, Will," she said. "Wake up, now you're the one	202
snoring." We all laughed. I guess I learned how from my	213
grandpa. Next time I sleep at Grandma and Grandpa's house I	224
am going to bring earplugs so I can sleep, too.	234

Total words: _____ – errors: _____ = words correct: _____

_____ WCPM

_____ % ACCURACY

Appendix E10**DIBELS Post-Assessment****My Grandpa Snores**

It's hard to get a good night's rest at my grandma and grandpa's house because my grandpa snores. Grandma says he snores so loudly that he almost snores his head off. Grandpa sleeps in a bedroom all by himself because his snoring keeps Grandma awake.

Grandpa's snore is so loud he sounds like a big bull elephant. He sounds like the largest lion in the zoo giving his loudest roar. He's as loud as a huge grizzly bear or an old moose. Anyway, he's very loud.

Grandma says that when she wants to get a good night's sleep she just puts in her earplugs and shuts her bedroom door.

When I spent the night, I didn't get very much sleep. I tried putting my pillow over my head. Then I got all the way under the covers. Then I crawled under the bed. No matter what I did, I could still hear Grandpa. His snoring kept me awake almost all night long.

By morning I was so tired that I fell asleep at the breakfast table. I almost hit my cereal bowl with my chin. Grandma had to shake me awake.

"Wake up, Will," she said. "Wake up, now you're the one snoring." We all laughed. I guess I learned how from my grandpa. Next time I sleep at Grandma and Grandpa's house I am going to bring earplugs so I can sleep, too.

Appendix E11

DIBELS Post-Assessment

Benchmark 3.3**DIBELS® Oral Reading Fluency**

My Drift Bottle

I read a story about people who met because of a message	12
inside a bottle. A man put the message inside the bottle and	24
tossed it in the ocean. Months later, a lady found the bottle on a	38
beach far across the ocean.	43
I asked my teacher if we could try sending a message in a	56
bottle. She said she would save a bottle with a tight lid for me.	70
She said we could launch the bottle on our next field trip to the	84
beach. It was our class project. I wrote a letter about myself for	97
the bottle. Some of my friends wrote letters, also.	106
After we were done, we showed our letters to my teacher.	117
She said we could put all the letters in the bottle. We asked	130
whoever found the bottle to write to us at our school. We wanted	143
to know how far the bottle would go. We took the bottle along	156
on our next trip to the shore. We stood on the beach until the tide	171
started to go out. Then I threw the bottle as far as I could. We	186
watched it bob in the waves until we could not see it anymore.	199
Now every day I wonder if someone has found our message.	210
I wonder if the bottle is still drifting on the waves. I wonder if it	225
is traveling across the ocean and imagine the different countries	235
it might reach. I hope someday we find out where it went.	247

Total words: _____ – errors: _____ = words correct: _____

_____ WCPM

_____ % ACCURACY

Appendix E12**DIBELS Post-Assessment****My Drift Bottle**

I read a story about people who met because of a message inside a bottle. A man put the message inside the bottle and tossed it in the ocean. Months later, a lady found the bottle on a beach far across the ocean.

I asked my teacher if we could try sending a message in a bottle. She said she would save a bottle with a tight lid for me. She said we could launch the bottle on our next field trip to the beach. It was our class project. I wrote a letter about myself for the bottle. Some of my friends wrote letters, also.

After we were done, we showed our letters to my teacher. She said we could put all the letters in the bottle. We asked whoever found the bottle to write to us at our school. We wanted to know how far the bottle would go. We took the bottle along on our next trip to the shore. We stood on the beach until the tide started to go out. Then I threw the bottle as far as I could. We watched it bob in the waves until we could not see it anymore. Now every day I wonder if someone has found our message. I wonder if the bottle is still drifting on the waves. I wonder if it is traveling across the ocean and imagine the different countries it might reach. I hope someday we find out where it went.

Appendix F

Multidimensional Fluency Scale Rubric

NAME _____

FLUENCY RUBRIC

	1	2	3	4
Expression and Volume	Reads in a quiet voice as if to get words out. The reading does not sound natural like talking to a friend.	Reads in a quiet voice. The reading sounds natural in part of the text, but the reader does not always sound like they are talking to a friend.	Reads with volume and expression. However, sometimes the reader slips into expressionless reading and does not sound like they are talking to a friend.	Reads with varied volume and expression. The reader sounds like they are talking to a friend with their voice matching the interpretation of the passage.
Phrasing	Reads word-by-word in a monotone voice.	Reads in two or three word phrases, not adhering to punctuation, stress and intonation.	Reads with a mixture of run-ons, mid sentence pauses for breath, and some choppiness. There is reasonable stress and intonation.	Reads with good phrasing; adhering to punctuation, stress and intonation.
Smoothness	Frequently hesitates while reading, sounds out words, and repeats words or phrases. The reader makes multiple attempts to read the same passage.	Reads with extended pauses or hesitations. The reader has many "rough spots."	Reads with occasional breaks in rhythm. The reader has difficulty with specific words and/or sentence structures.	Reads smoothly with some breaks, but self-corrects with difficult words and/ or sentence structures.
Pace	Reads slowly and laboriously.	Reads moderately slowly.	Reads fast and slow throughout reading.	Reads at a conversational pace throughout the reading.

Scores of 10 or more indicate that the student is making good progress in fluency. Score _____

Scores below 10 indicate that the student needs additional instruction in fluency.

