The Impact of Reading Strategy Instruction on Student Performance

by Shannon Tracy

Submitted in Partial Fulfillment of the Requirements for the

Degree of Master of Education

May 2013

Graduate Programs in Education

Goucher College

Table of Contents

List of Tables

Abstract

The purpose of this study was to determine whether teaching select reading strategies from the Comprehension Toolkit would improve the reading comprehension of lower achieving 3rd grade students. The study was quasiexperimental with a posttest-only design comparing the reading comprehension scores of two groups of third grade students. Students were chosen based on their 2nd grade stanine scores in passage comprehension on GRADE. The median stanine scores ranged from 3 to 5. Both groups received the same daily reading instruction within the classroom. The treatment group of ten students received ten weeks of reading strategy instruction in a before-school class that met once a week for one hour. The control group of 11 students received no additional assistance. Comparison of median scores on the school system's reading benchmark test, administered after treatment was delivered, revealed no significant difference in performance between the groups. Although there were no significant findings, observations and other research suggests that teaching reading strategies may improve reading comprehension. Educational implications and suggestions for future research are discussed.

CHAPTER I

INTRODUCTION

Educators in schools in the United States are under a tremendous amount of pressure to have their students perform, and perform well, on standardized tests. In Maryland, starting in 3rd grade and continuing through grade 8, students take a standardized test, the MSA (Maryland School Assessment), each year to establish their proficiency in reading and mathematics. Third graders are categorized as basic, proficient, or advanced in reading based on the following areas: phonics, word study, vocabulary, and reading comprehension. The reading comprehension portion consists of fiction and nonfiction passages which students must read and then answer items formatted as selected response (multiple choice) or brief constructed responses (written responses to questions).

Because of the importance of student performance on such tests, teachers often focus on teaching to the test rather than teaching students the strategies necessary to be able to read the variety of texts they will encounter in life. Lower-achieving students especially are adversely affected because their teachers spend less time engaging them using authentic literature and teaching strategies necessary to become more proficient, independent readers across the genres. Instead, teachers often present them with short passages, multiple choice questions, and BCR's (brief constructed responses). Because of this emphasis on test preparation, students have less opportunity to prepare for reading tasks in the real world.

This researcher is uncertain how common teaching to the test has become in schools across the United States, but this is definitely true in the researcher's school. Because of the pervasiveness of teaching to the test in this school and the absence of teaching comprehension strategies in the classrooms at this school, the researcher became interested in studying the

impact of strategy instruction on the reading comprehension skills of lower-achieving students. This researcher has been a reading teacher at the same school since 2005. Throughout her experience there, administrators have directed the teachers to align the teaching of reading with what students will see on the state assessments, short cycles, and benchmarks. Every lesson is required to be in packet form with multiple choice questions and a BCR question. The administration has believed that if students see questions similar to state assessment questions and in the same format, they will perform better on the spring testing. In this school, there is a lack of teaching the reading strategies that the National Reading Panel deems as important to success in reading comprehension. The following action research explores the effects of explicitly teaching reading strategies on the reading comprehension of lower-achieving students.

Statement of Problem

The purpose of the study is to determine whether instruction in selected reading strategies from the Comprehension Toolkit will improve the reading comprehension of lower achieving 3rd grade students.

Statement of Hypothesis

The null hypothesis is that there will be no significant difference in the reading comprehension scores of lower-achieving 3rd grade students who receive strategy instruction from the Comprehension Tool Kit compared to the scores of similar students who do not receive strategy instruction.

Operational Definitions

Within this study, the dependent variable is reading comprehension. The reading comprehension score will be based on the 23-item benchmark assessment administered in

February. Baltimore County's reading benchmark was retrieved from Houghton Mifflin's theme skill tests.

The independent variable in this study is instructional method. Treatment group students received both traditional reading instruction and additional instruction in selected strategies from The Comprehension Toolkit (Harvey & Goudvis, 2005). Control group students received instruction following county reading program guidelines. These guidelines call for a 90-minute block of time divided between the county's reading program (75 minutes) and phonics instruction (15 minutes).

All participants in the study were lower-achieving reading students who had achieved stanine scores ranging from 3 to 5 on the passage comprehension section of the GRADE (Group Reading Assessment and Diagnostic Evaluation) administered countywide to second grade students. GRADE is an untimed assessment used to assess reading skills and monitor reading progress as students move from grade to grade, prekindergarten through early college. The GRADE taken by the second graders includes subtests addressing word reading, word meaning, sentence comprehension, passage comprehension, and listening comprehension. There are independent scores for each section, composite scores for vocabulary and comprehension, and a score for the entire test. Reliability for the GRADE appears to be adequate. All reliability coefficients for the total test score are .90 or greater (Mental Measurement Yearbook, 2012).

CHAPTER II

REVIEW OF THE LITERATURE

This literature review examines the history of methods for increasing reading comprehension proficiency with a focus on strategies that can be used to enhance reading comprehension at the upper elementary school level. Section one introduces the history of comprehension strategy instruction and defines the reading strategies that have been identified by the National Reading Panel as effective. Section two discusses reasons why students struggle with reading comprehension and strategy use. Section three examines techniques for increasing reading comprehension.

