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The Effects of Repeated Reading Strategy On Oral Reading Fluency and Reading
Comprehension of Middle School Students

By

Daryl Rose Armstrong-Coppins

A Graduate Field Experience

Submitted on Partial Fulfillment of the

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This Graduate Field Experience

For Daryl Rose Armstrong-Coppins

Has been approved for Cardinal Stritch University by

Linda Gordy, Ph.D.

(Advisor)

November 16, 2013

(Date)

Acknowledgement Page

To God Be the Glory!

I acknowledge the work Jesus Christ has wrought in my life as well as the collaborative efforts, works and contributions of individuals in my personal and professional life. Jesus has seasoned my life with love, compassion and the strength to accomplish the tasks he has provided me as an individual and educator.

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WHAT EFFECT DOES REPEATED READING STRATEGY HAS ON ORAL READING
FLUENCY AND READING COMPREHENSION OF MIDDLE SCHOOL STUDENTS

Daryl Rose Armstrong-Coppins
Cardinal Stritch University

ABSTRACT

The purpose of this action project was to explore the effect repeated reading strategy has on oral reading fluency and reading comprehension of middle school students. The repeated reading strategy supplemented the reading instruction of middle school students in a parental choice school. The 5-phase study included school and parental approval, student interest interview and teacher questionnaire; the administration of the Qualitative Reading Inventory – 5th edition for pre-test and post-test; repeated reading strategy training and intervention strategy implementation. Students paired together and trained on the intervention process received fluency-comprehension instruction 60 to 90 minutes twice a week. Growth was determined from the Pre-test and Post-test. The findings concluded an overall effect of the repeated reading strategy on fluency and comprehension of middle school students.

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Chapter I

Introduction

One of the major goals of reading instruction is for students to become fluent readers and proficient in reading comprehension (Kuhn and Stahl, 2003). To ensure the attainment of this goal, it is essential that fluent readers recognize words accurately and automatically. The challenge of how skilled readers are able to quickly read and comprehend the text guided the literacy education field to a major shift in fluency's role in the literacy curriculum. The readers' ability to construct meaning from the text is an important role played by fluency.

The theoretical foundation of reading fluency based on the automaticity theory assists in understanding the link between decoding, reading fluency and comprehension (LaBerge and Samuels, 1974; Kuhn and Stahl 2003). The Automaticity Theory asserts that individuals have a limited amount of cognitive resources available for any given task. This is to say when increased time and attention is spent on a task; the result is fewer cognitive resources available for completing another task simultaneously. For example, excessive attention to the decoding process causes a blockage resulting in fewer cognitive resources available for comprehension. With the aim to provide more resources for comprehension to occur, decoding needs to become fluent and automatic.

Proponents of the Automaticity Theory identify accurate word decoding and automatic word recognition as the main components of fluency. Automatic word recognition is defined as quick and effortless identification for words out of context and accuracy in encoding as the ability to blend sounds together and the knowledge of a large bank of high-frequency words. Automatic word recognition ensures fluent readers effortlessly and accurately decode a text. Prosody, the second component of reading fluency, is an individual's ability to read with

appropriate expression and intonation coupled with phrasing that allows for the maintenance of meaning (Miller and Schwanenfluel, 2008). As students listen to and read along with models of expressive reading, prosody develops. When a student uses prosody accurately, the student demonstrates an awareness of the connection between oral and written language.

Learners who are not fluent readers exhibit an inability to transfer prosodic elements that happen naturally in speech onto written text. The learner's reading is monotonous, word-by-word and does not parallel the spoken language. However, fluent readers use appropriate phrasing, pitch and emphasis in their reading; thereby, making their oral reading sound like spoken language (Kuhn, 2005). The development of automatic word recognition and prosody play an important part in the students' reading development. The key elements of reading fluency are accuracy in word decoding, automaticity in recognizing words and appropriate use of prosody while reading opens the door to comprehension.

Another goal of reading instruction is comprehension, which is when the reader gains meaning from the text. "Reading comprehension is a complex process during which good readers flexibly apply a variety of appropriate comprehension strategies to whatever text they are reading" (Smith, 2006, p. 764). The process of comprehension instruction is to help students become competent users of individual comprehension strategies. The process of simultaneously extracting and constructing meaning entails three elements - the reader, the text and the activity (Sweet and Snow, 2004).

Many students go through the reading stages and become proficient comprehenders without difficulty, while other students struggle with gaining meaning from the text presented before them. Edmonds, Vaughn, Wexler, Reutebuch, Cable, Tuckett, and Schnakenberg's (2009) study indicates students struggling to gain meaning from the text have a comprehension

breakdown. A comprehension breakdown happens when there is a problem with decoding words, fluency, understanding the meanings of words, relating content to prior knowledge, using comprehension strategies and/or monitoring understanding. Moreover, some teachers assume students who are able to read words accurately also comprehend and learn from the text by reading. Because of teachers' assumption, students do not receive instruction on how to approach the text whereas the text contents are better understood. The use of reading strategies helps readers to comprehend text when it is difficult (Cantrell, Almasi, Carter, Rintamaa and Madden, 2010).

The studies by Rasinski, Rikli and Johnston (2009), Archer, Gleason and Vachon (2003), Kluda and Guthrie (2008), Rasinski, Pdak, McKeon, Wilfong, Friedauer and Heim (2005), and Applegate, Applegate and Modla (2009) state students must focus their cognitive energy on word recognition and fluency as well as develop a high level of comprehension. Successful reading requires a proficiency at combining at least two critical skills. Decoding words effectively and thoroughly comprehending text are the imperative skills necessary in promoting successful reading (Griffith and Rasinski, 2004). Cognitive strategies with concrete representation need to be included in instruction to facilitate comprehension of a text. Thus, it is important to integrate reading fluency and comprehension into regular classroom instruction in literacy and other content areas. Given the importance of fluency and comprehension skills, there is a need for explicit fluency building strategies.

Current researchers, Hawkins, Musti-Rao, Hale, McGuire and Hailley (2010), Musti-Rao, Hawkins and Barkley (2009), Kuhn (2005) and Strong, Wehby, Falk and Lane (2004) provided insight into the best instructional practices for fluency instruction for middle school students. Hawkins, Musti-Rao, Hale, McGuire and Hailley's (2010) study confirms that repeated reading

and non-repetitive reading strategy developed reading fluency for small groups of students with mixed abilities. In addition, Strong, Wehby, Falk and Lane (2004) concluded that fluency-building activities could improve the reading performance of students.

Research-based instructional strategies increase fluency while promoting comprehension and vocabulary; thereby, increase overall reading achievement and reduce reading skills deficits. Additionally, fluency instruction on accuracy, automaticity and prosodic reading should happen at the same time. The approach of repeated reading helped students increase reading rate and reading enjoyment. Thus, instruction must include strategies to help the students read fluently and comprehend any text placed before them. In an effort to assist students in making meaning from the text, the Common Core State Standards suggest instructional reading strategies, which focus on higher order comprehension instruction and move students up levels of text complexity. This would move students away from reading for information to reading with an increased analytical stance. In addition, this movement recognizes the intellectual growth of young people happens over time supporting the instruction of fluency and comprehension strategies in the secondary schools as well as elementary schools.

Statement of the Problem

Rasinski et al. (2009) as well as Rasinski and Padak (2005) findings indicated that reading fluency difficulties is another factor behind poor performance and negative attitudes towards reading for middle school students. Yet, reading fluency is not the single cause of poor reading and reading comprehension among struggling adolescent readers. Several studies (Kluda and Guthrie, 2008; Applegate, Applegate and Modla, 2009; Rasinski, Rikli, and Johnston, 2009; Rasinski, Padak, McKeon, Wilfong, Friedaugar and Heim, 2005) examine the relationship between oral reading fluency and reading comprehension. Considering the daily challenges and responsibilities presented to educators, it is important to understand the relationship that exists

between oral reading and comprehension as well as its effect on middle school student achievement. It is also important to understand what instructional reading strategies impact oral reading fluency and reading comprehension.

Purpose of the Study

Even though reading fluency has been a reading goal taught and mastered in the elementary grades, reading fluency is a significant variable in upper elementary students' reading (Rasinski, Rikli and Johnston, 2009). There is a need to prevent poor reading performance and intervene to improve the performance of struggling readers. This action research project explores what effect repeated reading strategy has on oral reading fluency and comprehension on the middle school student.

Rationale for the Study

The National Assessment of Educational Progress (NAEP) National Report Card (2001) urban students have consistently scored lower in reading than their suburban and rural peers. According to the National Report Card (2001), 60% of African American students scored below the basic reading level, 27% achieved a score at the basic reading level. Other indicators free or reduced lunch, low-income background, are also lower than the national average. African American students had the lowest reading scores of any demographic group (NAEP, 2000). The National Reading Panel found that 44% of fourth-grade students do not read with sufficient speed and accuracy and these deficits contribute to reduced comprehension.

Reports from national assessments of reading progress indicated that approximately 40% of fourth graders read below a basic level of achievement (Mercer, Campbell, Miller, Mercer, Lane, 2000, p. 179). The National Education Goals Panel (1995) reported that only 25% of students in Grade 4, 28% of students in Grade 8 and 34% of students in Grade 12 achieved proficient reading standards (Mercer, Campbell, Miller, Mercer and Lane, 2000). The numbers

of students in the United States who have reading difficulties are alarming. “The personal and societal costs of reading problems are substantial, illiteracy is positively correlated with unemployment, low wages, poverty, crime and low self-esteem” (Mercer, Campbell, Miller, Mercer and Lane, 2000, p. 179). Students with reading problems tend to be less aware of text structure and have poorer recall of textual ideas than good readers (Jitendra, Hoppes and Xin, 2000).

Although fluency is primarily a beginning reader issue, it can still be an issue in reading difficulties experienced by middle and high school students. Rasinski, Padak, McKeon, Wilfong, Friedauer and Heim (2005) demonstrated that middle and high school students from urban areas experience increased difficulty in reading than students from nonurban areas. During the middle school years, it is important for students to be fluent in recognizing words; expand their knowledge needs as well as their ability to think critically and broadly (Paige, 2011).

Finally, there is a need for continued exploration of the effect of instructional intervention for enhancing oral reading fluency and reading comprehension of the middle school student. Whether you are playing a musical instrument, driving a car or playing a sport, there is a need for degrees of fluency. Practice at the activity is critical to the development of automaticity or fluency in its execution. The same is true for reading. This project was an attempt to determine if students who receive explicit instruction in a reading strategy would improve their fluency and comprehension of expository text.

In conclusion, to attain improved reading proficiency, the majority of the adolescent struggling readers in urban schools need balanced reading instruction that provides instruction in word-level skills of fluency, vocabulary and comprehension.

Setting, Population, and Timeline

This action research project was implemented during the second semester of the 2012-2013 school year. A Parental Choice Program School in Wisconsin was the setting for the project. The school enrolled 162 students from 3-years old Kindergarten through Grade 8. All 162 students are African-American. Alyce Hubert Christian Academy (AHCA) collaborated with parents to prepare students spiritually, academically and in accordance with their God-given potential to be in the world and not of the world.

The sample for this research project was selected from the middle school student population at AHCA. There were 23 middle school students invited to participate in the reading project and thirteen parents consented to have their student participate. Of the thirteen students, nine students were 7th grade and four students were 8th grade. The overall academic achievement of the AHCA students ranged from minimal to basic performance (Milwaukee Parental Choice Program, 2011). The fourteen-session project began the third week in March and ended the first week in June.

Definition of Terms

Automaticity. The ability to read without consciously thinking about it (Caldwell and Leslie, 2011)

Oral Reading Fluency. Reading with speed, accuracy and proper expression without conscious attention on the reader's part (National Reading Panel, 2000)

Prosody. An individual's ability to read with appropriate expression and intonation coupled with phrasing that allows for the maintenance of meaning (Miller and Schwanenfluel, 2008).

Reading Comprehension. Making meaning from the text (Calkins, Ehrenworth and Lehman, 2012)

The review of literature in Chapter II starts with the reading comprehension process; what it means to comprehend a text. Next, the chapter will present the importance of fluency in the reading process in the middle school. In addition, Chapter II will examine the connection between reading fluency and reading comprehension and literacy instructional practices to improve fluency and comprehension development of the middle school students. Moreover, the chapter explores the best literacy instructional practices to use with middle school students.