Appendix G1

Daily Assessment Rubric: Day 1

WEEK 2 DAY 1
October 15, 2012

DAILY ASSESSMENT

DATE	NAME	STRATEGY	SMOOTHNESS	NOTES
15-Oct	1	Repeated Reading: HFW's	Y N	
15-Oct	2	Repeated Reading: HFW's	Y N	
15-Oct	3	Repeated Reading: HFW's	Y N	
15-Oct	4	Repeated Reading: HFW's	Y N	
15-Oct	5	Repeated Reading: HFW's	Y N	
15-Oct	6	Repeated Reading: HFW's	Y N	
15-Oct	7	Repeated Reading: HFW's	Y N	
15-Oct	8	Repeated Reading: HFW's	Y N	
15-Oct	9	Repeated Reading: HFW's	Y N	
15-Oct	10	Repeated Reading: HFW's	Y N	
15-Oct	11	Repeated Reading: HFW's	Y N	
15-Oct	12	Repeated Reading: HFW's	Y N	
15-Oct	13	Repeated Reading: HFW's	Y N	
15-Oct	14	Repeated Reading: HFW's	Y N	
15-Oct	15	Repeated Reading: HFW's	Y N	
15-Oct	16	Repeated Reading: HFW's	Y N	
15-Oct	17	Repeated Reading: HFW's	Y N	
15-Oct	18	Repeated Reading: HFW's	Y N	
15-Oct	19	Repeated Reading: HFW's	Y N	
15-Oct	20	Repeated Reading: HFW's	Y N	
15-Oct	21	Repeated Reading: HFW's	Y N	

Appendix G2

Daily Assessment Rubric: Day 2

WEEK 5 DAY 2
November 6, 2012

DAILY ASSESSMENT

DATE	NAME	STRATEGY	NOTICED ERRORS	SMOOTHNESS	NOTES
6-Nov	1	Noticed errors and used decoding strategies	Y N	Y N	
6-Nov	2	Noticed errors and used decoding strategies	Y N	Y N	
6-Nov	3	Noticed errors and used decoding strategies	Y N	Y N	
6-Nov	4	Noticed errors and used decoding strategies	Y N	Y N	
6-Nov	5	Noticed errors and used decoding strategies	Y N	Y N	
6-Nov	6	Noticed errors and used decoding strategies	Y N	Y N	
6-Nov	7	Noticed errors and used decoding strategies	Y N	Y N	
6-Nov	8	Noticed errors and used decoding strategies	Y N	Y N	
6-Nov	9	Noticed errors and used decoding strategies	Y N	Y N	
6-Nov	10	Noticed errors and used decoding strategies	Y N	Y N	
6-Nov	11	Noticed errors and used decoding strategies	Y N	Y N	
6-Nov	12	Noticed errors and used decoding strategies	Y N	Y N	
6-Nov	13	Noticed errors and used decoding strategies	Y N	Y N	
6-Nov	14	Noticed errors and used decoding strategies	Y N	Y N	
6-Nov	15	Noticed errors and used decoding strategies	Y N	Y N	
6-Nov	16	Noticed errors and used decoding strategies	Y N	Y N	
6-Nov	17	Noticed errors and used decoding strategies	Y N	Y N	
6-Nov	18	Noticed errors and used decoding strategies	Y N	Y N	
6-Nov	19	Noticed errors and used decoding strategies	Y N	Y N	
6-Nov	20	Noticed errors and used decoding strategies	Y N	Y N	
6-Nov	21	Noticed errors and used decoding strategies	Y N	Y N	

Appendix G3

Daily Assessment Rubric: Day 3

WEEK 6 DAY 3
November 14, 2012

DAILY ASSESSMENT

DATE	NAM E	STRATEGY	NOTICE ERRORS	SELF-CORRECTS	NOTES
14-Nov	1	Noticed errors and se lf-corrects difficult words	Y N	Y N	
14-Nov	2	Noticed errors and se lf-corrects difficult words	Y N	Y N	
14-Nov	3	Noticed errors and se lf-corrects difficult words	Y N	Y N	
14-Nov	4	Noticed errors and se lf-corrects difficult words	Y N	Y N	
14-Nov	5	Noticed errors and se lf-corrects difficult words	Y N	Y N	
14-Nov	6	Noticed errors and se lf-corrects difficult words	Y N	Y N	
14-Nov	7	Noticed errors and se lf-corrects difficult words	Y N	Y N	
14-Nov	8	Noticed errors and se lf-corrects difficult words	Y N	Y N	
14-Nov	9	Noticed errors and se lf-corrects difficult words	Y N	Y N	
14-Nov	10	Noticed errors and se lf-corrects difficult words	Y N	Y N	
14-Nov	11	Noticed errors and se lf-corrects difficult words	Y N	Y N	
14-Nov	12	Noticed errors and se lf-corrects difficult words	Y N	Y N	
14-Nov	13	Noticed errors and se lf-corrects difficult words	Y N	Y N	
14-Nov	14	Noticed errors and se lf-corrects difficult words	Y N	Y N	
14-Nov	15	Noticed errors and se lf-corrects difficult words	Y N	Y N	
14-Nov	16	Noticed errors and se lf-corrects difficult words	Y N	Y N	
14-Nov	17	Noticed errors and se lf-corrects difficult words	Y N	Y N	
14-Nov	18	Noticed errors and se lf-corrects difficult words	Y N	Y N	
14-Nov	19	Noticed errors and se lf-corrects difficult words	Y N	Y N	
14-Nov	20	Noticed errors and se lf-corrects difficult words	Y N	Y N	
14-Nov	21	Noticed errors and se lf-corrects difficult words	Y N	Y N	

Appendix G4

Daily Assessment Rubric: Day 4

WEEK 8 DAY 4
December 3, 2012

DAILY ASSESSMENT

DATE	NAME	STRATEGY	NOTICED ERRORS	SMOOTHNESS	NOTES
3-Dec	1	Noticed errors and phrasing	Y N	Y N	
3-Dec	2	Noticed errors and phrasing	Y N	Y N	
3-Dec	3	Noticed errors and phrasing	Y N	Y N	
3-Dec	4	Noticed errors and phrasing	Y N	Y N	
3-Dec	5	Noticed errors and phrasing	Y N	Y N	
3-Dec	6	Noticed errors and phrasing	Y N	Y N	
3-Dec	7	Noticed errors and phrasing	Y N	Y N	
3-Dec	8	Noticed errors and phrasing	Y N	Y N	
3-Dec	9	Noticed errors and phrasing	Y N	Y N	
3-Dec	10	Noticed errors and phrasing	Y N	Y N	
3-Dec	11	Noticed errors and phrasing	Y N	Y N	
3-Dec	12	Noticed errors and phrasing	Y N	Y N	
3-Dec	13	Noticed errors and phrasing	Y N	Y N	
3-Dec	14	Noticed errors and phrasing	Y N	Y N	
3-Dec	15	Noticed errors and phrasing	Y N	Y N	
3-Dec	16	Noticed errors and phrasing	Y N	Y N	
3-Dec	17	Noticed errors and phrasing	Y N	Y N	
3-Dec	18	Noticed errors and phrasing	Y N	Y N	
3-Dec	19	Noticed errors and phrasing	Y N	Y N	
3-Dec	20	Noticed errors and phrasing	Y N	Y N	
3-Dec	21	Noticed errors and phrasing	Y N	Y N	