History of Strategy Instruction

When it comes to reading, comprehension instruction is the most important component of the reading process. If readers are not reading to comprehend, there is no point to reading at all. Good readers automatically incorporate reading strategies into the reading and comprehension of a text. At some point, these readers were taught reading strategies and they subsequently practiced these strategies until they instinctively were able to use them. Children must see strategies modeled and be given the opportunity to practice in order for reading to become an automatic function. More importantly, it is essential to provide direct strategy instruction to students who may be struggling with comprehension (Harvey & Goudvis, 2007).

Comprehension strategy instruction fosters active reading. Active readers are able to draw on strategies before, during, and after reading in order to increase their comprehension. . Skilled readers may develop their own strategies, but most students can benefit from instruction and practice in the application of specific cognitive procedures to improve their comprehension. Explicit comprehension instruction begins with a teacher modeling the strategy. Students

gradually learn to implement the strategy on their own. A commonly used process is "scaffolding," in which the teacher moves from directly teaching the strategy through guiding the student in applying it to observing the student using it independently. Meaning is first constructed by an experienced reader, or the teacher. Then, students can take control of their own reading by practicing until they internalize the strategies and achieve mastery (Bouchard & Trabasso, 2003).

Fielding and Pearson (1994) state that comprehension was once viewed as a nearly automatic result of decoding and oral language. Today we know that comprehension is much more complex and involves knowledge, experience, thinking, and teaching. According to Bouchard and Trabasso (2003), interest in teaching reading comprehension strategies began to grow as a result of a new understanding of cognition that emerged in the late twentieth century. In 1979, Dolores Durkin spent many hours observing reading instruction in classrooms and found that the questions in basal readers and on worksheets were the main focus of comprehension instruction. Teachers were assessing comprehension through these questions rather than teaching students the strategies necessary to become better readers across the genres (Harvey & Goudvis, 2007). Markman (1981) conducted a study to determine whether readers would recognize obvious logical contradictions in reading passages. Findings showed that readers did not notice logical inconsistencies in the passages read because there was very little comprehension instruction in classrooms. Teachers simply assigned questions and told students about the content, but no time was devoted to teaching readers how to comprehend and learn from reading (Durkin, 1979). Studies conducted in the late 1970's prompted an interest in helping students learn strategies to help them to create meaning from text.

There are many ways to teach reading comprehension and no single right way to go about it, but "true comprehension goes beyond literal understanding and involves the reader's interaction with the text" (Harvey & Goudvis, 2007, p. 14). "Reading comprehension is a complex task that depends on many different automatic and strategic cognitive processes" (Cain, Oakhill, & Bryant, 2004). When research in reading comprehension took a different turn in the 1980's, researchers identified several thinking strategies that proficient readers use to comprehend. Pearson, Dole, Duffy, and Roehler (as cited in Harvey & Goudvis, 2007) summarized these strategies and found that proficient readers "look for connections between existing knowledge and the new information they are reading, ask questions, make inferences during reading and after reading, distinguish important ideas from unimportant ideas, synthesize information, monitor their understanding, and repair comprehension when they have difficulties" (p. 17). Kintsch and Van Dijk (1978) found that a reader actively participating with the text and making sense out of what they read will make connections between the text and what they already know. Readers build meaning by using mental representations and store them as semantic interpretations that are held in the memory during reading. Representations allow the reader to remember, use, and understand what has been read.

Strategies

The National Reading Panel (2000) identified twelve strategies that support reading comprehension. These strategies help readers construct meaning, which directly relates to improved reading comprehension. Active listening requires that readers listen while others read aloud. Active listening increases participation, allows for more thoughtful responses, enhances memory on what has been read, and focuses attention and interest on material being read. Comprehension monitoring helps readers determine their understanding as they read. This

strategy leads to detection of text inconsistencies, enhanced memory of the text, and higher performance on standardized tests. Prior knowledge allows readers to make connections to the text with what they already know. Prior knowledge instruction positively affects factual and inferential comprehension, as well as improvement on recall and standardized test performance. Mental imagery or visualization helps the reader paint a mental picture in their mind of what they are reading. Mental imagery assists readers in determining inconsistencies in the text. Graphic organizers allow students to structure important ideas from the text and greatly assist readers in writing well-written summaries. Vocabulary instruction helps students better understand what they are reading especially if the material is unfamiliar. Question answering and question generation focus readers on the content and assists students by guiding and motivating them to look back to the text for answers. Story structure helps readers understand the 'who', 'what', 'where', 'when', and 'why' of stories, as well as what happened and what has been done. Story structure teaches readers to identify main characters, setting, problem, and solution. This strategy improves the reader's ability to answer short questions and retell the story. Summarization shows readers how ideas in the text are related and teaches readers how to identify main ideas, leave out unimportant details, and generalize. Multiple strategy instruction allows readers to use several strategies at once to comprehend a text. Cooperative learning by peers suggests that readers may learn better when they are in situations with other readers that are near their level of understanding. This strategy promotes discussion and increases control over learning and social interactions.