Chapter II

REVIEW OF LITERATURE

The challenge of how skilled readers are able to quickly read and comprehend the text guided the literacy education field to a major shift in fluency's role in the literacy curriculum. The major change was spurred by the National Reading Panel (National Institute of Child Health and Human Development, 2000) review of fluency and the reconsideration of oral reading's role in the development of skilled reading.

A major goal of reading instruction is for students to become fluent readers and proficient in reading comprehension (Kuhn and Stahl, 2003). In order to ensure this goal, it is important that fluent readers recognize words automatically and accurately rather than intentionally decoding words they encounter in the text. It is equally important for fluent readers to read with prosody and expression. Moreover, the readers' ability to construct meaning from the text is an important role played by fluency.

The comprehension process of constructing understanding of a text implies an active intentional thinking process through which the reader constructs meaning as well as the understanding of texts variation on the differences in student background knowledge and experiences (Irvin, 2007). However, the essential point to remember is what the reader brings to the text (knowledge of the topic) and the ideas conveyed through the words printed in the text are important to the comprehension process (Neufeld, 2005). Thus, the relationship between fluency and comprehension is complex and exhibits developmental changes over time based upon the readers' abilities (Paris and Hamilton, 2009).

The purpose of this action research project is to determine what effects repeated reading instruction strategy have on oral reading fluency and reading comprehension of middle school students. This chapter summarizes studies that address the important questions pertaining to this

action research project: What does it mean to comprehend a text? What role does fluency play in the reading process of the middle school student? What is the connection between reading fluency and reading comprehension? What literacy instructional practices improve fluency and comprehension development of the middle school student? The first section focuses on comprehension development of the middle school student. The next section presents the importance of fluency in the reading process in the middle school. The subsequent section examines the best literacy instructional practices to use with middle school scholars to strengthen fluency and comprehension.

Reading Comprehension Process

“Reading comprehension is a complex process during which good readers flexibly apply a variety of appropriate comprehension strategies to whatever text they are reading” (Smith, 2006, p. 764). The process of simultaneously extracting and constructing meaning entails three elements - the reader, the text and the activity (Sweet and Snow, 2003). The reader brings capacities, abilities, knowledge and experiences to the act of reading; the text is anything that is read; and the activity is the purpose we read. The process is the mental activity the reader engages in while reading and the consequences are the results of the reading experience (Sweet and Snow, 2003). Irvin (2007) indicates the goal of comprehension instruction in all content areas is to teach students how to take charge of the elements of reading comprehension through the curriculum and to accomplish a variety of activities from the texts they experience.

The process of comprehension instruction is to help students become competent users of individual comprehension strategies. Good comprehension instruction includes explicit instruction in specific comprehension strategies, a great deal of time and opportunity for actual reading, writing and discussion of texts (Duke and Pearson, 2002). Explicit strategy instruction “is one in which the teacher must take an active role in teaching the strategy to be learned, rather

than simply presenting it and hoping the students ‘catch on’ and learn to use it effectively” (Neufeld, 2005, p 308). The objective is to explicitly teach processes in a context in which the students see an immediate need for the strategy as well as avoid teaching strategies that the students are already using effectively (Irvin, 2007). Explicit strategy instruction provides systematic steps to teach metacognitive and cognitive strategies with a clear explanation of the task, encourage students to pay attention, activate prior knowledge, break the task into small steps, provide sufficient practice at every step, and incorporate teacher feedback (Bishop, Reyes, Pflaum, 2006; Sweet and Snow, 2003). The steps begin by assessing what strategies students need to succeed on a specific task.

The assessment step is followed by the teacher’s introduction and justification of the strategy to students by telling them what the strategy is and why it is useful through a simple description or definition. Subsequently, the teacher provides students with a rationale for learning the strategy as well as how it can improve their reading comprehension (Neufeld, 2005; Irvin, 2007; Sweet and Snow 2003). Next, in order to have meaningful learning of the strategy, teacher modeling is a crucial step. It is the beginning of the process of teaching the students how to use the strategy. Through demonstration and thinking-alouds, teachers guide the students through the strategy using a relevant piece of reading material (Neufeld, 2005; Irvin, 2007; Sweet and Snow 2003).

Next, guided practice provides students with numerous opportunities to practice the strategies they are learning as well as to ask questions that will provide opportunities for them to model their thinking strategies with the support and feedback of the classroom teacher (Neufeld, 2005; Irvin, 2007; Sweet and Snow 2003). Guided practice or scaffolding for instructional purposes will lead students to internalize what the activity means in the particular setting, how to

go about implementing it and eventually, appropriating the tools of instructional conversation as their own (Wilkinson and Silliman, 2001). When the students have modeled the process through guided practice, the opportunity to independently practice the strategy in meaningful reading tasks as step five is provided. Even though the students assume full responsibility for using the strategy at the independent practice level, classroom teacher monitoring and feedback remain an important part of the process to ensure the strategy is used correctly plus help build student confidence (Neufeld, 2005; Irvin, 2007; Sweet and Snow, 2003).

Furthermore, the explicit comprehension instruction should be accompanied by a classroom-based assessment program that is designed to adjust instruction that reflects a deeper, richer and multifaceted conceptualization as well as meet each student's comprehension needs immediately (Fiene and McMahon, 2007; Sweet and Snow, 2003). Thereby, crucial to stimulating instruction is the developmental nature of comprehension and the interactions among the dimensions of reader, activity, text and context (Sweet and Snow, 2003). Additionally, the complex act of comprehending depends upon the readers' thinking process (Neufeld, 2005).

Reading Comprehension Thinking Process

The three thinking processes students need in order to comprehend a written text are word level, comprehension strategies and readers' knowledge. The word level is the students' ability to identify words quickly, accurately and knowledge of the keywords meanings. Comprehension strategies focus on students' ability to demonstrate how to understand what they read. Readers' knowledge refers to what the read knows about the world and the specific topic about which they are reading (Neufeld, 2005). Some teachers assume that students who read words accurately can also comprehend and learn from text by reading; therefore, do not teacher students how to interact with a text to better understand the content (Edmond, Vaughn, Wexler,

Reutebuch, Cable, Tuckett, and Schnakenber, 2009). The next section will focus on comprehension strategies.

Comprehension Instructional Practices

There are a number of comprehension strategies considered useful to students. Neufeld (2005) identified two comprehension strategy categories that are useful to students - getting ready-to-read as well as during- and after reading strategies. Getting-Ready-to Read category strategies that help students comprehend text included clarifying reading purpose, text overview, activating prior knowledge that is relevant to the text and prediction about the text. During- and After-reading category strategies consist of two primary goals of helping students understand and remember what they have read and assist students in monitoring their comprehension and “apply ‘fix up’ strategies when breakdowns in understanding occur” (Neufeld, 2006, p. 4). The strategies include text organization structure, creation of text summaries, checking for understanding and fix up strategies.

In this section, the first study in conducted by Cantrell, Almasi, Carter, Rintanaa and Madden (2010) explore the impact of the Learning Strategies Curriculum (LSC) reading intervention program on reading comprehension and strategy use of struggling adolescent readers. The second study lead by Schorzman and Cheek (2004) also investigated the effectiveness of an intervention strategy on the student achievement of sixth grade students. The third study in this section directed by Hock, Brasseur, Deshler, Catts, Marquis Mark and Stribling (2009) examined the reading skills of adolescent struggling readers attending urban high schools. The next study by Jitendra, Hoppes and Xin (2000) explored the effectiveness of self-monitoring and main idea strategy instructional procedure for improving comprehension of expository and textual material of students with learning and behavior problems.

Cantrell, Almasi, Carter, Rintanaa and Madden (2010) conducted a study to explore the impact of the Learning Strategies Curriculum (LSC) reading intervention program on reading comprehension and strategy use of struggling adolescent readers. The purpose of this study was to investigate the impact of the LSC on adolescent reading comprehension. Because researchers' hypothesized that younger and older adolescent students might respond to the intervention differently, the researchers examined the reading comprehension outcomes as well as reading strategy use of 6th and 9th grade students. Cantrell, et al hypothesized that the instruction in cognitive strategies that focused on developing sufficient text base for text comprehension would improve students' use of reading strategies. The researcher collected their data through randomized treatment –control group design. It compared outcomes of 365 students who received instruction in six LSC strategies daily and the 290-control group students engaged in the regular language arts curriculum.

The participants of the study consisted of 25 teachers and 862 students in 23 schools. 52.6% of the middle school participants were free or reduced price lunch; 91.1% were Caucasian and 4.5% were African American. On the other hand, 45.6% of the high school students were free or reduced prices lunch; 89.9% were Caucasian and 5.7% were African American. Within the 12 middle schools, 192 sixth graders were part of the treatment group and 166 were part of the control group. Within the 11 high schools, 254 were part of the treatment group and 232 were in the control group. Eleven middle school parents and thirty-five high school parents (8.7%) did not give permission for their child to receive the intervention; therefore, the participants were reduced to 655 students. The demographics of students in the intervention and control groups were similar for the sixth and ninth graders regarding gender, ethnicity, and

socioeconomic status; however, the sample consisted of more boys than girls in terms of ethnicity – 90% Caucasian and 6% African American.

The measures of reading achievement and strategy use to determine the impact of the LSC on student outcomes as well as observation of intervention instruction by researchers were Group Reading and Diagnostic Evaluation (GRADE) and Metacognitive Awareness of Reading Strategies Inventory (MARSİ). The GRADE is a norm-reference standardized test of reading achievement, the MARSİ is a self-reported measure designed to assess middle and high school student has perceived use of reading strategies during academic reading. Classroom observations of intervention instruction determined treatment fidelity. Structured interviews with each teacher was a secondary data source used to gain information to understand the goals of the lesson observed, reconstruct details of the lesson from the teacher’s perspective and enable participants to reflect on the lesson and their training to implement the intervention. The interview data was only used to clarify each teacher’s intervention implementation.

Each school hired a literacy teacher that taught the targeted intervention classes and worked with other teachers. In addition, each school hired one intervention teacher except for one high school that hired two 9th grade intervention teachers. Twelve of the intervention teachers only taught ninth grade and 11 taught sixth graders only. There were 12 middle school teachers (all Caucasian females) and 14 high school teachers (all Caucasian, 13 females and 1 male) provided learning strategy curriculum intervention instruction to students in the treatment group. The 24 teachers received intervention training from professional development specialist certified in LSC. The professional development consisted of training in the six cognitive strategies.

The Cantrell, et al (2010) had two primary components of whole-school model and LSC targeted intervention. The whole-school model involved professional development for all content teachers in content area literacy and the LSC targeted intervention involved instruction in six cognitive strategies of: word identification, visual imagery, self-questioning, LINC S vocabulary strategy, sentence writing and paraphrasing. All students received the whole school model component but the treatment group of struggling readers received additional instruction with the targeted learning strategies curriculum intervention. These cognitive strategies provided students with tools for word recognition, comprehension, vocabulary and writing.

Students that scored two grade levels below their current grade placement on the GRADE were placed in the treatment group. For each strategy, the intervention teachers administrated a pre assessment prior to instruction where the students read from a grade level passage and performed tasks related to the strategy, received feedback from the teacher and recorded their initial score on a progress-tracking chart. At this point, students made a verbal commitment to improve their skills and teachers made a verbal commitment to help students learn the strategy.

Following explicit instruction and modeling of the strategy, students practiced the strategy in isolation and context. The final stage dealt with assessing students' strategy use and facilitating strategy use across context. This phase focused on student awareness of contexts in which they could use their new strategy. Even though strategies were taught sequentially according to the professional development, the intervention teachers continuously reviewed previously taught strategies and encourage student to apply strategies flexibly during practice stages

Because the MARS I was a student self-report scale, "think-alouds" were used as a secondary data source. Passages and procedures from Qualitative Reading Inventory 4 (QRI-4)

were used to elicit response from students about what they were thinking as they read the selected passages. Researchers coded each student's response according to the MARS strategy. The secondary data source did not serve as a variable in the study.

Classroom observations of the intervention instruction were conducted for one class period on two different occasions. Even though the observations were completed to determine treatment fidelity and the extent teachers implemented aspects of the LSC, teachers were notified when the observations would take place.

Teacher Structured Interviews were a secondary data source used to gain information to understand the goals of the lesson observed, reconstruct details from the teacher perspective of the lesson, and assist teachers to reflect on the lesson and their training to implement the intervention. The data was used to clarify each teacher's implementation of the intervention.