Appendix H1

Scope and Sequence

1

Dorothy Ivey: CIED 5983

<i>Scope and Sequence of Action Research Intervention</i>		
DV	Skill	Week, Day Instruction
Week 1: Introduce Reading Automatically		
Automaticity	Introduce automaticity	1.1 Recall Prior Knowledge, Notice errors
Automaticity	Strategies: Unknown Words	1.2 Notice errors, Blending sounds
Automaticity	Strategies: Unknown Words	1.3 Notice errors, flip the sound
Automaticity	Strategies: Unknown Words	1.4 Notice errors, use word parts to help decode
Automaticity	Assessment	1.5 <i>DORF</i> and <i>MDFS</i>
Week 2: Introduce Repeated Reading		
Automaticity	Reading words in isolation	2.1 Whole group repeated reading with high frequency words
Automaticity	Reading words in phrases	2.2 Small group repeated reading with Fry's Phrases
Automaticity	Reading connected text	2.3 Partner repeated reading with basal text
Automaticity	Reading connected text	2.4 Partner repeated reading with basal text
Automaticity	Assessment	2.5 <i>DORF</i> and <i>MDFS</i>
Week 3: Song Lyrics		
Automaticity	Reading song lyrics	3.1 Introduce genre, recognize automatic vs. non-automatic reading
Automaticity	Decoding strategies	3.2 Notice errors and use decoding strategies for difficult words
Automaticity	Self-Correcting	3.3 Notice errors and self-correct difficult words
Automaticity	Phrases	3.4 Notice errors and self-correct difficult sentence structure with phrases
Automaticity	Assessment	3.5 <i>DORF</i> and <i>MDFS</i>
Week 4: Poetry		
Automaticity	Reading poetry	4.1 Introduce genre, recognize automatic vs. non-automatic reading
Automaticity	Decoding strategies	4.2 Notice errors and use decoding strategies for difficult words
Automaticity	Self-correcting	4.3 Notice errors and self-correct difficult words
Automaticity	Phrases	4.4 Notice errors and self-correct difficult sentence structure with phrases
Automaticity	Assessment	4.5 <i>DORF</i> and <i>MDFS</i>

Appendix H2

Scope and Sequence

2

Dorothy Ivey: CIED 5983

Week 5: Poetry		
Automaticity	Reading poetry	5.1
Automaticity	Decoding	5.2
Automaticity	Self-Correcting	5.3
Automaticity	Phrases	5.4
Automaticity	Assessment	5.5
Introduce genre, recognize automatic vs. non-automatic reading Notice errors and use decoding strategies for difficult words Notice errors and self-correct difficult words Notice errors and self-correct difficult sentence structure with phrases <i>DORF</i> and <i>MDFS</i> with Poetry Slam		
Week 6: Reader's Theater		
Automaticity	Reading Reader's Theater	6.1
Automaticity	Decoding	6.2
Automaticity	Self-Correcting	6.3
Automaticity	Phrases	6.4
Automaticity	Assessment	6.5
Introduce genre, recognize automatic vs. non-automatic reading Notice errors and use decoding strategies for difficult words Notice errors and self-correct difficult words Notice errors and self-correct difficult sentence structure with phrases <i>DORF</i> and <i>MDFS</i> with Reader's Theater performance		
Week 7: Non-Fiction text		
Automaticity	Reading Non-Fiction text	7.1
Automaticity	Decoding	7.2
Automaticity	Self-Correcting	7.3
Automaticity	Phrases	7.4
Automaticity	Assessment	7.5
Introduce genre, recognize automatic vs. non-automatic reading Notice errors and use decoding strategies for difficult words Notice errors and self-correct difficult words Notice errors and self-correct difficult sentence structure with phrases <i>DORF</i> and <i>MDFS</i>		
Week 8: Fiction text		
Automaticity	Reading Fiction text	8.1
Automaticity	Decoding	8.2
Automaticity	Self-Correcting	8.3
Automaticity	Phrases	8.4
Automaticity	Assessment	8.5
Introduce genre, recognize automatic vs. non-automatic reading Notice errors and use decoding strategies for difficult words Notice errors and self-correct difficult words Notice errors and self-correct difficult sentence structure with phrases <i>DORF</i> and <i>MDFS</i>		

Appendix I1**Day 1 Lesson Plan**

Week 7 Day 1

November 19, 2012

- I. Repeated reading of connected text: Non-Fiction text
- II. 2nd grade
- III. *TLW* know the difference between automatic and non-automatic reading of connected text.

TLW understand that the characteristics of automatic reading include reading in phrases and in a conversational tone whereas the characteristics of non-automatic reading include word-by-word reading with frequent hesitations and repetitions.