Teacher preparation is crucial for explicit strategy instruction. Teachers must be well prepared to teach reading strategies and knowledgeable in the area of strategy instruction. Adequate preparation enables teachers to determine which strategies should be paired with

certain texts and how to properly execute explicit strategy instruction (Trabasso & Bouchard, 2003).

Reasons Why Children Struggle with Reading Comprehension

"Research has shown that many children who read at the third grade level in grade 3 will not automatically become proficient comprehenders in later grades. Therefore, teachers must "teach comprehension explicitly, beginning in primary grades and continuing through high school" (RAND Reading Study Group, 2002, p.10).

There are a multitude of reasons why children may struggle with reading comprehension and strategy usage. Poor reading at the word attack level can influence comprehension since anytime the flow of ideas is interrupted by word decoding the ability to comprehend becomes compromised. Weaknesses in the working memory can affect comprehension because by the time these students have reached the end of the sentence or paragraph they may have forgotten what they have read (McCormick, 2007).

Hirsch (2006) and Kamhi (2007) found that a lack of background knowledge on the topic can influence reading comprehension. It is difficult for a student to comprehend what they are reading if they are unfamiliar with the topic. Recht and Leslie (1988) illustrated this point in a study where they compared the reading comprehension of students who were skilled readers with students considered lower skilled readers. In the study, the subject matter was baseball. The skilled readers knew very little about baseball whereas the low-skilled readers knew a great deal about the game. The lower skilled readers had better comprehension because they had more background knowledge on the topic. This point is demonstrated well when students get one score when reading a science passage and a very different score when reading literature.

Other reasons for poor performance can be related to learning disabilities, a low level of home support, little access to reading materials outside of school, attendance problems, behavior problems, low academic achievement, low socioeconomic status, attention problems, and inferior classroom instruction (McCormick, 2007). Educators must determine the general cause of comprehension difficulties in order to devise a solution and strategies to help students become more active readers who truly comprehend and learn from what they read.

Difficulties in reading are often centered on learning disabilities and the early precursors of the alphabetic principle. It has become evident, however, that many students with a strong background in the alphabetic principle continue to struggle with reading comprehension. They require the development of various skills and strategies to overcome these difficulties (Vaughn, Chard, Bryant, Coleman, Tyler, Linan-Thompson, & Kouzekanani, 2000).

Research has proven that explicit instruction in reading comprehension strategies improves student ability to understand the text. With the advent of standardized testing, much classroom instruction has focused on measuring student comprehension with individual stories. Reading instruction in many classrooms utilizes basal readers and teacher generated questions, leaving little time for direct strategy instruction. This type of instruction may measure comprehension, but it does not teach students the skills necessary for comprehending other texts (Eilers & Pinkley, 2006). El-Dinary, Pressley, and Schuder (1992) argued that strategy instruction was too far removed from teachers' classroom practices and beliefs about comprehension instruction and, therefore, was not factored into classroom instruction.

The Committee on the Prevention of Reading Difficulties in Young Children found that the acquiring of reading comprehension skills and strategies is important enough that the lack of these metacognitive strategies is one of the major reasons why children do not become good

readers (Snow, Burns, & Griffin, 1998). It was discovered that students less-skilled in reading benefit more from strategy instruction than those more skilled in reading comprehension. The use of comprehension strategies in less skilled readers brings them closer to the ability level of students more skilled in reading comprehension (Yuill & Joscelyne, 1988).

Techniques for Teaching Reading Strategies to Increase Comprehension

Walt Whitman (as cited in Harvey & Goudvis, 2007) said "the process of reading is not a half sleep, but in highest sense, an exercise, a gymnast's struggle: that the reader is to do something for him or herself, must be on the alert, must construct indeed the poem, argument, history, metaphysical essay-the text furnishing the hints, the clue, the start, the framework" (p. 1). Reading is "an exercise" because in order to make connections, activate prior knowledge, question, visualize, infer, determine importance, and synthesize, the reader must work to comprehend the text and use strategies to do so.

Effective strategy instruction is when teachers show students how to construct meaning as they read. In "Strategies That Work," it is suggested that strategy instruction is most effective when Pearson and Gallagher's (1983) Gradual Release of Responsibility framework is used. This framework includes five components of comprehension strategy instruction that are found to be the most effective technique for teachers to use when introducing individual strategies. Teacher modeling is the first part of strategy instruction. Modeling occurs when the teacher explains the strategy, then demonstrates how to effectively use the strategy to comprehend, and thinks aloud when reading to show her thinking process and how the strategy is being used. Teacher modeling should be brief, so that the teacher can quickly move the students to guided practice. Guided practice is where the teacher directs large-group conversation to follow a certain line of thinking. The teacher and students practice the strategy together in a shared

reading where they can co-construct meaning together. During this time, the teacher provides support and feedback while scaffolding students' thinking, thus ensuring that the students are understanding the strategy. Students then participate in collaborative practice. This activity occurs in partners or small groups, where students share their thinking processes with their peers while the teacher circulates and responds to students' needs. After much practice with the teacher and peers, students are allowed time to independently practice the strategy on their own. During this time, teacher will still provide feedback, as will the other students. Once a student "owns" a strategy they can apply it to various texts across genres (Harvey & Goudvis, 2007).