At the end of the school year, students were administered the GRADE and the MARS as a post assessment. The researchers found that the 6th grade students who received instruction in the LSC 6 strategies outperformed students in the control group or the students engaged the regular language arts curriculum on the reading comprehension measure GRADE and used problem solving strategies to a greater extent than the control group. The researchers also indicated there was no significant difference between 9th grade intervention and control groups in reading comprehension or strategy use.

The researchers concluded that reading comprehension competence is gained as students develop text-based decoding and lexical skills, increase in domain knowledge, topic knowledge and interest. In addition, students develop in cognitive monitoring and strategy use as texts become more complex.

When fostering reading comprehension, it is imperative that the instruction focus on preparing readers not simply to use strategies but to become strategic users of the strategy. This means “building readers knowledge base associated with particular strategies, teaching reader how to analysis reading tasks in order to select appropriate strategies, build readers’ repertoire of strategies so they have access to a variety of strategies to used flexibly” (Cantrell, Almasi, Carter, Rintanaa and Madden, 2010, p 258).

Next, Schorzman and Cheek (2004) study investigated the effectiveness of an intervention strategy on the reading comprehension ability of sixth-grade students. The purpose of the study was to determine the reading comprehension ability of sixth-grade students on three popular comprehension strategies. The researchers hypothesized if three popular strategies, Directed Reading-Thinking Activity (DRTA), Pre Reading Plan and graphic organizers were successfully taught to 6th grade readers, their general reading comprehension abilities as measure by the formal and informal assessment instruments would increase. The researchers collected their data through the randomized treatment-control group design, pretest posttest study.

Schorzman and Cheek (2004) use the Gates-MacGinitie Reading Test (1998) and an informal cloze procedure to determine the effectiveness of the intervention on student achievement. The vocabulary and reading comprehension subtest of the Gates-MacGinitie Reading Test were administered in a group format. The cloze procedures were used with non-fiction stories from an instructional supplement. Additionally, classroom observations of the experimental and control teachers classroom lessons happened two days a week for fifty minutes per session during the entire study. The observations provided data regarding the implementation of the intervention by teachers.

The sample consisted of 103 sixth-grade students and six teachers from two middle schools in a southeast suburban school district. The students were from three reading classes in each school (School A and School B). The team of three teachers from each school were selected and randomly assigned as control and experimental schools. Prior to the intervention, Gates-MacGinitie Reading Test and an informal cloze procedure were administered. The Gates-MacGinitie Reading Test subtest of vocabulary and reading comprehension were administered to the entire group as a screening device in reading. In addition, nonfiction stories from an instructional supplement were used as the informal reading assessment. The formal and informal assessments were used to determine the effectiveness of the intervention on student achievement.

Following the formal and informal pre assessments, the experimental teachers were trained in the use of the instructional strategies. With the DRTA strategy, students created an hypotheses, read a selection of text, reviewed the created hypothesis, and amend of their original hypotheses. At this point, students provided support for their assertions. The Pre-Reading Plan strategy activated students' prior knowledge before reading. During the pre-reading plan, teachers inquired into students' experiences using pictures and clue phrases to gauge students' prior knowledge on a theme or concept. In addition, teachers provided necessary background knowledge to assist and enrich students' experiences prior to reading (Schorzman and Cheek, 2004). The third strategy was the use of various mapping strategies using graphic organizers. The three-hour training sessions included topics like: discussing the strategies, their theoretical support and examining the lesson outlines for clarity. Following the training sessions, the teachers had a one-week pilot study to practice the lesson outlines

Prior to the 7 week study, teachers developed 28 lesson plans based on the selection of texts believed to appeal to the selected students. The seven stories selected were on the 6th grade

reading level according to the Fry Readability Graph. Each lesson was designed to include the three strategies as follows Pre-reading Plan (10%), Directed Reading-Thinking Activity (60%) and graphic organizers (30%). Additionally, the lessons were compatible with the 45 minute reading class period and included a variety of activities – silent reading, group and individual vocabulary activities, and group and individual comprehension checks

Collaboratively, the researchers and teachers restricted the intervention lessons to four days per week. The experimental group (School A) students received instruction in the strategies intervention during their regular reading class period. The control group (School B) students continued to receive the district curriculum, which was a sequential, skills-base program during their regular reading class period. Bi-weekly, each teacher was observed using an observation checklist that was scored and tallied following each visit. Furthermore, a second evaluator observed and scored 20% of the observations. School B – control group planned their daily lessons during the weekly team planning time.

The researchers found that there was no significant difference between the experimental (School A) and control group (School B) on the pre and post-test on the Gates-MacGinitie Reading Test subtest of vocabulary and reading comprehension . The difference between the pre and post Gates-McGrinite Reading Test suggest that strategy intervention did not demonstrate an effect on student performance. However, it was effective in increasing the test scores as traditional directed model used by the control group (School B).

Nevertheless, the differences between the experimental group (School A) and control group (School B) were significant according to the cloze procedure. The difference on the cloze procedure indicates the strategy intervention was effective in increasing students' reading comprehension. This is to say, the experimental group ability to answer contextual clues

questions benefited their acquisition of the reading strategies. Additionally, based on the observational checklist the mean experimental teachers' implementation of strategy intervention was 92.42%. The observations and interviews support the success of the strategy on an affective level. The researchers suggest reasons for the mixed results were the format of the testing instruments and the performance level of the Experimental Teacher #1's class and the teacher reaction to the response. The researchers concluded the three strategies, (Directed Reading-Thinking Activity (DRTA), Pre Reading Plan and graphic organizers) should be considered in other context and for more than 7 weeks.

Researchers suggest that explicit instruction, modeling, scaffolding, elaborated feedback and adaptation of instruction to students' performance are keys in teaching students to use knowledge about text structure strategically. Low reading achievement is a genuine and consequential problem for many middle and high school students. Unfortunately, reading comprehension is an extremely difficult skill for many students to master. Therefore, structure interventions employ modeling, practice, and feedback, to teach students how to use text structure strategically and eventually automatically.

The next study conducted by Jitendra, Hoppes and Xin (2000) investigated the effectiveness of an integrated reading comprehension and self-monitoring program on the main idea comprehension performance of middle school students with learning disabilities and behavior disabilities. The purpose of the study was to investigate the effects of strategy instruction, self-monitoring procedure on the acquisition and maintenance of main idea comprehension skill with students with high-incidence disabilities. The researchers hypothesized that explicit instruction on main idea comprehension and self-monitoring improves the performance of students with high-incident disabilities in reading content areas. The authors

collected their data through randomized experimental-control group design, pretest, posttest and delayed posttest.

Jitendra, Hopps and Xin (2000) used three test forms developed as pretest, posttest and delayed posttest to evaluate main idea comprehension. There were 36 items with readability levels of 2.96, 4.77 and 6.69. Twelve items assessed application of skills learned during training (training measures), 12 items based on narrative passages from basal reading text (near transfer measure) and 12 items based on expository passages from social studies texts (far transfer measure). Each test included 18 multiple choice (selection) and 18 generated main idea (production) responses. The passages also included sentences that did not relate to the main idea called distracters and main ideas, which were implicit or explicit. In addition, there was a student satisfaction questionnaire developed to assess student attitudes regarding the acceptability of training, the effectiveness of the main ideas strategy and the usefulness of the prompt card.

The sample consisted of 33 middle school students from an urban school district in the northeastern United States. There were 9 (27%) sixth graders, 14 (42.4%) seventh graders, and 10 (30.3%) eighth graders. Within the 33 middle school students, 22 were males and 11 were females. The average age of the participants was 13.2 years. The ethnic profile information of the students were 45.4% (15) Caucasian, 15.1% (5) African American and 39.3% (13) Hispanic. Additionally, of the 33 students that participated in the study 29 (87.8 %) were classified as learning disabilities [LD] and 4 (12.1%) classified as seriously emotional disturbance [SED]. The participants selected for the study received specialized instruction for a reading deficit and scored at least 2 years below grade level on the Word Recognition and Reading Comprehension

subtest of the Woodcock Reading Mastery Test; however, the student did not score lower than 2.5 and 2.0 grade level.

Students were arranged by grade level and randomly assigned to the experimental (student trained in main idea) or control group (students not trained). The pretest, posttest and delayed posttest evaluated main idea comprehension were the same for the experimental and control group. Students read each passage, determined the main idea of that paragraph and either select the best answer or write a main idea sentence. However, students received assistance in word recognition as needed. The pretest administration was the day before main idea instruction; posttest administration was the day immediately following the completion of instruction. Delayed posttest administered six weeks after the completion of instruction.

The main idea and self-monitoring instruction for the experimental group happened in small groups of 6 to 8 students. The instructor presented a main idea comprehension strategy, modeled the application of the strategy, followed by guided and independent practice. The instruction incorporated self-monitoring strategy procedures. The eight lesson instructions was completed in two sessions except for lesson three, which was completed within one session. The control group continued to receive reading instruction in small group from the special education teachers in the resource classroom. Student performance was monitored and corrective feedback was provided during the guided and independent practice. A four-step self-monitoring procedure was incorporated throughout the main idea strategy instruction. During session one, prompt card and oral cues for self-monitoring were provided during the guided and independent practice part of the lesson.

The researchers determined the experimental group outscored the control group statistically on the posttest training items. The posttest items required students to select a

response and produce a response as well as maintain their improved performance on the delayed posttest. On the near and far transfer posttest and delayed posttest items, the experimental group outscored the control group on selection response; however, there was a decrease from the pretest performance on generated responses for both groups. The student questionnaire indicated student attitude was positive toward strategy and self-monitoring instructional procedures. The prompts provided students with access to cues for recalling the strategy; thereby, decreasing the demand on memory. Furthermore, the prompts helped students to focus on strategy application instead of strategy recall. In conclusion, the results provide support for explicit instruction on main idea comprehension and self-monitoring procedures to enhance the performance of students with high incidence disabilities in reading and content area.

Next, the study conducted by Hock, Brasseur, Deshler, Catts, Marquis, Mark, and Stribling (2009) examined the reading skills of adolescent struggling readers attending urban high schools. The purpose of their study was to determine the nature of components of reading skills for older adolescent struggling readers (ASR) in urban high schools. The authors listed hypotheses related to these questions. 1) The differences between proficient and struggling readers on word level, fluency vocabulary and comprehension. 2) The relationship profile of specific reading component skill and reading comprehension 3) Struggling adolescent readers need instruction in all reading components or on one or two component skills. The authors collected their data through multiple measures of each construct. The independent variables were the reader skill components of word level, fluency, vocabulary and comprehension. The dependent variables were Woodcock Language Proficiency Battery [WLPB-R] (word attack and word identification), Test of Word Reading Efficiency [TOWRE] (sight word efficiency and phonemic decoding efficiency), and Gray Oral Reading Tests [GORT] (rate, accuracy, reading

comprehension). In addition, the Peabody Picture Vocabulary Test and Kansas State Assessment [KSA] (reading subtest) to assess word level (decoding and word identification), fluency (rate, pace and accuracy), vocabulary (receptive and expressive) and comprehension (reading and listening) were dependent variables. It is important to assess students with measures that provide detailed patterns of strength and weakness in the components areas of reading to give teachers information that is useful for instruction.

The sample consisted of 345 late eighth and early ninth grade students from two suburban junior high schools, two urban middle schools and three urban high schools in two mid-western cities. Eight-two percent of the sample was from the urban schools and 18% recruited from the suburban areas in order to increase the number of exemplary readers and balance the 5 KRA categories of unsatisfactory, basic, proficient, advanced, and exemplary. The average age of the participants was 14.9 years. The ethnic profiles of the students were 53% African American, 15% Hispanic, 29% white and 4% other. The ASR students and proficient readers were 202 and 143, respectively; additionally, 51% of the students received free/reduced cost lunch and 47% paid lunch. Of the 34 students that received special needs, services (Learning Disabilities) 29 were ASR and five in the proficient group.

The author only discussed procedures of the study related to the student responses on the multiple measures of each construct. Participants were individually tested by 16 trained examiners after school or on Saturdays. The student data was handled using the steps of completion, accuracy, reliability, data entry, and verification. Student data were checked for scoring and accurate calculation of raw scores. Data entry and verification were completed independently and reliability checks were completed for each measure that involved scorer judgment – GORT, WLPM-R word attack subtest and TOWRE.