TLW be able to recognize the difference between non-fiction text being read automatically and non-automatically.
- IV. Materials:
 - A. Automatic vs. Not-Automatic Reading anchor chart
 - B. Science textbook
 - C. Automatic vs. Non-Automatic assessment
- V. Schema:
 - A. Review Automatic vs. Not-Automatic Reading Anchor Chart
- VI. Purpose: The students will listen to non-fiction text being read aloud and determine if they are being read automatically or non-automatically.
- VII. Method:
 - A. Set a purpose for reading non-fiction text with anchor chart.
 - B. Introduce Repeated Reading with excerpt from Science textbook.
 - C. Choose 5 students to read a portion of the text in front of the class.
- VIII. Guided Practice
 - A. Introduce Repeated Reading of non-fiction text.
- IX. Independent Practice:
 - A. Students will practice the excerpt from Science textbook independently.
 - B. Allow 5 students to orally read excerpt from Science textbook for assessing.
- X. Assessment:
 - A. Check accuracy of automatic vs. non-automatic responses on a 0-5 point scale.
 - B. Anecdotal record

Appendix I2
Day 1 Lesson Plan

DAILY ASSESSMENT

WEEK 4 DAY 1 October 29, 2012

Automatic vs. Non-Automatic Reading

1. This text was read: Automatically Non-Automatically

2. This text was read: Automatically Non-Automatically

3. This text was read: Automatically Non-Automatically

4. This text was read: Automatically Non-Automatically

5. This text was read: Automatically Non-Automatically

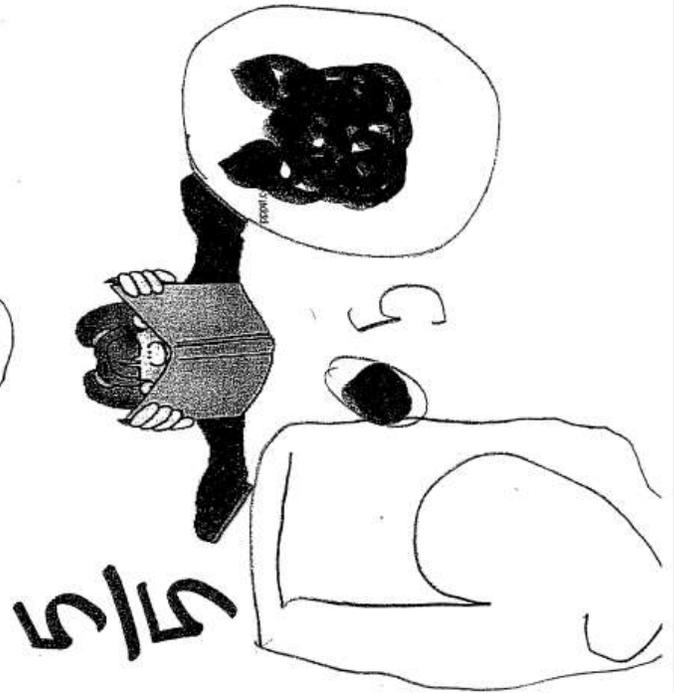


Appendix I3

Day 1 Lesson Plan

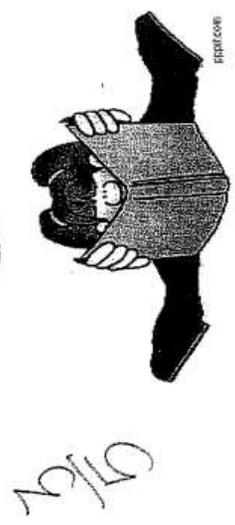
DAILY ASSIGNMENT
 WEEK 4 DAY 1 Oct 29, 2012
 WEEK 7 DAY 21
 Automatic vs. Non-Automatic Reading

1. This text was read: Automatically Non-Automatically
2. This text was read: Automatically Non-Automatically
3. This text was read: Automatically Non-Automatically
4. This text was read: Automatically Non-Automatically
5. This text was read: Automatically Non-Automatically



DAILY ASSIGNMENT
 WEEK 4 DAY 1 Oct 29, 2012
 WEEK 7 DAY 21
 Automatic vs. Non-Automatic Reading

1. This text was read: Automatically Non-Automatically
2. This text was read: Automatically Non-Automatically
3. This text was read: Automatically Non-Automatically
4. This text was read: Automatically Non-Automatically
5. This text was read: Automatically Non-Automatically



Appendix J**Day 2 Lesson Plan**

Week 7 Day 2

November 20, 2012

- I. Repeated reading of connected text: Non-Fiction Text
- II. 2nd grade
- III. *TLW* know strategies for decoding unknown words.

TLW understand that good readers notice the errors they make when reading and use strategies such as blending the sounds, flipping the sounds, looking for word parts, and analogies to decode unknown words.

TLW be able to notice errors and use the strategies learned as well as the new strategy of word analogies to decode unknown words.
- IV. Materials:
 - A. Solving Unknown Words anchor chart
 - B. *The Wild Turkey*
- V. Schema:
 - B. Review Solving Unknown Words
- VI. Purpose: The students will use strategies to decode unfamiliar words in text.
- VII. Method:
 - D. Set a purpose for reading non-fiction text with anchor chart.
 - E. Model using decoding strategies with *The Thanksgiving Holiday*
- VIII. Guided Practice
 - B. Chose student volunteers to read first three paragraphs of *The Thanksgiving Holiday* to model noticing errors and using decoding strategies to solve unknown words.
- IX. Independent Practice:
 - A. Students will read *The Wild Turkey* in small groups.
 - B. Students will notice errors and use decoding strategies with peers and independently.
- X. Assessment:
 - A. Check oral reading of leveled poetry using a 0-2 point scale:
 - 0 = did not notice errors or read text smoothly.
 - 1 = **either** noticed errors **or** read text smoothly.
 - 2 = noticed errors and read text smoothly.
 - B. Anecdotal records

Appendix K

Day 3 Lesson Plan

Week 7 Day 3

November 26, 2012

- I. Repeated reading of connected text: Non-Fiction Text
- II. 2nd grade
- III. *TLW* know that good readers self-correct difficult words while reading.

TLW understand that when a good reader encounters difficult words in text that do not look right, sound right, or makes sense, they must self-correct those words while reading.