Strategy lessons provide many opportunities for explicit instruction. The following approaches can be used when explicitly teaching a strategy: think-alouds, read-alouds, interactive read-alouds, lifting text, guided discussion, anchor lessons and anchor charts, and rereading for deeper meaning. Thinking aloud shows students the inner conversation we, as good readers, are having with ourselves as we read. It allows students to hear us think through our connections, questions, inferences, and reactions to the text. Other think-alouds are more strategy specific. Reading aloud is just that, when teachers read aloud to students without the purpose of instruction. Interactive read-alouds are more about listening comprehension because students do not have a copy of the text, rather they listen and react to the text through guided discussion. Lifting text is when teachers use a short piece of text to model instruction. In this strategy, students have a copy of the text and are able to make notes with their thinking as well. Guided discussion occurs when the whole group gathers together with the teacher who facilitates conversation around a certain topic, issue, theme, or idea. The teacher does not dominate the conversation but rather develops a line of thinking where students can comment and reflect on each other's ideas. Anchor charts and anchor lessons are lessons or charts that can be referred to

when encouraging students to use particular strategies. The anchor lesson is the lesson where the strategy is first introduced. Anchor charts make teacher and student thinking more visible. Rereading texts enables a student to better connect with the writing and therefore, hopefully, more able to comprehend the material (Harvey & Goudvis, 2007).

When students read, they can code the text according to the strategy they are using. This technique is called text coding or leaving tracks. For example, when making text-to-self connections, students can mark a Post-It note with T-S and stick it to the page to remind them of something that happened in their own lives. They can then write the scenario from their lives on the sticky note for later discussion with the class. Text coding is a written pathway that follows student thinking during reading. It can be used to show connections, new learning, key ideas, questions, inferences, and surprising information (Harvey & Goudvis, 2007). This strategy keeps students active readers, thinking about their own thinking while they are reading.

Pressley (2002) described the use of transactional strategy teaching as a feasible way for teaching reading strategies as well. This approach teaches students a multitude of strategies that they can apply to various reading tasks and genres of text. Pressley (2002) found that students performed better when taught a group of strategies, as opposed to traditional instruction. This was most clearly seen when students were ask talk about the text. Furthermore, Trabasso and Bouchard (as cited in Harvey & Goudvis, 2007) concluded that "there is very strong empirical, scientific evidence that the instruction of more than one strategy in a natural context leads to the acquisition and use of reading comprehension strategies and transfers to standardized comprehension tests. Multiple strategy instruction facilitates comprehension as evidenced by performance on tasks that involve memory, summarizing, and identification of main ideas" (, p. 24).

Summary

Basing reading instruction on basal readers and teacher-generated questions has been shown to be ineffective for many students. This technique will lead to a society of readers who can only comprehend certain texts. In order to become an active reader, able to comprehend various texts, children must be taught strategies at a young age. There are various methods and techniques for teaching reading strategies, but they all have similar principles in common. The instruction begins with the teacher who models how to use a strategy. Students must then be given ample time to practice strategies, in order to apply them, independently, to various texts. Strategy instruction is even more vital for less skilled readers or readers with comprehension problems. Strategies assist these students in thinking about what they are reading and making the connections necessary to become engaged in the text. This engagement will lead to a better understanding of what is being read.

A student portrayed in "Strategies That Work" (2007) put it best when he said, "reading is thinking…when you read, you have to figure out the words and what they mean…sometimes it is easy, sometimes it is hard" (Harvey & Goudvis, 2007, p. 13). Reading is more than decoding words. As Harvey and Goudvis (2007) state, "It involves cracking the alphabetic code to determine the words and thinking about what those words mean to construct meaning" (p.13).

CHAPTER III

METHODS

The purpose of this study was to determine whether teaching reading strategies from the Comprehension Toolkit would improve the reading comprehension of lower achieving 3rd grade students.

Design

This study was quasi-experimental with a posttest only design involving a comparison of the reading comprehension scores of two groups of third-grade students on the Baltimore County Public School Reading Benchmark. The experimental group received traditional comprehension instruction with an extra hour a week of reading strategy instruction over a ten-week period. The control group received only county-prescribed comprehension instruction. Median scores on the BCPSRB, administered at the end of the ten-week intervention, were calculated and compared.

Participants

The participants of this study consisted of 22 third grade students from a public elementary school in northwest Baltimore County, Maryland. The age of students in this study was between eight and nine years old. The school is 68% Black or African American, 12% Asian, 10% White, 6% two or more races, and 4% Hispanic/Latino. During the 2011 – 2012 school year, 46.4% of 3rd, 4th, and 5th grade students scored advanced on the MSA in reading, 50.3% scored proficient, and 3.3% scored basic. The treatment group included five boys and five girls. Nine students were Black or African American, and one student was Asian. Within the treatment group, one student had ESOL services and another student had IEP goals for mathematics. The control group included five boys and seven girls, all of whom were Black or

African American. Within the control group, one student had a 504 plan with reduced distractions and extended time on assessments.