The researchers found that 123 (61%) adolescent struggling readers scored lower on all reading skill components (word level, fluency, vocabulary and comprehension) than proficient readers. Another 26 (12%) ASR scored low on fluency, vocabulary and comprehension reading skill components. The areas of greatest deficit were fluency and comprehension. Beside comprehension, the largest number of students [177 (88%)] scored below the mean on the reading component of fluency. There were significant deficits at the word level and fluency for students with learning disabilities. Four proficient readers scored below the mean of every component except comprehension. In fluency, 49 proficient readers were below the mean standard score; however, the combination of high vocabulary scores, low fluency scores and varying word-level scores 42 proficient readers and 28 struggling readers were in this category. In summary, Hock, Brasseur, Deshler, Catts, Marquis, Mark, and Stribling (2009) stated that 260 of the 345 students scored below the 40th percentile on at least one component (67 of 150 proficient readers and 200 of 202 struggling readers)

In conclusion, to attain improved reading proficient the majority of the adolescent struggling readers in urban schools need balanced reading instruction that provides instruction in word-level skills of fluency, vocabulary and comprehension. Hence, it is important that teachers are prepared to teach students reading skills and strategies in each of the reading component areas in this study.

The four studies presented provided insight in to what it means to comprehend a text. The first study explored the impact of the Learning Strategies curriculum (LSC) reading intervention program on reading comprehension and strategy use of struggling adolescent readers. The researchers determined that reading comprehension competence is gained as students develop text-based decoding and lexical skills, increase in domain knowledge, topic

knowledge and interest and develop in cognitive monitoring and strategy use as texts become more complex. The second study investigated the effectiveness of an intervention strategy on the reading comprehension ability of sixth-grade students and suggested that direct instruction, modeling scaffolding, elaborated feedback and adaptation of instruction to students' performance are keys in teaching students strategically use knowledge about text structure. The third study examined the reading skills of adolescent struggling readers attending urban high schools and determined to improve reading proficient the majority of the adolescent struggling readers in urban schools need balanced reading instruction. The fourth study explored the effectiveness of an integrated reading comprehension and self-monitoring program on the main idea comprehension performance of middle school students with learning disabilities and behavior disabilities.

There are factors that contribute to a student's ability to comprehend. Generally, the low reading performance of students in the intermediate, middle, and secondary schools is due to poor vocabulary and comprehension (Rasinski and Padak, 2005; Edmond, et al, 2005). Nonetheless, reading difficulties are also related to insufficient mastery of reading competencies such as word decoding and reading fluency. Skilled readers are able to identify words instantly and accurately; thereby, spending a minimal amount of attention to identify individual words and greater focus of text meaning (LaBerge and Samuels, 1974; Edmond, et al., 2005).

Secondary school students with difficulty decoding words will also have a challenge with understanding what they have read. Furthermore, adolescents who laboriously decode words accurately are directing cognitive resource that should be devoted to comprehension for word decoding (National Reading Panel, 2000; Archer, Gleason, and Vachon, 2003; Rasinski and Padak, 2005). As a result, struggling middle school students read less over time and fail to gain

fluency while their peers read more over time and increase their fluency, illustrating the Matthew Effect phenomenon. The Matthew Effect refers to some students rapidly developing and building on literacy foundations without intervention while other students are left behind.

Fluency as a Factor in Reading Process

Even though reading fluency has been a reading goal taught and mastered in the elementary grades, reading fluency is a significant variable in upper elementary students reading (Rasinski, Rikli and Johnston, 2009). The first study conducted by Rasinski et al. (2009) investigated the relationship of reading fluency and reading comprehension of students. The most common reason for the importance of fluency is its relationship with comprehension and the direct impact on class work completed by the middle school student (Archer, Gleason and Vachon, 2003). The second study implemented by Kluda and Guthrie (2008) further explained the relationship of reading fluency and reading comprehension in the middle school classroom. The third study conducted by Rasinski, Padak, McKeon, Wilfong, Friedauer and Heim (2005) explored the relationship between reading comprehension and reading fluency as measured by decoding accuracy and fluency level of ninth grade students. The next study by Applegate, Applegate and Modla (2009) focused on the comprehension and fluency relationship as a complex higher-level thoughtful response to text.

Rasinski, Rikli and Johnston's (2009) study explored the relationship between reading comprehension and reading fluency as measured by prosody (phrasing, intonation, and pace) of third, fifth, and seventh graders. Rasinski, et al. (2009) based on other research in the area of reading fluency and reading comprehension hypothesized that as students progressed through the grades the overall relationship between fluency and reading comprehension would continue to be significant but would likely diminish.

The participants for the study were selected from Westside Community Schools in Omaha, Nebraska. Westside Community Schools was is a small urban school district with approximately 6,100 students in 10 elementary schools (grades K-6) one middle school (grades 7-8) and one high school (grades 9-12). All students in grades 3 (n = 391), grade 5 (n = 421) and grade 7 (n = 392) participated in the study. Westside Community Schools and Educational Service Unit (ESU #3) developed the project to test the relationship of reading fluency to reading comprehension. ESU #3 is an intermediate education agency responsible for designing programs for teacher learning and collaborating with schools on custom services as specified by each district.

The third, fifth and seventh graders were administered a standardized norm-referenced silent reading assessment. The comprehension subset of the standardized norm-references silent reading assessment, narrative and expository passages, was used as the measure of reading comprehension. The study procedures consisted of digital recording of oral reading sample and scoring of the reading file for prosodic reading using Multi-Dimensional Fluency Scoring Guide (MFSG). Specifically, students read 200-word grade-level narrative passages from a published trade book. One passage was selected for the seventh graders and two passages were selected for the 3rd and 5th grade students in which one passage was at a lower level for students with special academic needs. Student read the passage silently and then read the same passage orally using their normal and expressive voice. Students were allowed 10 minutes to complete a one-minute recording in the computer. Each audio reading sample was independently scored by two raters for prosodic readings features, phrasing and expression, accuracy and smoothness, and pacing, using the MFSG (Rasinski, 2004).

The researchers determined three important results from the study. First, students at all grade levels who read with greater prosody had a greater level of comprehension during silent reading indicating a significant relationship between silent reading and prosodic reading. Secondly, the magnitude of the relationship between reading fluency and reading comprehension measures at all grades was a significant portion of the variance in silent reading comprehension is shared with the variance in reading fluency. Last, the relationship between reading fluency and reading comprehension was significant at all three grade levels, even though there was a moderate drop in fluency from grade 5 to 7.

Based upon the researchers' observations and results there was little fluency instruction provided beyond the elementary grades in most of the schools and fluency development may deteriorate in the middle grades. Thereby, confirming the importance of reading fluency and its relationship to reading comprehension regardless of a prosody or automaticity measure. Reading fluency is not the single cause of poor reading and reading comprehension among struggling adolescent readers. Rasinski et al. (2009) as well as Rasinski and Padak (2005) findings indicated that reading fluency difficulties is another factor behind poor performance and negative attitudes towards reading for middle school students. Klauda and Guthrie (2008) in the next study further explain the relationship between fluency and comprehension as well as its importance for the middle school student.

Klauda & Guthrie (2008) study was designed to examine the relationships of reading among word reading fluency, syntactic fluency, text fluency and reading comprehension for students in sixth through eighth grade. The researchers' purpose focused on the correlation of the three fluency level with comprehension under various controlled situations as well as the extent to which the correlation was mediated by inference, prior knowledge, and the bidirectional

relationship between fluency and comprehension. Klauda and Guthrie (2008) expanded their study to include the passage level in order to determine the effect of the macrostructure of the text on fluency beyond the word and syntactic levels.

The researchers' hypothesized that the dependent variable of each type of fluency, individual word, the syntactic unit and the whole passage, will show a strong relationship or at least relationships stronger than those that would be obtained if the measures were based on entirely different texts. The independent variables were background knowledge, inference, word recognition speed, syntactic, and passage level processing.

The participants were selected from a school located in a small city in a mid-Atlantic state in the United States. The 278 fifth grade students were from 13 classrooms in three schools. The ethnic composition of participants were 20.5% African American/Black, 65.2% Caucasian, 8.8 Hispanic, 2.6% other. In addition, 49.6% of participating students were male and 50.4% were female. The sample population also included 9.2% of the students had special education needs and English as a Second Language were 4.8% of the sample population. In addition, the sample included students reading several years below and above grade level.

The study was implemented in the regular classroom by the classroom teacher across two consecutive school days for a total of 90 minutes. At the beginning of the school year, all participants completed the group reading assessments to all students. Research assistants administered individual fluency measures for word recognition and passage oral reading for students in each classroom - 12 students per class considered as struggling readers, 12 students considered at or above grade level and reading below grade level. At the second test point, mid-December, the syntactic processing and reading comprehension measures were reassessed.

The study results indicated that word level fluency, syntactic level fluency and passage level related separately to reading comprehension. Additionally, the association between the reading fluency levels and reading comprehension was partially mediated by background knowledge and inference. Klauda and Guthrie (2008) findings indicated an automaticity effect for word recognition speed and syntactic processing; thus, more cognitive resources were available for using background knowledge and inference. Finally, the bidirectional relationship between reading comprehension and syntactic level fluency was consistent with the automaticity theory, fluency contributed to reading comprehension and comprehension contributed to fluency in a top-down manner. (Klauda and Guthrie, 2008) concluded that background knowledge, inference, and passage level processing might be depended upon similar language processing abilities or factors such as vocabulary or motivation.

Although fluency is primarily a beginning reader issue, it can still be an issue in reading difficulties experiences by middle and high school students. Rasinski, Padak, McKeon, Wilfong, Friedauer and Heim (2005) demonstrated that middle and high school students from urban areas to experience increased difficulty in reading than students from nonurban areas. The following study by Rasinski, Padale, McKeon, Wilfong, Friedauer, and Hiem (2005) also focused on the reading fluency and comprehension relationship.

The study conducted by Rasinski, Padak, McKeon, Wilfong, Friedauer, and Heim (2005) explored the relationship between reading comprehension and reading fluency as measured by decoding accuracy and fluency levels of ninth grade students. The purpose of their study was to determine that the lack of reading fluency is a source of middle and high school students from urban areas reading difficulties.

The authors hypothesized that improvements in fluency can account for significant gains in students' reading comprehension. The independent variable was a ninth grade level passage from the Secondary and College Reading Inventory. The dependent variable was the performance scores on the state high school graduation test (a silent reading comprehension tests across all major subject areas taken at the beginning of the school year) and a one-minute reading probe (Curriculum-Based Measurement [CBM] or Oral Reading Fluency [ORF]).

The sample consisted of 303 ninth grade students from a moderate sized urban school district in the United States Midwest. The participants were selected based on poor performances scores on the state high school graduation tests, which students are required to pass in order to qualify for a high school diploma. As well as, teachers who were willing to allow their students to leave class for less than five minutes for the study. The school administration and teachers asserted that the students were representative of the school population.

During the last week of the school year, to ensure that the reading samples reflected the most advanced levels of reading exhibited by students during the year, the 303 students were assessed using a one-minute reading probe known as Curriculum-Based Measurement (CBM) in reading or Oral Reading Fluency (ORF). Working one-on-one with the researchers, each student read a ninth-grade level passage from the Secondary and College Reading Inventory for one minute to assess the decoding accuracy and fluency levels of the 303 students. Students were asked to read orally in their normal voices and to retell what they had read at the end of the reading. As the students read the passage, the researcher marked any uncorrected errors students made during the one-minute period. The one-minute reading determined each student's word recognition level as measured by percentage of words read correctly and reading fluency as determined by number of words read correctly in the time period.

The authors found that the end-of-the-year ninth graders read with an average word-recognition accuracy of 97.4% correct and a reading fluency rate of 136.4 words correct per minute. Based on this, the sample of ninth grade students were able to decode words accurately and reading fluency rate increased as students matured across and within grade levels. Because there were no ninth grade established to compare oral reading fluency against, spring fluency norms for grade eight students were used. The 50th percentile spring norm for eighth grade students was 171 words correct per minute (wcpm) and the 25th percentile norm was 145 wcpm. On the average, the 303 ninth graders students' fluency levels were below the 25th percentile for eighth graders. The 9th graders read at a fluency level that was about 80% of what might be considered the norm for eighth grade students (50th percentile) and 186 (61.3%) scored at or below the 25th percentile. As a whole, these students did not achieve a level of fluency that would be considered normal or average for their grade level. These students require significantly more time to accomplish any reading assignment than do students who read at a normal reading rate.