TLW be able to self-correct difficult words while reading.
- IV. Materials:
 - A. Solving Unknown Words anchor chart
 - B. *Machines Can Move* non-fiction text
 - C. *Technology in Our World* below-level reader
 - D. *Technology* on-level reader
 - E. *Flying Machines* advanced level reader
- V. Schema:
 - A. Remind: when self-correcting constantly ask “Did that make sense?”
- VI. Purpose: The students will self-correct difficult words encountered in connected text.
- VII. Method:
 - A. Model self-correcting with *Machines Can Move*
 - B. Allow students to practice self-correcting with leveled non-fiction readers.
- VIII. Guided Practice
 - A. Choose student volunteers to read *Machines Can Move* to model self-correcting.
- IX. Independent Practice:
 - A. Students will use leveled non-fiction reader to practice self-correcting. Students will work in groups of 2 and notice errors and self-correct with peers
- X. Assessment:
 - A. Check oral reading of leveled poetry using a 0-2 point scale:
 - 0 = did not notice errors or self-correct while reading.
 - 1 = **either** noticed errors **or** self-corrected while reading.
 - 2 = noticed errors and self-corrected while reading.
 - B: Anecdotal records

Appendix L**Day 4 Lesson Plan**

Week 7 Day 4

November 27, 2012

- I. Repeated reading of connected text: Non-Fiction Text
- II. 2nd grade
- III. *TLW* know how to determine where the phrases are in connected text and use them when reading orally.

TLW understand that connected text is composed of words in phrases, and good readers use these phrases to read the connected more smoothly.

TLW be able to locate phrases in non-fiction text and use them to read more smoothly.
- IV. Materials:
 - A. *Fry's Phrases* (100) 31-40
 - B. *Inventions in Our World* non-fiction text
- V. Schema:
 - B. Ask: "What is a phrase?" and review.
 - C. Practice reading *Fry's Phrases* (100) 31-40
- VI. Purpose: The students will locate phrases in non-fiction text and incorporate them into their oral reading.
- VII. Method:
 - C. Model finding phrases with *Inventions in Our World* non-fiction text.
 - D. Allow students to find phrases with leveled non-fiction readers.
- VIII. Guided Practice
 - B. Chose students volunteers to read *Inventions in Our World* one paragraph at a time.
 - C. Work as a whole group to locate the phrases in the text.
- IX. Independent Practice
 - A. Students will work in pairs to locate phrases and read leveled non-fiction text.
- X. Assessment:
 - A: Check oral reading of leveled poetry using a 0-2 point scale:
 - 0 = did not notice errors or read the text smoothly.
 - 1 = **either** noticed errors **or** read the text smoothly.
 - 2 = noticed errors and read the text smoothly.
 - B: Anecdotal records

Appendix M**Day 5 Lesson Plan**

Week 7 Day 5

November 28, 2012

- I. Repeated reading of connected text: Non-Fiction text
- II. 2nd grade
- III. *TLW* know how to read a text smoothly and effortlessly.

TLW understand that good readers notice errors, decode unfamiliar words, self-correct difficult words, and read in phrases to read automatically and smoothly.

TLW be able to read a connected text automatically and effortlessly.
- IV. Materials:
 - C. *Life on the Space Station*
 - D. DIBELS ORF reading passage
- V. Schema:
 - D. Review what good readers do to read automatically and effortlessly.
- VI. Purpose: The students will read connected text automatically and effortlessly.
- VII. Method:
 - E. Assess oral reading with *Life on the Space Station* non-fiction text and DIBELS ORF reading passage.
- VIII. Guided Practice
 - D. Introduce *Life on the Space Station* non-fiction text
- IX. Independent Practice
 - B. Students will work in groups of two to practice oral reading strategies learned throughout Days 1-4.
- X. Assessment:
 - A. Check oral reading of leveled poetry using a 1-4 point scale:
 - 1 = lots of errors, several hesitations, repeats text
 - 2 = frequent hesitations and several rough spots
 - 3 = few errors with certain sentence structures
 - 4 = smooth reading
 - B. DIBELS ORF accuracy score
 - C. Anecdotal records

Appendix N

DIBELS Baseline Scores

DIBELS
Baseline Scores

STUDENT	SCORE 1	SCORE 2	SCORE 3	BASELINE	CATEGORY
1	94.74	98.57	88.89	94.74	Below Benchmark
2	89.29	68.75	64.1	68.75	Well-Below Benchmark
3	98.86	97.44	95.52	97.44	At or Above Benchmark
4	95.24	100	92.68	95.24	Below Benchmark
5	0	1.76	0.07	0.07	Well-Below Benchmark
6	99.03	95.6	100	99.03	At or Above Benchmark
7	98.88	94.29	92.11	94.29	Below Benchmark
8	96.77	70.59	96.25	96.25	At or Above Benchmark
9	93.44	78.85	84.21	84.21	Well-Below Benchmark
10	88.14	65.45	85.42	85.42	Well-Below Benchmark
11	93.24	98.68	94.83	94.83	Below Benchmark
12	95.71	97.3	93.94	96	At or Above Benchmark
13	91.11	79.55	76.79	79.55	Well-Below Benchmark
14	97.09	97.75	96.63	96.63	At or Above Benchmark
15	98.75	100	95.16	98.75	At or Above Benchmark
16	68.75	57.58	73.81	68.75	Well-Below Benchmark
17	78.69	94.44	86.11	86.11	Well-Below Benchmark
18	87.5	87.88	80.56	87.88	Well-Below Benchmark
19	92.3	91.38	87.76	91.38	Below Benchmark
20	96.88	97.18	93.88	96.88	At or Above Benchmark
21	71.05	78.38	74.29	74.29	Well-Below Benchmark

Appendix P**Weekly Averages of Daily Scores**

Week and Objectives	Average
Week 1: Decoding Strategies	69.86
Week 2: Introduce Repeated Reading	43.34
Week 3: Song Lyrics	73.75
Week 4: Poetry	88.21
Week 5: Poetry	67.14
Week 6: Reader's Theater	69.27
Week 7: Non-Fiction	79.37
Week 8: Fiction	81.57