Instrument

The instrument used in this study was the Baltimore County Public School Reading Benchmark (Houghton Mifflin Company, 2005). Benchmark assessments are tests aligned with the BCPS curriculum. These tests are used to determine how students at a particular level are performing in relationship to the content in the BCPS curriculum. Benchmarks were given as a "cold" read with no prior discussion. Benchmarks demonstrated to teachers what a student could accomplish independently. Benchmark assessments are also used to predict student success on the Maryland School Assessments. Currently, there is no information or data regarding the reliability or validity of this assessment. However, the researcher's principal indicated that typically students who score 70% or better on Fall and Winter Benchmarks are likely to pass the MSA given in the spring. The 3rd grade reading benchmark assesses phonics, word study, vocabulary in context, and comprehension. The benchmark contains selected response (multiple choice) questions and constructed response (written) questions. Selected response questions require the student to pick the correct answer from four choices. Constructed response questions require students to provide a written answer of 3-5 sentences with support from the text in their answer. The test is divided into three sections. Section one focuses on phonics and word study. Section two focuses on vocabulary of multiple meaning words and context clues. Section three focuses on reading comprehension. In section three, students must read three passages (fiction and non-fiction), then answer selected response and constructed response questions. Questions on the test not related to reading comprehension (e.g., phonics, vocabulary, and word study) were not included in the scores. Therefore, for the purpose of this study, only section three

which focused on comprehension was used in the reading score. It should also be noted that one week into the treatment, students took the first of two benchmarks given during 3rd grade.

Procedure

In October 2012, the researcher identified 22 of 35 students with stanine scores ranging from 3 to 5 on the GRADE (test taken at the end of second grade). A group of ten students out of the original 22 students were selected to attend a before-school class for 10 weeks. Selection was based on the likelihood of consistent attendance at this before-school class, which lasted for 60 minutes and was held every Thursday morning for 10 weeks. Attendance data was collected and will be discussed in Chapter V. During this 10-week time frame, all 22 students received the same daily reading instruction in the traditional manner. Traditional instruction consisted of 75 minute lessons using Houghton Mifflin stories or nonfiction lessons created by the researcher and her coworkers, and 15 minutes daily of silent reading for 100 Book Challenge. The treatment group received an extra hour each week of instruction with a focus on reading strategies for ten weeks. The researcher utilized The Comprehension Toolkit as a guide for teaching reading strategies. The Comprehension Toolkit is a practical resource for comprehension instruction that teaches comprehension through strategies using non-fiction texts.

Five strategies were taught and practiced by the students over the ten lessons. Specific strategies taught included monitoring comprehension, activating and connecting background knowledge, asking questions, inferring meaning, determining importance, and summarizing and synthesizing. During the monitoring comprehension lessons, students were taught to actively listen to the inner conversation that goes on in their heads while they read. Students were instructed to actively listen to their inner conversations while reading by tracking their thinking on Post-It notes using sentence starters such as, "This reminds me of," "I learned," "I wonder,"

and "I didn't know that." The second monitoring comprehension lesson focused on teaching students to take notice of confusion or distractions while reading. This strategy taught them fix-it techniques to use while reading. Some techniques include: rereading, reading ahead, slowing down, using background knowledge, and stopping to summarize.

The activating and connecting lessons worked on teaching students to use visuals and text features to gain accurate information from the features they encounter as they are reading. When students understand text features and their purposes, the features can be used to connect and clarify the new learning read in the text. Another *activating and connecting* lesson taught students to become aware of their inner conversation language that signaled new learning. Students marked up texts with Post-It notes using phrases such as, "Wow," "I can't believe that…," "I was surprised by…," and "Amazing!" Finally, student learned to activate background knowledge by completing a K-L chart (Know and Learn).

The questioning lesson taught students how to ask questions while reading and further reminded them to follow their inner conversation so that they are thinking while they are reading. The infer meaning lessons began by using context to infer the meaning of words teaching students that text clues + background knowledge = an inference. The second lesson gave students a focus question and required them to search for facts to build a case for their focus question. They were then asked to draw conclusions and support their inference with the facts they gathered.

The determining importance lesson taught students how to "code" the text. Codes included: BK (Background Knowledge), a star to show something is important, a question mark for a question, the letter R for a response, and a wavy line underneath interesting information. This lesson was important because it taught the students how to hold onto their thinking so that

they could later practice paraphrasing and identifying important information. The summarize and synthesize lesson taught students to record the main idea of sections of the text and pull that information together in order to ascertain the big ideas.

Strategy lessons were designed to support a gradual release of responsibility from teacher to student. The Toolkit lessons provided the researcher with "teaching moves" – the step-by-step teaching procedure and "teaching language" – the words used to teach key concepts to students. The following generic procedure was used to teach each strategy lesson:

1. Researcher built background, word and concept knowledge by connecting and engaging students in the strategy by asking students what they already knew about the strategy or the topic they are going to read about. Students skimmed the text and looked at the pictures to preview key concepts and vocabulary and make predictions. The researcher anticipated words and concepts that would confuse students and prepared accordingly.