The authors found there was a statistically significant and moderately strong relationship between fluency and comprehension. Thereby, suggesting that reading fluency is a factor that should be considered among struggling students. The results of the study concluded that improvements in fluency could account for significant and substantial gains in students' reading comprehension. Reading fluency is generally taught in the elementary grades and not in the middle and secondary schools. Therefore, the lack of reading fluency instruction may be an important cause for reading comprehension difficulties experienced by middle and secondary students. The next study continues the exploration of the relationship between oral fluency and

comprehension. Applegate, Applegate and Modla (2009) focused on the relationship between comprehension and fluency as a complex higher-level thoughtful response to text.

The study conducted by Applegate, Applegate and Modla (2009) investigated the relationship between fluency and comprehension. The purpose of the study was to assess reading comprehension as complex higher-level thoughtful response to text. The authors hypothesized that if reading fluency helps reading comprehension then highly fluent students are expected to demonstrate high performance levels when comprehending reading materials at their current grade level. The primary dependent variable for the study was correct words per minute (CWPM) of students' oral reading fluency. The fourth grade passage of DIBELS oral reading fluency serves as progress-monitoring data for students during the study. The independent variables were baseline conditions and paired repeated reading conditions. To investigate the relationship between fluency and comprehension, the study examined the issues of 1) will a high degree of fluency be accompanied by a high degree of reading comprehension and 2) when comprehension is assessed as thoughtful response to text will a high degree of fluency be accompanied by a high degree of reading comprehension.

The sample consisted of 171 students (60 males and 11 females) ranging from grade 2 to grade 10 from the states of Pennsylvania, New Jersey and Delaware. One hundred and nine of the students attended public schools, 45 attended parochial schools, 17 attended private schools and two students were home-schooled. Primary grades (2-3) 60 students, Intermediate grades (4-5) 57 students, middle and high school (6-10) 54 students. Eighty-six percent of the participants were Caucasian and 14% were members of minority groups. Readers tested were identified by a parent or teacher as a strong reader were assessed by a graduate or undergraduate using the Critical Reading Inventory-2 (CRI-2). CRI-2 measured reading along three dimensions: text-

based, inference and critical response. The assessment assisted the users to distinguish between readers who can recall information from the text and can think about it. The results of the Critical Reading Inventory -2 oral readings and retellings were scored by comparing the students retelling to a retelling rubric for each passage. The scoring was primarily based on the recall of key elements drawn from a modified story grammar structure.

Following the pretests (Critical Reading Inventory-2 reading fluency rubric), the strongest readers were identified as the students who earned a score of 16 or higher indicating strong fluency performance in the areas of accuracy, pace and prosody. Each student was assessed at his or her current grade level on two narrative passages. One passage was read orally and the other passage was read silently. Retelling and a series of 10 open-ended comprehension questions followed each passage. Text-based comprehension was assessed with 8 comprehension items and higher order comprehension was assessed with 12 comprehension items. Inference and critical response items which assess the ability to link text and experiences.

The authors found the proportion of the sample were determined to function at advanced comprehenders (85% or higher), proficient comprehenders (between 63% and 80%), and struggling comprehenders (58% or lower) in their current grade placement. Thirty percent of fluent and strong readers (literal and higher order) achieved a high level of reading comprehension at their current grade levels. In addition, 39% scored at a level that suggested that they are proficient readers but still have some instructional needs in comprehension. In addition, 1/3 of fluent and strong readers struggled with comprehension at their current grade level. The average text-based comprehension of struggling comprehenders reached as instructional level suggesting that much of the problem lies with higher order comprehension.

Applegate, Applegate, and Modla (2009) concluded that a number of the students had a distorted conceptualization of reading, focusing their energies on a high level of word recognition and fluency without developing high levels of comprehension. Secondly, assessments of fluency without concurrent assessments of thoughtful comprehension are potentially misleading and damaging.

The four studies in this section provide insight into the importance of reading fluency in the middle schools and its relationship to comprehension. The first study explored the role of reading fluency as a contributor to reading proficiency and difficulty among intermediate and middle grade students and determined a correlation between fluency and silent reading comprehension as measured by a standardized achievement test at all three grade levels. The second study examined the relationship of three levels of reading fluency to reading comprehension and validated the importance of reading fluency regardless of the measurement instrument in models of reading especially in the relationship to reading comprehension. The third study explored the relationship between reading fluency and reading comprehension of ninth grade students and supported the improvement in fluency accounts for gains in student reading comprehension. The fourth study investigated the relationship between fluency and comprehension.

The researchers determined that students must focus their cognitive energy on word recognition and fluency as well as developing high level of comprehension. Successful reading requires a proficiency at combining at least two critical skills. Decoding words effectively and thoroughly comprehending text are the imperative skills necessary in promoting successful reading (Griffith and Rasinski, 2004). Cognitive strategies with concrete representation need to be included in instruction to facilitate comprehension of a text. Thus, is important to integrate

reading fluency and comprehension into regular classroom instruction in literacy and other content areas. The next section includes research on the implementation of instructional strategies which encourages reading skill development in the areas of oral fluency and comprehension.

Fluency and Comprehension Instructional Interventions

National and state stakeholders that shape reading instruction and accountability have had an unprecedented involvement for the past 10 years. In response to the National Reading Panel (NRP) report (National Institute of Child Health and Human Development [NICHD], 2000), No Child Left Behind (NCLB) legislation, Reading First, Response to Intervention, and other state and local policies, educators have been urged to focus on ‘proven practices’ in literacy areas including comprehension and fluency. Teachers are expected to provide excellent instruction, assess student performance, as well as use assessment results to inform instruction and evaluate student achievement (Valencia, Smith, Reece, Li, Wixson, and Newman, 2010).

During the middle school years, it is important for students to be fluent in recognizing words; expand their knowledge needs as well as their ability to think critically and broadly (Paige, 2011). Therefore, there is a need for effective strategies to promote reading fluency and comprehension among middle school students. The first study conducted by Hawkins, Musti-Rao, McGuire, and Hailley (2010) examined the implementation of class-wide instructional strategies to improve reading fluency. The second study by Musti-Rao, Hawkins, and Barkley (2009) evaluated the influence of repeated reading intervention on oral reading fluency of students. The next study conducted by Kuhn (2005) explored the reading development of small student groups that were transitioning from intentional decoding to fluent reading. The Strong, Wehby, Falk and Lane (2004) study examined the impact of structured reading curriculum and

repeated reading intervention on the reading fluency on junior high school students with special needs.

Hawkins, Musti-Rao, Hale, McGuire and Hailley (2010) conducted a study that examined the implementation of class-wide instructional strategies to improve reading fluency, comprehension and vocabulary knowledge. The purpose of the study was to examine the effects of the class-wide implementation of a listening previewing (LP) strategy and vocabulary previewing (VP) strategy on reading comprehension as compared to silent reading. The researchers' hypotheses were twofold: 1) the class-wide listening previewing would lead to higher comprehension levels than would silent reading and 2) the addition of vocabulary preview activities would result in the highest levels of comprehension and vocabulary when compared to LP alone and silent reading. The independent variables were silent reading control, listening previewing, listening previewing plus vocabulary previewing. The dependent variables were factual, comprehension, inferential comprehension and vocabulary. The study used passages from a reading series, which contained 50 expository passages at the fourth grade reading level.

The participants were selected from an urban charter school in Midwestern United States. The school enrollment was 605 students from kindergarten to ninth grade. The ethnic composition of the school was 96% African American/Black, 1.3% white, 0.3% Hispanic and 2.3% multiracial students. In addition, 86.5% students qualified for free lunch and 6.4% students qualified for reduced lunch. Following teacher referral and results of a grade-wide reading fluency measure 21 fourth grade students between the ages of nine and eleven were selected to participate in the study. Thirteen (61.90%) of the participating students were African American males without special education services.

The procedures for the study were implemented in the regular classroom over nine consecutive school days by the researchers. The classroom teacher was there for all sessions to observe the intervention approaches and to manage classroom behavior. Each data collection session consisted of students reading one passage, answering 10 corresponding multiple-choice questions, and completing a vocabulary-matching probe that contained 10 words from the passage. The listening previewing and vocabulary previewing condition provided students with pre-teaching of vocabulary words, sentence-by-sentence reading with the researchers, and the completion of the 10 comprehension questions and the vocabulary-matching probe. Each day, students were exposed to one of the three conditions: silent reading control condition, Listening Preview Condition and Listening Preview + Vocabulary Preview conditions.

The silent reading control condition students completed the passage reading, answered the 10 comprehension multiple-choice comprehension questions and vocabulary-matching probe sheet independently. During the LP condition, students read the selected passages with the researchers sentence by sentence, followed by the instruction to complete the vocabulary-match probe independently.

Hawkins et al. (2010) determined that class-wide implementation of a sentence-by-sentence LP strategy increased reading comprehension of targeted material as compared to silent reading. Furthermore, adding VP activities can enhance the effect on comprehension and improved immediate vocabulary knowledge and recall. In addition, the reading comprehension analysis found that students answered significantly more factual comprehension and inferential comprehension questions correctly in the LP and LP + VP conditions than the silent reading condition. This was consistent for 19 of 21 participants that displayed the highest median factual comprehension scores in on or both of the LP condition. There was not a significant difference

between the number of correction inferential comprehension question between the control and LP conditions and between the LP and LP + VP conditions. This performance was consistent for 17 of 21 students that displayed the highest levels of inferential comprehension in one or both of the LP conditions.

The vocabulary analysis found that students made significantly more correct vocabulary matches in the LP + VP conditions than in the LP and control conditions. There was not a significant difference in performance on the vocabulary-matching task across the control and the LP conditions. Fifteen of 21 students had the highest median number of vocabulary matches in the LP + VP condition.

Fluency oriented instruction approaches ensure students have increased opportunities to read connected text and create student academic responsibility. Fluency skill is important in middle school grades when students are exposed to reading materials at a higher level (Musti-Rao, Hawkins, and Barkley, 2009). The repeated readings technique based on the automaticity theory of Samuels (1974) is usually incorporated in all instructional strategies designed for fluency. The commonly used approach involves the repeated reading of passage so that students are able to read the passage with accuracy, speed, expression and comprehension is based upon the automaticity theory (LaBerge and Samuels, 1974; Kuhn and Stahl, 2003; Samuels, Ediger and Fautsch-Patridge, 2005). Freeing the reader's attention from decoding allows the reader to assert more attention to the meaning of the passage. The next two studies focus on the effects of repeated reading on oral reading fluency and small group instruction is presented.

Musti-Rao, Hawkins, and Barkley (2009) conducted a study, which used multiple a baseline design to evaluate the influence of repeated reading intervention on oral reading fluency of students. The purpose of the study was to determine the effects of peer-mediated repeated

reading on the oral reading fluency of urban fourth-grade students. The researchers' hypothesis was to determine if gains in reading fluency during repeated reading practice sessions would generalize to unfamiliar reading. The primary dependent variable for the study was correct words per minute (cwpm) of student's oral reading fluency on. The dependent variables were students' performance on the fourth grade-level passages from an oral reading fluency, which was also used as progress-monitoring data students during the study. The independent variables were baseline conditions and paired repeated reading conditions.

The participants were selected from an urban charter school in Midwestern United States with an enrollment of 605 students from kindergarten to ninth grade. The ethnic composition of the school was 581 (96%) African American, 8 (1.3%), Caucasian, 2 (0.3%), Hispanic, and 14 (2.4 %) multiracial students. The grade wide reading fluency screening and teacher referral was used to select the participating class. The inclusion class selected to participate in the study was the lower achieving class of the two 4th grade classes in the school. From a class of 32 students, 12 African American (5 boys and 7 girls) selected to participate in the study were between the ages of 9 years 3 months and 12 years 5 months of age. Six students were identified as receiving special education services. The 12 sample students were selected based on the at-risk markers in reading on the oral reading fluency screening results.

Following the oral reading fluency screening, a three tiered multiple baseline design was used with the two conditions – baseline and paired repeated readings. Students were trained to use the paired repeated reading condition in two 15-minute sessions and the classroom teacher was trained through a script with the steps involved as well as specific instructions to read aloud to students and researcher modeling.

During sustained silent reading after lunch, students selected a book from the class or school library and read independently for 30 minutes followed by a progress-monitoring passage. Even though the entire class was engaged in the repeated reading, progress-monitoring passages were used to measure fluency from the practice passages for the 12 participating students administered individually by the researchers. Each session began with paired students taking turns reading each paragraph of the passage for 10 minutes. Students read the practiced passage for 1 minute at the end of the 10 minute of repeated reading sessions and recorded the number of words read correctly in their reading logs. The three-tiered groups of students received a repeated reading intervention for 17, 12, and 6 weeks by classroom teacher in a four week staggered manner. The sessions were three days per week.