Appendix Q1**Individual Weekly and Bi-Weekly Scores****MDFS** (number correct out of 4 possible)

	12-Oct	19-Oct	26-Oct	2-Nov	9-Oct	16-Nov	27-Nov	3-Dec
STUDENT	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
1	2	2	2	3	3	3	3	4
2	2	2	2	2	3	2	2	2
3	3	3	4	4	4	4	4	4
4	2	3	3	2	4	4	4	4
5	1	Absent	1	2	Absent	2	2	2
6	3	3	3	4	A	4	4	4
7	2	3	3	3	3	4	Absent	Absent
8	3	3	3	3	3	3	Absent	3
9	3	2	2	2	2	2	3	3
10	2	Absent	3	2	3	2	2	3
11	3	2	3	3	3	3	4	3
12	3	2	2	3	4	3	3	4
13	3	3	2	2	3	3	2	3
14	3	2	3	4	4	4	4	4
15	3	3	4	3	Absent	4	3	4
16	2	2	2	2	3	2	2	4
17	1	2	3	2	3	2	2	3
18	2	2	2	2	2	2	2	3
19	3	2	3	3	3	2	3	4
20	3	3	3	3	4	3	4	4
21	2	2	2	2	2	2	2	3
Average	2.428571	2.42105	2.61905	2.66667	3.111111	2.85714	2.89474	3.4
Percentage	60.75	60.5	65.5	66.75	77.75	71.5	72.25	8.5

Appendix Q2**Individual Weekly and Bi-Weekly Scores****DIBELS - Accuracy** (out of a possible 100%)

	19-Oct	2-Nov	16-Nov	30-Nov
STUDENT	Week 2	Week 4	Week 6	Week 8
1	96.72%	94.52%	97.22%	92.59%
2	85.71%	76.47%	78.05%	94.44%
3	98.82%	100.00%	98.88%	97.53%
4	96.43%	94.64%	93.67%	96.25%
5	30.00%	A	38.46%	44.44%
6	98.83%	97.76%	97.70%	99.04%
7	96.15%	96.19%	96.12%	Absent
8	96.77%	72.58%	100.00%	95.79%
9	86.44%	98.18%	82.14%	87.72%
10	87.50%	82.93%	91.67%	88.75%
11	80.95%	98.76%	97.06%	97.47%
12	69.35%	96.63%	100.00%	83.96%
13	90.00%	87.04%	96.55%	93.42%
14	97.70%	100.00%	100.00%	100.00%
15	98.11%	95.92%	99.04%	100.00%
16	86.36%	77.05%	82.00%	84.72%
17	66.67%	87.50%	100.00%	90.12%
18	58.82%	81.08%	82.00%	85.19%
19	89.86%	89.04%	92.65%	95.00%
20	97.44%	93.75%	98.72%	95.35%
21	59.32%	80.85%	80.36%	95.38%
Average	84.19%	90.04%	90.59%	90.86%

Appendix R

DIBELS Post Intervention Scores

STUDENT	SCORE 1	SCORE 2	SCORE 3	BASELINE	CATEGORY
1	98.85%	95.08%	85.23%	95.08%	Benchmark
2	78.38%	87.50%	73.33%	78.38%	Well-Below Benchmark
3	95.05%	98.90%	95.28%	95.28%	Benchmark
4	100.00%	96.69%	96.39%	96.69%	At or Above Benchmark
5	50.00%	25.00%	27.27%	27.27%	Well-Below Benchmark
6	100.00%	97.62%	97.06%	97.62%	At or Above Benchmark
7	96.08%	96.51%	97.94%	96.51%	At or Above Benchmark
8	88.79%	84.04%	95.88%	88.79%	Well-Below Benchmark
9	94.74%	93.75%	92.19%	93.75%	Benchmark
10	95.77%	82.93%	85.96%	85.96%	Well-Below Benchmark
11	100.00%	96.67%	98.89%	98.89%	At or Above Benchmark
12	100.00%	94.14%	98.59%	98.59%	At or Above Benchmark
13	96.88%	87.50%	93.94%	93.94%	Benchmark
14	100.00%	98.17%	99.22%	99.22%	At or Above Benchmark
15	99.00%	98.78%	97.78%	98.78%	At or Above Benchmark
16	83.91%	71.43%	75.44%	75.44%	Well-Below Benchmark
17	83.72%	89.09%	77.78%	83.72%	Well-Below Benchmark
18	91.07%	84.75%	76.47%	84.75%	Well-Below Benchmark
19	97.62%	85.48%	88.57%	88.57%	Well-Below Benchmark
20	100.00%	97.01%	95.35%	97.01%	At or Above Benchmark
21	94.55	83.33	69.67	83.33	Well-Below Benchmark

Appendix S**Individual DIBELS Pre- and Post- Achievement Categories**

DIBELS Achievement Categories	Pretest	Posttest
At or Above Benchmark	7	8
Below Benchmark	5	4
Well-Below Benchmark	9	9

Appendix T

MDFS Post Intervention Scores

STUDENT	POSTTEST	CATEGORY
1	3/4	Benchmark
2	2/4	Below Benchmark
3	4/4	At or Above Benchmark
4	4/4	At or Above Benchmark
5	2/4	Below Benchmark
6	4/4	At or Above Benchmark
7	4/4	At or Above Benchmark
8	3/4	Benchmark
9	3/4	Benchmark
10	3/4	Benchmark
11	4/4	At or Above Benchmark
12	3/4	Benchmark
13	3/4	Benchmark
14	4/4	At or Above Benchmark
15	4/4	At or Above Benchmark
16	3/4	Benchmark
17	3/4	Benchmark
18	2/4	Below Benchmark
19	3/4	Benchmark
20	4/4	At or Above Benchmark
21	3/4	Benchmark

Appendix U**Individual MDFS Pre- and Post- Achievement Categories**

MDFS Achievement Categories	Pretest	Posttest
At or Above Benchmark	0	8
Benchmark	7	10
Below Benchmark	12	3
Well-Below Benchmark	2	0