2. During the teach/model portion of the lesson, the researcher previewed the text with the students and provided a brief read-aloud or think-aloud. The researcher then explained the strategy and demonstrated how to use it. Sometimes the researcher would produce an anchor chart that had points added throughout the lesson.

3. Through guided support and practice, the students and the researcher worked together on the strategy. This was accomplished reading the selection together and having the students turn and talk to each other thus enabling them to practice the strategy. Students then read a section independently while the teacher listened in and conferred with students as needed. Students also whisper-read the text and talked through the strategy out loud. This allowed the researcher to monitor fluency and strategy use.

4. The researcher wrapped up the lesson by having students share how they used the strategy or what they learned from the strategy when reading. The students and teacher summarized what was learned and an anchor chart was created or added to, if necessary. Finally, the students used the strategy independently with their own texts.

The same procedure was used for each lesson but applied to a new method for teaching the selected strategy. The only parts of the procedure subject to change were the strategies being taught and the texts being used. The main tools used during each lesson were Post-It notes and chart paper. The researcher was aware of the necessity of using high-interest texts so in-color projectable editions of National Geographic for Kids were used. The bright and vivid colors used in the illustrations, as well as the topics of the passages, enhanced students interest to read and apply the strategy to these texts.

Three weeks after the conclusion of the reading strategy class, all participants in this study took the 2$^{\text{nd}}$ reading benchmark. Their score on this benchmark represented the dependent variable for the study. An analysis was conducted to compare the scores of students in the control group and the experimental group. The results of this analysis are discussed in Chapter IV.

CHAPTER IV

RESULTS

The purpose of the study was to determine whether teaching selected reading strategies from the Comprehension Toolkit would improve the reading comprehension of lower achieving 3rd grade students. A comparison of median scores received by a treatment group and a control group following the intervention indicated a non-significant difference between the two groups.

Participants included 21 third graders whose stanine scores in passage comprehension of 3, 4, or 5 on the second grade version of GRADE. Table 1 below describes the performance of the treatment and control groups on the Baltimore County Reading Benchmark administered after the completion of treatment.

Table 1

Performance of Treatment and Control Students on the Baltimore County Reading Benchmark Following Comprehension Strategy Instructional Intervention

Descriptor	Treatment	Control
N Participants	10	11
Mean Per Cent Items Correct	70.60	65.45
Standard Deviation	8.05	10.82
Median Per Cent Correct	70.00	61.00
Range	57 – 83	52- 83

Because of the small N-size and difference in the variances of the distributions, the researcher selected a non-parametric test, the Independent Samples Median Test to compare the groups. This test yielded a significance level of 0.361, and did not meet the criterion of 0.05. Thus, the null hypothesis was retained.

Although there were no statistically significant differences between the two groups, it should be mentioned that the treatment group's median score of 70.0% exceeded that of the control group (61.0%). This data suggests that there is the possibility that students can benefit from strategy instruction in regards to raising their reading comprehension scores.

CHAPTER V

DISCUSSION

The results of this study did not support rejection of the null hypothesis of no difference in the reading comprehension scores of lower achieving 3rd grade students who received strategy instruction from the Comprehension Toolkit compared to the scores of similar students who did not receive strategy instruction.

Threats to Validity

There were several threats to the validity of this study. The most impacting threat was the amount of time the treatment was administered. The researcher selected various strategies suggested in the Comprehension Toolkit for ten weeks, once a week, for 60 minutes before school. After the second session of the treatment, the researcher realized that it would be extremely difficult for the students to take ownership of these strategies if they were only learning about them and practicing them once a week for an hour. Even the hour time frame was significantly less by the time students actually arrived, unpacked, and the lesson was started. Results could have been different had the treatment been given daily for ten weeks, for an hour each school day, as opposed to once a week.

Another threat to validity was the amount of time the researcher set aside to teach each strategy lesson. The researcher had concluded that each strategy lesson could be completed in the one-hour time frame allotted each week. The 1st two lessons taught during the ten weeks were on monitoring comprehension. These two lessons took more time than anticipated, thus causing the researcher to have to spend less time on the remaining lessons that she was prepared to teach. This affected the amount of time students had to practice each strategy as well. In

22

retrospect, each strategy lesson should have been taught in an 80-90 minute time frame instead of a 60-minute time frame.

The consistency of student participation in the treatment was another threat to the validity of this study. Attendance was problematic for some students. The treatment group consisted of ten students, and out of those ten students all but two students attended every treatment session. Five students missed 30% of the treatment sessions (only attended seven sessions), and two students missed 50% of the treatment session (only attended five sessions). Finally, one student missed 80% of the treatment sessions (only attended two sessions). Furthermore, students often arrived late. Every week, at least two students were ten to fifteen minutes late to the strategy workshop. Furthermore, during the process, one student assigned to the control group moved before the reading benchmark window opened. Thus, she did not take the assessment, and her score was not included. Due to the smaller size of the treatment group, all students' scores were still kept a part of the overall results. The amount of time allowed for this study, did not give the researcher time to make up any missed treatment sessions.

Other threats to validity came from the measurement instrument. The Baltimore County reading benchmark used to measure treatment effects was given in February, five weeks after the treatment had concluded. The amount of time that elapsed between the treatment and the assessment could have also adversely affected the validity of this study.