The researchers determined that all of the students showed increase in oral reading rate with peer-mediated repeated readings compared to the silent reading (baseline) condition. However, no students met end of year goals on the spring benchmark assessments for 4th grade. Even though there were limited gains by students, results suggest that repeated readings promote reading fluency rates among the struggling readers. The study results confirmed that repeated reading is an effective fluency-building intervention for urban learners especially true within an inclusive classroom setting where students with and without disabilities are engaged in meaningful reading activities at their instructional levels (Musti-Rao et al., 2009). The researcher in the next study explored the effectiveness of repeated reading and non-repetitive reading strategies on reading development of small student groups.

Kuhn (2005) explored the reading development of small student groups that were transitioning from intentional (needing to identify every word) decoding to fluent reading. The purpose of the study was to explore the effectiveness of repeated readings strategy and non-

repetitive reading strategy on the reading development of students that are transitioning from intentional decoding to fluent reading. The dependent variables for the study were isolated word recognition as measured by a standardized word reading efficiency assessment. Also, prosody (expression) as measured by an oral reading fluency scale, as well as correct words per minute (cwpm) as measured by an informal reading inventory were dependent variables. The independent intervention condition variables were repeated reading, wide reading and listening.

The participants were selected from a Southeastern City in the United States. Three-second grade classrooms from a low-to-middle social economic status public school were randomly assigned to the intervention strategies. Six students were identified by the classroom teachers from each classroom as not fluent to take part in the intervention conditions. The informal reading inventory score and oral reading fluency scale confirmed the teacher's evaluation. Using the same measures, two students from each class were assigned to the control group. Six students participated in each of the four groups - twenty-four students. Fourteen participates were girls and ten were boys – 18 African American, 4 European-American and one was Hispanic.

Following the pretesting with the informal reading inventory and the standardized word recognition efficiency assessment, the control group did not participate in the intervention strategies outside of the literacy curriculum taught in the classroom. The treatment groups were exposed to 18 sessions that were 15 to 20 minutes each. There were three sessions per week for six weeks. The Repeated Reading condition implemented a three-day cycle composed of echo reading, paired reading, and choral reading/performance. The Non-Repetitive Reading condition incorporated the Echo or Choral Reading for the text, while the Listening Only condition had the researcher read stories expressively aloud to students. Each group received 4.5 and 6 hours of

instructional time. At the end of the study, the informal reading inventory and the standardized word recognition efficiency assessment were used for the post assessment. The pretests were not examined until the end of the study after the post testing was completed in order to minimize bias.

Even though there was not a set growth expectation for any of the students, there were differences that emerged during the intervention period. The results of the study indicated that the Non-Repetitive Reading condition students showed improvement in comprehension. Also, the Repeated Reading and Non-Repetitive Reading conditions made greater gains in terms of the number of words read in isolation, number of correct words read per minute (CWPM) at their instructional level and more fluent than did those in the listening-only or control conditions.

Kuhn (2005) concluded the Repeated Reading Strategy and the Non-Repetitive Reading Strategy were effective strategies when compared to the round robin reading that was prevalent in the school classrooms. Both strategies helped students with prosodic reading and were recommended for developing prosodic reading fluency. Furthermore, the researchers concluded that the ability for students to comprehend the text comes from the interactions of words read in isolation, number of correct words read per minute, prosody and the ability to integrate various features of the reading process into a cohesive whole. Kuhn and Stahl (2003) stated that although the repeated reading technique appears effective, the findings remain unclear as to why the technique is effective. Repeated reading may produce gains in reading because students are increasing their volume of reading relative to traditional reading practices.

The Strong, Wehby, Falk, and Lane (2004) study examined the impact of a structured reading curriculum and repeated reading intervention on the reading fluency of junior high school students with emotional and behavioral disorders (E/BD). The purpose of the study was

to investigate the effectiveness of a repeated reading intervention used in conjunction with a corrective reading on the oral reading fluency of junior high students with E/BD. The authors addressed 1) the impact of a class-wide implementation of the Corrective Reading curriculum on the reading fluency and reading comprehension of adolescents with E/BD; 2) the effects of a repeated reading intervention, in conjunction with Corrective Reading on the fluency and comprehension scores of the participants. The primary dependent variables for the study were students' reading ability (basic skills cluster, reading comprehension cluster and total reading cluster) as measured by Woodcock Reading Mastery Tests- Revised (WRMT-R); oral reading rate and accuracy, oral comprehension, total oral reading ability and oral reading miscues as measured by Woodcock Reading Mastery Tests- Revised (GORT-3). Additionally, teacher perception of students' social behavior as measured by the teacher form of Social Skills Rating System (SSRS-T) was dependent variables. The independent intervention condition variables were the corrective reading program and repeated reading.

The sample of six male students was composed of two seventh graders (Caucasians) and four eighth graders (African Americans) with a mean age of 13 years in a southeastern metropolitan school district. At the time of the study, the school had an enrollment of 60 students serving students from first through eighth grade. The classes within the school were grouped into two grade levels. The participants were selected from the seventh and eighth classroom within the self-contained school for students with E/BD in a southeastern metropolitan school district after the classroom teacher consented to participant in the study. Prior to Intervention I and Intervention II conditions, the WRMT-R, the GORT-3 standardized assessments were given on an individual basis to each student as a pretest only. The classroom teacher completed the SSRS-T for each student.

Following the pretesting with the WRMT-R and the GORT-3, the class was observed for 5 weeks prior to the Implementation I condition of the Corrective Reading curriculum to determine the impact of the existing reading program. In the baseline condition, the students were assessed on 2 curriculum based assessment (CBA) probes that measure fluency when reading a text. During the baseline, students received reading instruction using the procedures typically used by the teachers for approximately 5 weeks. During the observation period, weekly reading probes were administered to monitor student growth during this phase. The Weekly Reading Probes were completed on Thursdays and Fridays of each of the five weeks.

Reading Probe 1 were passages that ranged from 96 to 140 words in length taken from the SRA Specific Skills Series. The examiner marked missed words, the length of time each student took to read the passage and asked students five comprehension questions read. The five multiple-choice questions about the passage asked students to identify the best title for the passage, facts stated within the passage, infer information that was not stated directly in the passage and vocabulary question about the definition of a word used in the passage.

Reading Probe 2 examined the student's current functioning in the seventh grade core curriculum and randomly selected 120-150 words passages from the 7th grade literature book. The passages were typed on a page and the students were directed to read the passage as quickly and accurately as possible for 1 minute. Fluency was calculated using the words read correctly in one minute. Absent students for a scheduled probe was assessed upon their return to class.

The Intervention 1 Corrective Reading (CR) condition was implemented with the placement test to examine the impact of a standardized, direct instruction reading program and to establish a consistent reading condition. Based on the results of the assessment, instruction focused on refining students' sound and word discrimination skills as well as increased their

level of fluency. The lessons consisted of word attack skills, group reading and workbook exercises. In order to facilitate student learning, the classroom teacher received 5 hours of CR training. The program was delivered Monday through Thursday for 30 to 40 minutes over a 7-week period.

Intervention II Repeated Reading condition was added to the CR condition. Three pairs of students were trained in repeated reading in a staggered manner. After training, two students began each session by chorally reading aloud an unfamiliar passage twice with the research assistant. After choral reading the passages twice, students alternated individually reading the passage aloud. Student 1 read the passage aloud while Student 2 read along silently and corrected any unknown words after waiting 3 seconds. Then Student 2 read the passage with Student 1 assisting with any unknown words. After the four readings, a new passage with the same difficulty level was read and timed. The number of words read correctly was graphed so that the students could monitor their reading progress. Intervention II was implemented Monday thru Thursday 20 to 30 minutes per day over a 7-week period.

The authors found that four students demonstrated moderate growth in oral reading fluency during the implementation of the CR program and when the repeated reading component was added there was an increase in the functional reading level and in age/grade leveled text. The other 2 students were less responsive to the interventions given they were initially reading at a higher rate than the other participants. Even though there was evidence of program with four of the six students, it was still below what might be expected from the same-age students without disabilities. Thus, the study demonstrated that supplementing a standard reading curriculum with fluency building activities could improve the reading performance of students with E/BD.

However, the improvement in reading performance was not significant enough to overcome the struggles in reading displayed by the participants.

The four articles in this section provided insight into the best instructional practices for fluency instruction for the middle school student. The first study conducted by Hawkins, Musti-Rao, Hale, McGuire and Hailley (2010) concluded that even though students did not reach the end of the year reading goals, peer-mediated repeated reading improved oral reading rate among struggling readers. The Musti-Rao, Hawkins, and Barkley (2009) study confirmed that repeated reading is an effective fluency-building intervention for urban learners. The findings from the Kuhn (2005) study suggested that repeated reading and non-repetitive reading strategies were effective for developing reading fluency and an alternative to round robin reading. The strategies were effective for small groups of students with mixed abilities. The final article by Strong, Wehby, Falk, and Lane (2004) concluded that fluency-building activities could improve the reading performance of student. Research-based instructional strategies increase fluency while promoting comprehension and vocabulary; thereby, increase overall reading achievement and reduce reading skills deficits. In summary, these articles suggested that fluency instruction on accuracy, automaticity and prosodic reading should happen at the same time. The approach of repeated readings helped students increase reading rate and reading enjoyment. Furthermore, the approaches in the studies provide students with increased opportunities to connect with text in order to extract and construct meaning from a text.

Conclusion

This chapter presented a review of the literature on the reading comprehension process, fluency as a factor in the reading process and instructional intervention strategies. The relationship between comprehension and fluency is complex as has developmental changes overtime based upon the reader's ability (Paris & Hamilton, 2009).

Reading comprehension is the result of the reader extracting and constructing meaning from the text which is the framework for thinking about comprehension instruction (Irvin, 2007). By way of a balance comprehension approach, the interconnection of readers, text and activity, teachers use explicit strategy instruction to assist students in becoming proficient users of individual comprehension strategies. The use of explicit strategy instruction, a sequence of activities well established in the research literature begins with modeling followed by guided practice and independent practice. The students move from teacher-directed to self-directed activities when they are encouraged to take control of their own learning and their efforts are applauded

Secondly, a relevant number of reading models place reading fluency as a competency that is developed in the primary grades. Nevertheless, some studies have found that fluency or rather the lack of fluency is an issue found among older students and may limit the development of reading achievement among upper elementary, middle and secondary school students (Rasinski et al., 2009; Rasinski et al., 2005). Based on the automaticity theory, fluency is composed of accurate word decoding and automaticity in word recognition (LaBerge and Samuels, 2004). When automaticity is reached, students perform the reading task rapidly, effortlessly or without paying attention. Hence, it frees the reader to concentrate on the meaning of the connected text. Thereby, the power of fluency helps students become proficient readers (Mercer, Campbell, Miller, Mercer and Lane, 2000).

Third, as teacher are focusing on their content area instruction and helping students understand a specific passage, they can help students learn how to become self-regulate active autonomous readers through the integration of cognitive strategies and conceptual learning from the text (Sweet and Snow, 2003, Guthrie, McCann, VanMeter and Wigfiel, 1996). Equally,

students gain competence in a strategy, helping them to become aware and thus proud of their work. From their newfound skills, students gain a sense of confidence and self-efficacy (Sweet and Snow, 2003).

Numerous studies have supported the use of repeated readings to increase the fluency of students at many reading levels and ages (Mercer, Campbell, Miller, Mercer, and Lane, 2000; Meyer and Felton, 1999). Oral reading fluency of middle school students can improve with the instructional method of repeated reading through the aim of meaningful and expressive oral interpretation of text. Moreover, the implementation of combined decoding approaches and instructional methods for developing fluency in secondary school reading programs improve reading. Additionally, repeated reading programs can be designed with a variety of grouping formats in the classroom – class wide, small group, peer mediation. The flexible groupings allow student to progress at their own pace and practice reading at their instructional reading level.

In conclusion, many teachers focus of the balancing of fluency and comprehension without considering the relationship between fluency and comprehension. On the other hand, other teachers focus more on fluency or comprehension depending on which one they consider important. Research says that increasing student fluency increases reading comprehension; in addition, fluent readers often comprehend text proficiently. The review of literature indicates that fluency is important for developing reading comprehension at all grade levels. The relationship between reading fluency and reading comprehension must consider the influence and implementation of comprehension and fluency instructional intervention strategies for middle school students.