Appendix V

DIBELS *t*-Test Results

t-Test: Paired Two Sample for Means

	<i>DIBELS Pretest</i>	<i>DIBELS Posttest</i>
Mean	0.893065	0.91514
Variance	0.00944	0.005393
Observations	20	20
Pearson Correlation	0.838637	
Hypothesized Mean Difference	0	
df	19	
t Stat	-1.84425	
P(T<=t) one-tail	0.040399	
t Critical one-tail	1.729133	
P(T<=t) two-tail	0.080797	
t Critical two-tail	2.093024	

***p* < .05**

Appendix W**MDFS *t*-Test Results**

t-Test: Paired Two Sample for Means

	<i>MDFS Pretest</i>	<i>MDFS Posttest</i>
Mean	2.238095238	3.238095238
Variance	0.39047619	0.49047619
Observations	21	21
Pearson Correlation	0.89225361	
Hypothesized Mean Difference	0	
df	20	
t Stat	-14.49137675	
P(T<=t) one-tail	2.26925E-12	
t Critical one-tail	3.551808341	
P(T<=t) two-tail	4.5385E-12	
t Critical two-tail	3.849516274	

 $p < .001$

Appendix X

DIBELS Pre- and Posttest Results for Gender

DIBELS - Accuracy

	1-Oct	3-Dec	
FEMALE	PRE	POST	Difference
1	94.74%	95.08%	0.34
2	68.75%	78.38%	9.63
3	97.44%	95.28%	-2.16
4	95.24%	96.67%	1.43
6	99.03%	97.62%	-1.41
7	94.29%	96.51%	2.22
13	79.55%	93.94%	14.39
14	96.63%	99.22%	2.59
17	86.11%	83.72%	-2.39

DIBELS – Accuracy

	1-Oct	3-Dec	
MALE	PRE	POST	Difference
5	0.07%	27.27%	19.58
8	96.25%	88.79%	-7.46
9	84.21%	93.75%	9.54
10	85.42%	85.96%	0.54
11	94.83%	98.89%	4.06
12	95.71%	98.59%	2.88
15	98.75%	98.78%	0.03
16	68.75%	75.44%	6.69
18	87.88%	84.75%	-3.13
19	91.38%	88.57%	-2.81
20	96.88%	97.01%	0.13
21	74.29%	83.33%	9.04

Appendix Y

DIBELS *t*-Test Results for Gender

	<i>DIBELS-Female</i>	<i>DIBELS-Male</i>
Mean	2.737777778	1.773636364
Variance	32.31411944	28.13176545
Observations	9	11
Hypothesized Mean Difference	0	
df	17	
t Stat	0.388846022	
P(T<=t) one-tail	0.351108629	
t Critical one-tail	1.739606716	
P(T<=t) two-tail	0.702217259	
t Critical two-tail	2.109815559	

p < .05

Appendix Z

MDFS Pre- and Posttest Results for Gender

MDFS

	1-Oct	3-Dec	
FEMALE	PRE	POST	Difference
1	2	3	1
2	1	2	1
3	3	4	1
4	3	4	1
6	3	4	1
7	2	4	2
13	2	3	1
14	3	4	1
17	2	3	1

MDFS

	1-Oct	3-Dec	
MALE	PRE	POST	Difference
5	1	2	1
8	2	3	1
9	2	3	1
10	2	3	1
11	3	4	1
12	2	3	1
15	3	4	1
16	2	3	1
18	2	2	0
19	2	3	1
20	3	4	1
21	2	3	1

Appendix AA**MDFS *t*-Test for Gender**

t-Test: Two-Sample Assuming Unequal Variances

	<i>MDFS-Female</i>	<i>MDFS-Male</i>
Mean	1.111111111	0.916666667
Variance	0.111111111	0.083333333
Observations	9	12
Hypothesized Mean Difference	0	
df	16	
t Stat	1.4	
P(T<=t) one-tail	0.09030247	
t Critical one-tail	1.745883669	
P(T<=t) two-tail	0.18060494	
t Critical two-tail	2.119905285	

***p* < .05**

Appendix BB

DIBELS Pre- and Posttest Results for Special Education Students

DIBELS

	1-Oct	3-Dec	
SpEd Services	PRE	POST	Difference
5	0.07%	27.27%	27.2
9	84.21%	93.75%	9.54
10	85.42%	85.96%	0.54
11	94.83%	98.89%	4.06
16	68.75%	75.44%	6.69
18	87.88%	84.75%	-3.13

DIBELS

	1-Oct	3-Dec	
No SpEd Services	PRE	POST	Difference
1	94.74%	95.08%	0.34
2	68.75%	78.38%	9.63
3	97.44%	95.28%	-2.16
4	95.24%	96.67%	1.43
6	99.03%	97.62%	-1.41
7	94.29%	96.51%	2.22
8	96.25%	88.79%	-7.46
12	95.71%	98.59%	2.88
13	79.55%	93.94%	14.39
14	96.63%	99.22%	2.59
15	98.75%	98.78%	0.03
17	86.11%	83.72%	-2.39
21	74.29%	83.33%	9.04

Appendix CC

DIBELS *t*-Test for Special Education Students

t-Test: Two-Sample Assuming Unequal Variances

	<i>DIBELS SpEd</i>	<i>DIBELS non-SpEd</i>
Mean	7.483333333	1.201428571
Variance	113.2356267	28.20064396
Observations	6	14
Hypothesized Mean Difference	0	
df	6	
t Stat	1.374529225	
P(T<=t) one-tail	0.109202649	
t Critical one-tail	1.943180274	
P(T<=t) two-tail	0.218405298	
t Critical two-tail	2.446911846	

p < .05

Appendix DD

MDFS Pre- and Posttest Results for Special Education Students

MDFS

	1-Oct	3-Dec	
SpEd	PRE	POST	Difference
5	1	2	1
9	2	3	1
10	2	3	1
11	3	4	1
16	2	3	1
18	2	2	0