The scoring of performance on the instrument was also problematic. The benchmarks include both machine-scored selected response items and constructed response questions graded by the teacher. This means that the BCR's are graded subjectively by one teacher and that expectations on BCR responses can vary from teacher to teacher, regardless of the answer key or rubric given. Subjective grading of the BCR's could also impact the validity of this study.

Implications of Study

The analysis of this study shows no statistical difference between the intervention group and the control group and implies that strategy instruction does not help improve comprehension in lower achieving students. However, the researcher would like to note that the average comprehension score of the treatment group receiving strategy instruction was 70% compared to a median score of 61% for the control group. While there is no hard evidence clearly supporting the use of strategy instruction, the researcher noticed some changes in student behavior which could be associated with the treatment. For instance, the researcher noticed that those students receiving strategy instruction began using those strategies during their normal reading block. At least seven of the students from the treatment group began asking their teacher for Post-It notes to track their thinking while reading during class. Those students also had more comments to offer during the discussion of stories because they had been actively thinking while they were reading. This gave them some additional opportunities to practice the strategy and the researcher noticed that the more they practiced the strategy in the classroom setting the more proficient they became in using that strategy.

By the end of the study, those seven students mentioned above were highly capable of monitoring their comprehension by tracking their thinking and actively listening to the inner conversations that went on in their heads as they read. Another strategy that impacted these students was activating and connecting their prior knowledge to the text. Finally, these students became experts at asking relevant questions about what they were reading. Although not all students in the treatment group progressed to this extent with strategy usage, it is on a positive note that the researcher observed that 70% of the students in the treatment group mastered a selection of the strategies they were taught. This demonstrates that, with consistent practice,

students could potentially master all the strategies. Although not a part of the study, the researcher wishes to add that in terms of report card grades, in the treatment group, one student received a 90% or higher, five students received an 80%-89%, and four students received grades between 70%-79%. In the control group, there were no grades of 90% or higher, four students received an 80% - 89%, six students received 70%-79%, and one student received a grade lower than a 70%. This does imply that the treatment group had higher grades on their overall classwork and tests than the control group.

Comparisons to Previous Research

This study did not deliver statistical substantiation that strategy instruction is effective for lower-achieving third grade students, but that is not necessarily in line with other research that has been conducted. Courtney, King, and Pedro (2006) conducted a study where a fourth grade teacher and a first grade teacher set aside time in their classrooms several days a week to teach comprehension strategies. The teachers explicitly taught the reading strategies through modeling and thinking aloud and provided time for guided practice and peer practice. Strategy usage was scaffolded by the teachers to eventually lead to individual strategy use. By the end of the study, students in both classes showed progress on several reading assessment instruments and both teachers reported that their overall classwork improved as well.

Harvey and Goudvis (2007) state that various studies in the National Reading Panel (2000) as well as many other bodies of research provide a wealth of evidence that strategy instruction improves students' understanding of what they read in school. Furthermore, studies conducted on how to teach specific strategies showed "when researchers explicitly taught kids comprehension-fostering strategies, kids not only learned to apply the strategies they were

taught, but the instruction had positive effects on students' general comprehension as well" (Harvey & Goudvis, 2007, p. 23).

Comprehension strategies are tools used to help students construct meaning from the text. They are "a means to an end, not an end in themselves" (Harvey & Goudvis, 2007, p. 14). In relation to the results of this researcher's study, another study conducted by De Corte, Verschaffel, and De Van (2001) showed that teaching four comprehension strategies (activating prior knowledge, monitoring and clarifying, schema, and important ideas) did not automatically result in performance improvement on a standardized reading comprehension test. Although, the instrument used in this study was not a standardized test, it does mimic the Maryland State Assessment which students in both the experimental group and control group took in March 2013.

Recommendations for Future Research

The researcher has several recommendations for future research regarding the use of strategy instruction and increasing comprehension. The researcher believes that more time was needed to teach the selected strategies and for students to practice selected strategies. Thus, the researcher suggests that future research be conducted for ten weeks, daily in the classroom setting, instead of once a week for ten weeks in a before-school workshop. Futhermore, each strategy lesson should be taught in a 90-minute time frame, as opposed to a 60-minute time frame. This will allow for more modeling time, guided practice, peer practice, and independent practice.

The researcher thinks that limiting the number of strategies taught over the ten-week time frame would benefit future research. This researcher taught a total of six strategies over the ten weeks, some of which included more than one lesson per strategy. The researcher felt rushed

trying to touch upon all six strategies in the ten weeks. In the future, it would be more beneficial for the teacher and for the students to focus on three strategies over the ten weeks, instead of all six strategies. This would give the teacher the appropriate amount of time to teach each strategy well and give students more time for practice and in the end, ownership of the strategy. This is even more important when using The Comprehension Toolkit as a guide for teaching reading strategies because each strategy involves several lessons.