Chapter III

Procedures for the Study

A major goal of reading instruction is for students to become fluent readers and proficient in reading comprehension (Kuhn and Stahl, 2003). Low reading achievement is a genuine and consequential problem for middle school students. During the middle school years, it is important for students to be fluent in recognizing words, expand their knowledge needs as well as their ability to think critically and broadly (Paige, 2011). Thus, there is a need for effective strategies to promote reading fluency and comprehension among middle school students. Consequently, structure interventions that employ modeling practice, and feedback to teach students how to use text structure strategically and eventually automatically is important.

The purpose of this study was to determine the effects of repeated reading instruction on oral reading fluency and comprehension of middle school students. Data were collected to explore the effects of repeated reading on oral reading fluency and comprehension. This chapter includes a description of the research site and sample population, description of the instruments used in the data collection, the procedures used to carry out the project and an explanation of how the data were analyzed.

Description of Sample Population

The data were collected at Alyce Hubert Christian Academy, Inc. (AHCA) a Milwaukee Parental Choice Program School in Milwaukee, Wisconsin. Alyce Hubert Christian Academy partnered with parents to prepare students spiritually, academically, and in accordance with their God-given potential to be in the world and not of the world. The school founder and administration expressed a commitment to developing the potential of each student and strengthening the school reading program (www.eduforeternity.com, 2012).

Alyce Hubert Christian Academy used a thematic approach to teaching and learning from a biblical standpoint with the A Beka Book curriculum. A Beka is a publisher of K-12 curriculum materials used by Christian schools and homeschooling families. The A Beka curriculum included language arts/comprehension, spelling/poetry, phonics/listening skills, writing, math, creative art, computers, music, science and social studies/history. The implementation challenges of the A Beka Book Curriculum during the school year caused teachers to create individual classroom reading programs.

The AHCA Language Arts Program encompassed the reading program focused on grammar and composition, vocabulary, spelling, poetry and literature. The middle school classroom teacher emphasized reading skills to improve the oral reading skills including fluency, comprehension and vocabulary primarily through poetry and literature. Reading grouping techniques include reading groups, independent reading and coach reading.

A typical reading/language arts period in the classroom dealt with 15-minute “Do-Now” anticipatory activity, spelling words, reading packet and journal writing. The “Do-Now” activity followed by the introduction of spelling words for the week worksheets that covered CVC syllable, spelling patterns, frequently misspelled words, homophones, homographs, antonyms, synonyms, prefixes, suffixes, base and root words. Reading packets were used to engage students in various reading strategies. The students before reading strategy, highlighted important information, answered questions and wrote summaries of each packet. Each packet reading assessment comprised of multiple choice, fill in the blanks, word families, vocabulary, reflections and writing an opinion. Journal writings involved current events, newspaper articles and various topics.

The comprehension instruction emphasized recall of information and student response. During the school year, teachers participated in professional training on the Literacy One Program. This projected implementation of the Literacy One Program is the coming school year. The program was believed to better address the literacy needs of the students at AHCA.

The composition of the 10 instructional staff members at AHCA were 7 (70%) African American, 2 (20%) Latino, and 1 (10%) Caucasian. Students attending AHCA live primarily in the neighborhood of the school, which is located on the north side of Milwaukee; the families of the students are in the low socio-economic status. The school enrolled 162 students from 3-years old Kindergarten through Grade 8. All 162 students are African-American. In addition, all students were free or reduced lunch eligible. The overall academic achievement of the AHCA students ranged from minimal to basic performance (Milwaukee Parental Choice Program, 2011). The WSAS reading achievement scores for 2011 and 2012 demonstrate the WKCE scores of project participants as minimal or basic performance (Table 1).

Table 1: WSAS: WKCE and WAA-SwD

	2011			2012	
	Minimal	Basic		Minimal	Basic
Grade 6	100%	0.0%	Grade 7	60%	33%
Grade 7	77.8%	22.2%	Grade 8	67%	33%

Source: Milwaukee Parental Choice Program Results 2011 and 2012- WKCE

The reading intervention project targeted students in the middle school combination class of seventh and eighth graders. Thirteen out 23 students participated in the fluency-comprehension reading project. The thirteen participants included nine seventh-graders and four eighth-graders. Seven (53.8 %) of the participating students were male and 6 (46.1 %) were

female. Students ranged in age from 12 to 14 years. Before students began the intervention program, the reading fluency and comprehension were assessed.

Instrument Used in Data Collection

Demographic information used to gather descriptive data on students included: date of birth, age, grade level, ethnic background and gender. The 16-item Student Reading Interview elicits student perception of reading. The Student Reading Interview focused on reading strategies used, characteristics of a good reader, definition of reading, family reading, favorite genres, hardest part of reading, and like to do better as a reader.

The Qualitative Reading Inventory-5 (QRI-5) (Leslie and Caldwell, 2011) was the main data source for the research project. The QRI-5 is an informal assessment used as the criteria to determine the highest instructional reading level of each student. Administered to each student individually, the instrument provided word lists and numerous passages to assess the oral reading ability of students. Specifically, the Qualitative Reading Inventory-5 provided information about word identification/reading fluency and comprehension. The results were used to design and evaluate intervention instruction. Finally, the QRI-5 documented student growth at the end of the project.

Weekly reading fluency and comprehension assessments were given every other session. The Weekly reading fluency passages taken from Reading A to Z, Levels U and V, were selected because of the topic and readability. The two expository passages used from Reading A to Z related to what students were studying in science and social studies. The two passages divided into 2 to 3 page readings covered 4 or 5 sessions. While the length of the passages ranged from 1633 to 1676 words, each session reading passages ranged from 130 to 200 words. In addition, passages and/or articles that dealt with science or events happening in the United States were used. Passage comprehension questions focused on main idea, supporting details, main idea

sentence and inferences. In this strategy, students identified the topic of the passage section, details that support the identified main idea and construct a main idea sentence.

Description of Procedures Used

The reading intervention strategy implemented in the classroom in the mornings was between 9:30 am and 11:00 am for 14 sessions. The classroom teacher was present for some of the sessions to observe the intervention approach and to manage classroom behavior. Data collection occurred in five phrases.

Phase one involved approval from the school founders, parent consent, student-reading inventory and teacher questionnaire. A conversation with the founder and school administration to discuss the nature and purpose of the project secured school approval. Consent letters and Home Literacy Information Survey were mailed to parents of the 7th and 8th grade students. The Home Literacy Information Survey focused on student school progress, reading difficulties and kind of reader the student is at home (Attachment A). After numerous mailings and follow-up telephone calls, thirteen consent forms and Home Literacy Information Surveys were returned. Students completed a Reading Interest Inventory in the classroom that asked about the type of reading genres preferred, enjoyment of reading, amount of time spent watching television, playing video games and perception of the student as a reader (Attachment B). The classroom teacher questionnaire provided the greatest reading need of the class, description of a typical reading/language arts lesson, as well as individual questions about project participants. The project participant questions focus on ability, attitude, interests, needs and behavior (Attachment C).

The second phase of the study occurred during the spring semester of the 2012-2013 involved the individual administration of the Qualitative Reading Inventory – 5 (QRI -5) (Leslie and Caldwell, 2011) as the pretest. The assessment included the administration of word lists and

expository passage readings. The word list provided an estimate of the student's ability to identify words and the starting point for passage administration. Each passage included concept questions, passage reading, passage retelling and comprehension questions. The passages determined the highest instructional reading level, reading fluency level and comprehension scores. All assessments were audio-recorded.

In phase 3, Partners were assigned based upon the highest reading instructional level received training in the repeated reading strategy and the correction procedure over a four-day period.

- Day 1: Students were trained on the three step scripted correction procedure. The correction procedure was used when a partner commits a miscue. Students received a copy of the correction procedure in each folder (Attachment D).
- Day 2: Repeated reading instruction strategy introduced to students was followed by an opportunity to practice the reading strategy with a partner. The practice included choral reading with the researcher and partners read the text passage alternately for 10 minutes. When a miscue happened, the three-step correction procedure was implemented. The session concluded with students reading the passage individually for 1 minute in order to record correct words per minute.
- Day 3: Students received instruction on how to identify main idea, supporting details and the construction of main idea sentence. The students then practiced identifying the main idea, supporting details and constructing a main idea sentence with an expository passage.
- Day 4: The entire process of choral reading, repeated reading, correction procedure and comprehension activity was practiced.

The Reading Intervention Strategy implemented in Phase 4 over a 7-week period (14 sessions) with students receiving 1 hour of intervention each session in the classroom.

- Session 1: Choral reading with the researcher and partner reading alternating for 10 minutes took place. The session incorporated vocabulary strategies for unfamiliar/unknown words before the implementation of the Repeated Reading strategy (Appendix E)
- Session 2: Comprehension activity form focused on main idea, supporting detail, main idea sentence and inferences. In addition, student completed a 1-minute read that was audio recorded.

Phase 5 entailed the posttest administration to participants after the 7-weeks of intervention using the QRI-5 informal assessment (Leslie and Caldwell, 2011). The informal assessment procedures were completed to determine the growth of each participant. All tests were administered and scored according to outlined procedures in the test manual. In addition, all post assessment was audio-recorded.

Description of Data Collection

To determine the effects of repeated reading instruction on oral reading fluency and comprehension of middle school students, analyzes of QRI-5 informal assessment data were made. Students were administered a word list and asked to pronounce each word on the list. All answers were audio recorded. The word list was used to select a passage of the same readability level in which the student scored an instructional level. The expository passage concept questions determined the student's familiarity with the topic of the selection. As the students read the passage orally, miscues such as substitution, omission, insertion, and self-correction were recorded on the examiner copy of the passage.

Pre and Post Assessments

The QRI-5 assessment provided reading fluency percentage, retelling percentage and comprehension score with and without look-backs.

Oral Reading Fluency. The QRI-5 evaluated automaticity of word identification or reading fluency of participants by calculating the correct words per minute. The correct words per minute were calculate by the number of words in the passage minus the miscues/errors multiplied by 60 and divided by the number of seconds it took to read the passage.

Passage Retelling. After the student completed reading the passage during the pre and post assessment, the passage was removed and the student was asked to retell the passage as if telling to someone who had never heard the passage before. Thereby, telling what the author wrote about in the passage.

Comprehension without Look-Backs. Comprehension questions asked and scored based on the suggestion provided with the QRI-5 manual. The questions were scored as either right or wrong. The comprehension question score was determined by adding the number of correct answers provided by the students out of five questions relevant to the passage. The comprehension questions asked the reader to identify the main idea, facts stated in the passage to support the identified main idea, main idea sentence and infer or figure out the answer to the question.

Comprehension Look-Backs. This strategy was added to the process of assessing comprehension. After scoring the questions, students had the opportunity to look-back over the unknown or incorrect questions. The results determined a level for comprehension with look-backs.

Weekly Assessments

The 1-minute Readings and Comprehension Activity forms were used to record and monitor student progress.

1-minute Readings. Students read the expository passage for 1-minute to determine weekly fluency rate. The correct words per minute and automaticity percentage were recorded on the Student Reading Log (Attachment F). All 1-minute readings were audio recorded.

Comprehension Activity. After instruction and modeling on how to identify main idea, selection of supporting details, construction of main idea sentence, and construction of inference response, students received a comprehension activity form. Next, students completed the comprehension activity form with the main idea, supporting details, main idea sentence or inferences (Attachment G).

Finally, students were assessed before and after the intervention implementation. In addition, students were assessed weekly using the 1-minute Readings and comprehension activity form. In addition, students were able to observe their individual progress using the Reading Logs.

Conclusion

The purpose of Chapter III was to familiarized the reader with the description of the research site and sample population, instrument used in the data collection, the procedures used to carry out the project and an explanation of how the data were analyzed. In summary, Alyce Hubert Christian Academy was selected for the fluency-comprehension project to improve student reading and assist in the development the potential of each student. The QRI-5 word list was used to identify the beginning point for passage reading. The expository passages determined automaticity and comprehension at the student's highest instructional level. The data collection was implemented in five phases beginning with the approval from the school founder,

pre-test administration of the QRI-5 , student training in the reading intervention strategy, implementation of the reading intervention over a 7-week period, and post-test administration of the QRI-5. The next chapter will present and analysis the data gathered to measure the effectiveness of repeated reading instruction on oral reading fluency and comprehension of middle school students.