MDFS

	1-Oct	3-Dec	
non-SpEd	PRE	POST	Difference
1	2	3	1
2	1	2	1
3	3	4	1
4	3	4	1
6	3	4	1
7	2	4	2
8	2	3	1
12	2	3	1
13	2	3	1
14	3	4	1
15	3	4	1
17	2	3	1
19	2	3	1
20	3	4	1
21	2	3	1

Appendix EE**MDFS *t*-Test Results for Special Education Students**

t-Test: Two-Sample Assuming Unequal Variances

	<i>MDFS SpEd</i>	<i>MDFS non-SpEd</i>
Mean	0.833333333	1.066666667
Variance	0.166666667	0.066666667
Observations	6	15
Hypothesized Mean Difference	0	
df	7	
t Stat	-1.29986737	
P(T<=t) one-tail	0.117405418	
t Critical one-tail	1.894578604	
P(T<=t) two-tail	0.234810837	
t Critical two-tail	2.364624251	

***p* < .05**

Appendix FF1

Observed Anecdotes

	Date	Anecdote
Behaviors Seen in Groups of Varying Size and Ability Levels	8-Oct	Whole group: students actively engaged; Independently: students struggled.
	10-Oct	Whole group enthusiastic to volunteer letter, digraphs, combinations when learning the strategy of flip-a-sound to decode unfamiliar words
	17-Oct	Whole group: students attentive while student 3 modeled reading with peer in a fishbowl conference.
	17-Oct	Partners: students 4, 8, 11, 12, 15, and 18 were off task and playing with their partners.
	31-Oct	Whole group: student 1 modeled self-correcting, and the whole group enthusiastically asked her at the end of each sentence "Did that make sense?"
	1-Nov	Students 4, 7, 8, 12, 15, 18, 20 worked independently instead of in groups; off task.
	8-Nov	Independently: students very interested and on-task while self-selecting poems for poetry slam.
	13-Nov	Students 2 and 6 very frustrated when student 11 not paying attention while reading which resulted in a verbal exchange with hurtful words.
	13-Nov	Student 19 explained "We didn't know what "solo" meant, but (student 14) helped us understand but told us you want all of us to read there."
	14-Nov	Students 9 and 11 struggled as partners at first but learned how to work together
	14-Nov	Student 11 helped student 9 remain on-task by saying "It's your turn to read now."
29-Nov	Independently: engaged and worked independently while practicing page from basal text.	

Appendix FF2

Observed Anecdotes

	Date	Anecdote
Importance of Instructional Level Text	8-Oct	Students 3 and 14 made no errors, text too easy, need to find more challenging text.
	23-Oct	Students 6, 8, and 15 were not making errors and were self-correcting as they read. They need harder texts.
	24-Oct	Student 5 used a Pre-Primer text and he did GREAT! He's really starting to notice errors and when the words don't make sense.
	26-Oct	Used 3 different grade level song lyrics for weekly progress monitoring. There was a positive difference in smoothness when reading the instructional level text.
	27-Nov	St. 5 tried, but frustrated and gave up quickly when found text too challenging.
	29-Nov	Self-selected page from the basal to practice multiple times. When listening to students read, most students read smoothly.
	30-Nov	Self-selected fiction text from classroom library. Students 1, 2, 9, 13, and 21 chose texts that were too easy. Did not pay attention while reading and, as a result, had many errors and read without smoothness.

Appendix FF3

Observed Anecdotes

	Date	Anecdote
Increased Metacognitive Abilities While Reading	11-Oct	Students 2 and 5 would miss errors even when the words they "read" did not fit M, S, or V cues
	17-Oct	When reading with partners, starting to notice errors more frequently (their partners, not their own)
	20-Oct	Students worked together to create an anchor chart telling the characteristics of automatic and non-automatic reading. Words used to describe automatic reading were: smooth, like ocean waves, no mistakes, no skipping lines, and sounds like talking. Words used to describe non-automatic reading were: mistakes, like a robot, skipping lines, skipping words, no self-correcting, not like a human, and doesn't sound like real talking.
	23-Oct	Student 1: modeled decoding difficult words and missed repeated words (bushel, peck, heap, oodle); "There it is again" and circled it w/out decoding each time
	23-Oct	All students actively using strategies but needed lots of prompting to get them to explain what they were doing
	24-Oct	Most all students used decoding strategies and referred to anchor chart for ideas
	30-Oct	Anchor charts are used often as a reference; all are decoding and starting to think out loud while doing it
	30-Oct	Students 13 and 21 are sounding out words, but "new" words still don't make sense: just not thinking while reading
	31-Oct	Student 21: "sounded it out, but it didn't work out, so flipped the sound---squeaky!"
	5-Nov	Why my reading was not automatic: St. 4: "You SC which is good, but it makes your reading not smooth"
	5-Nov	When explaining why my reading was not automatic: St. 19: "You went back here and read this again"
	5-Nov	St. 13: "It wasn't automatic because it sounded broken."
	15-Nov	Student 2 to Student 18: "Does that look right? Make sense? Let's go back to...." and "You know you just SC?" St 18 "Yeah!"
	20-Nov	St11: when decoding the words domesticated "I see "dome" in it, and "cat", and "ed"..."

Appendix FF4

Observed Anecdotes

Behavior	Date	Anecdote
Understanding the Text's Meaning	24-Oct	Student 5 circled words that didn't make sense in the pre-primer text he was reading. It was the first time he noticed errors!
	30-Oct	Student 4 commented "Wynken, Blynken, and Nod must be characters because those words are all capitalized." Student 8 continued "And Wynken, Blynken and Nod are also things you do!" (demonstrated winking, blinking, and nodding)
	5-Nov	Student 7 noticed capital letters "Wind and Leaves" in the poem <i>Autumn Leaves</i> and questioned why.
	5-Nov	St. 8: made the connection that they must be characters like in Wynken, Blynken, and Nod"
	30-Nov	Student 5 tickled when he understood the meaning of the text "dogs slobber" after decoding.