Another suggestion by the researcher is using the Baltimore County reading benchmark #1 as a pretest in October. The first benchmark could be used to pick students who would fit into the experimental and control group. It might be more relevant for choosing participants instead of using an assessment that was given six months earlier when the children were in second grade. The study could then have a pre-test/post-test design which might lead to stronger statistical results.

Finally, the researcher suggests that the assessment be given closer to the end of the treatment. In this study, there were five weeks separating the end of the treatment and the benchmark window. In the researcher's opinion, no more than two weeks should pass between ending treatment and giving the assessment. This is especially true if strategy instruction comes to a complete stop in the classroom after the treatment phase is finished. The results from the assessment may be better linked to strategy instruction if the two are given in close proximity.

Summary

In summary, this study did not indicate that strategy instruction is an effective means for raising comprehension in lower-achieving third grade students. However, based on current research, the researcher believes that strategy instruction should still be considered a vital part of reading instruction. Strategies may not solve the comprehension difficulties of every student, but

the strategies will give students more tools for tackling complicated texts. If the overall goal of

reading is to comprehend, students should have all the means necessary to gain a successful

understanding of what they are reading. Reading strategy instruction paired with effective

teaching, appropriate texts, fluency practice, and phonetic knowledge should be the keys to

effective and successful reading instruction.

References

Bouchard, E., & Trabasso, T. (2003). Comprehension. *The Encyclopedia of Education.*
New York: Macmillan Reference USA.

Cain , K., Oakhill, J., & Bryant, P. (2004). Children's reading comprehension ability:
concurrent prediction by working memory, verbal ability, and component skills.
Journal of Educational Psychology, 96, 33-42.

Courtney, A., King, F., & Pedro, J. (2006). Paradigm shift: teachers scaffolding student
comprehension interactions. *Thinking Classroom, 7,* 30-40.

Durkin, D. (1979). What classroom observations reveal about reading comprehension.
Reading Research Quarterly, 15, 481-533.

De Corte, E., Verschaffel, L., & De Ven, A.V. (2001) Improving text comprehension strategies
in upper primary school children: a design experiment. *British Journal of Educational
Psychology, 71,* 531 – 559.

Eilers, L.H., & Pinkley, C. (2006). Metacognitive strategies to help students comprehend all
text. *Reading Improvement, 43*(1), Retrieved from
http://www.projectinnovation.biz/TOC_Reading_March_2006.pdf.

El-Dinary, P.B., Pressley, M., & Schuder, T. (1992). Becoming a strategic reader: an
observational and interview study of three teachers learning transactional strategies
instruction. *Proceedings of the National Reading Conference* (pp. 453-462). Chicago:
National Reading Conference.

Fielding, L. & Pearson P.D. (1994). Reading comprehension: what works? *Educational
Leadership,* 51(5), 62-67.

Group reading assessment and diagnostic evaluation. (2012). In The fifteenth mental
measurements yearbook. Retrieved from EBSCO Mental Measurement Yearbook
database.

Harvey, S. & Goudvis, A. (2007). *Strategies that work 2nd edition.* Markham, Ontario: Pembroke Publishers Limited.

Harvey, S. & Goudvis, A. (2005). *The comprehension toolkit: Language and lessons for active literacy, grades 3-6.* Firsthand Heinemann.

Hirsch, E.D. (2006). *The knowledge deficit.* New York: Houghton Mifflin.

Houghton Mifflin Company. (2005). *Maryland standards-aligned theme tests.* Boston: Houghton Mifflin.

Kamhi, A.G. (2007). Knowledge deficits: The true crisis in education. *The ASHA Leader.* 3, 28 – 29.

Kintsch, W., & Van Dijk, T.A. (1978). Toward a model of discourse comprehension and production. *Psychological Review, 83,* 363-394.

Markman, E.M. (1981). Comprehension monitoring. In W.P. Dickson (Ed.), *Children's Oral Communication Skills.* New York: Academic Press.

McCormick, S. (2007). *Instructing students who have literacy problems 5th edition.* Upper Saddle River, New Jersey: Pearson Education.

National Reading Panel. 2000. *The report of the national reading panel: Teaching children to read.* Washinton, DC: National Reading Panel.

Pressley, M. 2002. *Reading instruction that works: The case for balanced teaching* (2nd ed.). New York: Guilford.

RAND Reading Study Group. (2002). *Reading For Understanding: Toward an R & D program in reading comprehension.* Santa Monica, CA: RAND.

Recht, D.R., & Leslie, L. (1988). Effect of prior knowledge on good and poor readers' memory of text. *Journal of Educational Psychology, 80, 16-20.*

Snow, C., Burns, M.S., & Griffin, P. (1998). A cognitive and motivational agenda for reading Instruction. *Educational Leadership, 46(4),* 30-36.

Vaughn, S., Chard, D.J., Bryant, D.P., Coleman, M., Tyler, B.J., Linan-Thompson, S. &
Kouzekanani, K. (2000). Fluency and comprehension interventions for third grade
students. *Remedial & Special Education, 21(6),* Retrieved from Academic Search
Premier.

Yuill, N., & Joscelyne, T. (1988). Effect of organizational cues and strategies on good and poor
comprehenders' story understanding. *Journal of Educational Psychology, 80*(2), 152-
158.