Chapter IV

Presentation and Analysis of Data

The purpose of this study was to determine the effects of repeated reading instruction on oral reading fluency and comprehension of middle school students. The researcher hypothesized that the Repeated Reading strategy would affect oral reading fluency and reading comprehension of middle school students. The null hypothesis states there is no increase in fluency and comprehension of the middle school students. During the months of March and June, students engaged in 60 to sometimes more than 90-minute lessons focused on oral reading fluency and comprehension strategies twice a week. The oral reading strategy of repeated reading provided opportunities when the researcher and students read orally together, pairs of students read together and the whole class of students listened to the researcher's reading and imitated her expression. In addition, the researcher modeled the topic/detail/main idea comprehension strategy. In turn, students identified the main idea, three supporting details for each main idea and constructed a main idea summary.

The QRI-5 Reading Inventory (Leslie and Caldwell, 2011) was used for the pre-test and post-test of sample students. The word list and expository passages were used to determine the highest instructional level, fluency rate and comprehension of each student. The results of the fluency-comprehension reading project are reported in four parts. Part 1 will present demographic data such as: student reading interview, home and background information from the parents and the classroom teacher survey. Part 2 will present the pre-test data of thirteen participants based upon the QRI-5 Reading Inventory. Part 3 will focus on the weekly progress recorded in reading and comprehension logs. The reading logs recorded the results of the weekly one-minute readings. The comprehension logs recorded the weekly results of identifying main ideas, three supporting details for each main idea and the construction of main idea summaries.

Part 4 will concentrate on the comparative analysis of the pre-test and the post-test. Following, part 1 presents demographic data provided by students, parents and the classroom teacher.

Demographic Data

Twenty-three middle school students were invited to participate in the reading project and thirteen parents consented to have their student participate. Students completed a 16-question reading interview about themselves as a reader. The consenting parents provided home and family information that focused on early development, physical concerns, perception of school, and school progress. The classroom teacher interview dealt with the greatest classroom need, typical reading/language arts class period, the greatest emphasis in reading instruction and assessment.

Reading Interview. Students were asked 16 questions about their perceptions of reading. Reading was defined as many words put into a sentence; something you meditate on, a subject in school, something you do quietly, and helps you understand. Some of the students enjoyed being read to because of the ability to ask questions about what they did not understand. Others preferred reading to themselves rather than being read to by someone else. Fiction, non-fiction, adventure, drama and action books are the kinds of books/genres the participants said they liked best.

Students characterized themselves as good readers, ok readers, as well as great in reading. Yet, students stated that the hardest part about reading was reading aloud to others, pronouncing difficult words, and reading when others are talking. The student interview indicated that students would like to understand difficult words and have a better vocabulary. When asked about the kinds of things read at home with the family, most students stated that they did not read

at home. Others stated that they read: prayer books, magazines, newspaper, library books, drama and romance books

Home and Family Background Information. The parents of the sample participants provided insight into their student's school progress, feelings about school, reading materials at home and reading problems. Generally, parents asserted their student were not doing well in school; however, comments about school process included failing, lazy, does not want to do school work, hard time reading, needs extra help, very poor, pretty good, behind one grade and okay. When asked how their student feels about school, parents respond that their student really love school, are not motivated or do not want to go to school most days. Books, magazines, non-fiction, crime novels, Bible, dictionary were materials listed as available at home for students. Reading problems identified by parents were sounding out words/phonics, accuracy, reading for pleasure, spelling, sight word vocabulary, study skills, reading comprehension and expression/rate; moreover, parents depicted a concern about negative peer pressure.

Classroom Teacher Survey. The classroom teacher stated the greatest need of the 7th and 8th grade students in her classroom was to increase reading comprehension. The teacher stated that comprehension activities/strategies focused on were vocabulary, phonics, spelling, context clue reading, fluency visualization and inference. The teacher also stated that student reaction to instruction is not always positive. In addition, the teacher indicated that a number of the students in the class refused to participate in the learning process. In addition, students allowed outside issues to interfere with learning in the classroom, and struggled with understanding some of the material. On the other hand, the teacher stated that students have the ability to improve academically with one-on-one support and more effort.

In summary, the student participants indicated that, as a whole they liked all genres of reading and perceived themselves as good readers. They viewed that the hardest part of reading were difficult words and vocabulary. The parents indicated that they believe their children are doing well in school yet some felt there was failure due to laziness and not wanting to do school work. Parents identified all areas of reading as problematic along with motivation and peer influence. The classroom teacher indicated the greatest needs for the students were comprehension as well as the negative student reaction to instruction. Nonetheless, the classroom teacher stated that students increased their effort with one-on-one instruction and support. The pre-test assessment data are presented and analyzed in part two for the student participants. The researcher organized part 2 into the following three sections: 1) the level of word identification, 2) the comprehension level and 3) the instructional reading levels.

Pre Test Assessment Data Analysis

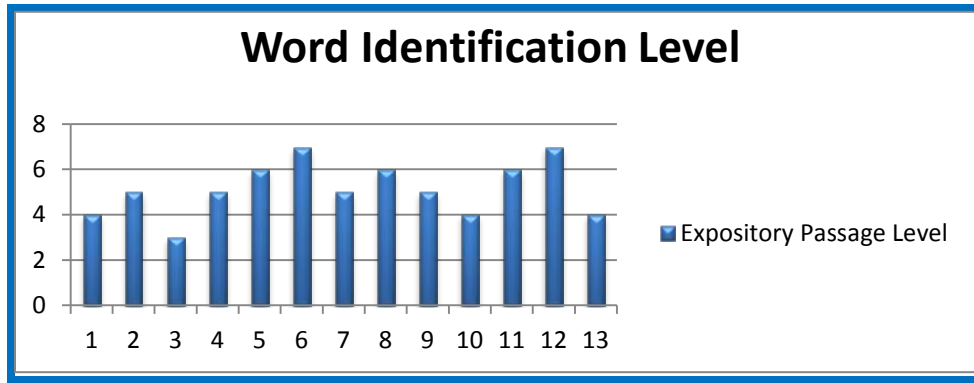
Oral Reading Fluency Data Results Analysis

Using the QRI-5 (Leslie and Caldwell, 2011) word list and expository passages, participants were individually assessed and audio-taped. The highest instructional reading level was determined by using the word lists to select a beginning expository passage level then students read orally and answered questions about the expository passages.

Word Identification Results and Analysis. The 7th grade student participants [#1, 3, 5, 6, 8-11 and 13] and the 8th grade student participants [#2, 4, 7, and 12] began reading expository passages orally at the same readability level as the lowest word lists on which the student scored at an instructional level. Students read expository passages until they reached a frustration level. The expository passages read by student participants ranged from Level 3 to

Upper Middle School. Chart one show the highest expository passages at the word identification level read by students.

Chart 1: Word Identification Level Data Results and Analysis – Pre Test



Total Accuracy Results and Analysis. Total Accuracy or correct word identification were used to determine independent, instructional and frustration levels. Also, recorded as miscues and counted towards Total Accuracy were self-corrections. The Total Accuracy percentage was calculated by subtracting the number of miscues from the total number of words in the passage, then divided by the number of words in the passage. The general guidelines for percent of total accuracy that indicate the independent, instructional and frustration level of a student reader are in Table 2.

Table 2: Percentage of Total Accuracy Guideline

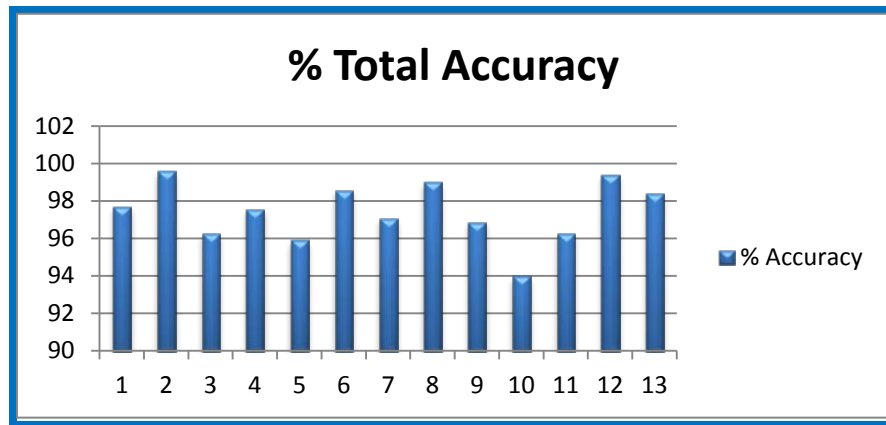
Independent Level	98% accuracy
Instructional Level	90% to 97% accuracy
Frustration Level	Less than 90% accuracy
<i>Source: Leslie & Caldwell (2011) Qualitative Reading Inventory-5</i>	

Chart 2 demonstrated that the overall project participants' Total Accuracy or level of word identification for students in the study. The Total Accuracy ranged between 94% and 99%.

Based on the general guidelines in Table 1, the student participants read within the instructional

and independent levels. Chart 2 also showed the word identification levels for each student in the study. The Word Identification level ranged from Level 2 to Upper Middle School.

Chart 2: Total Accuracy Data Results and Analysis - Pre-Test



Correct Words per Minute Results and Analysis. In conjunction with identifying the highest instructional reading level of each student, the assessment of reading rate or fluency rate took place using the correct words per minute (cwpm). The oral reading rate measured in correct words per minute (cwpm) evaluated the automaticity of word identification. The number of words in the QRI-5 expository passage multiplied by 60 and divided by the number of seconds it took the student to read the passage determined the cwpm. Students who read quickly lead one to assume that cognitive energy was used to comprehend the information of the text and no longer being used to decode. Conversely, students who did not read so quickly are using more cognitive energy to decode the words of the text and less energy used to comprehend the text. However, when a student reads for information, there is a tendency to read at a slower rate. The general guidelines for evaluating the reading rates of student oral reading at their instructions are in Table 3.

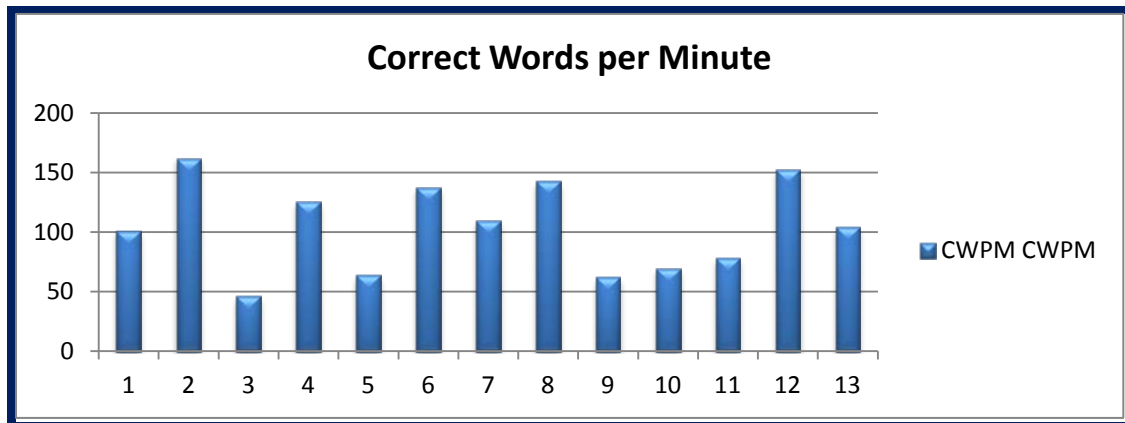
Table 3: Oral Reading Fluency - Correct Words per Minute Guideline

Instructional Level is...	Then Correct Words per Minute
2	19-77
3	53-101
4	54-112
5	62-118
6	91 – 235 (silent reading rate)

Source: Leslie and Caldwell (2011) Qualitative Reading Inventory-5

Chart 3: Correct Words per Minute shows the correct words per minute (cwpm) of all student participants. Their scores ranged from 62 to 162.5 correct words per minute. The cwpm of students in grade 7 range from 62 to 143 and the grade 8 students ranged from 109 to 162. The cwpm on the expository passages were within the instructional reading level of each student. Thus, students were able to read the passage at their individually identified highest instructional reading level shown in Chart 3.

Chart 3: Correct Words per Minutes Data Results and Analysis – Pre-test



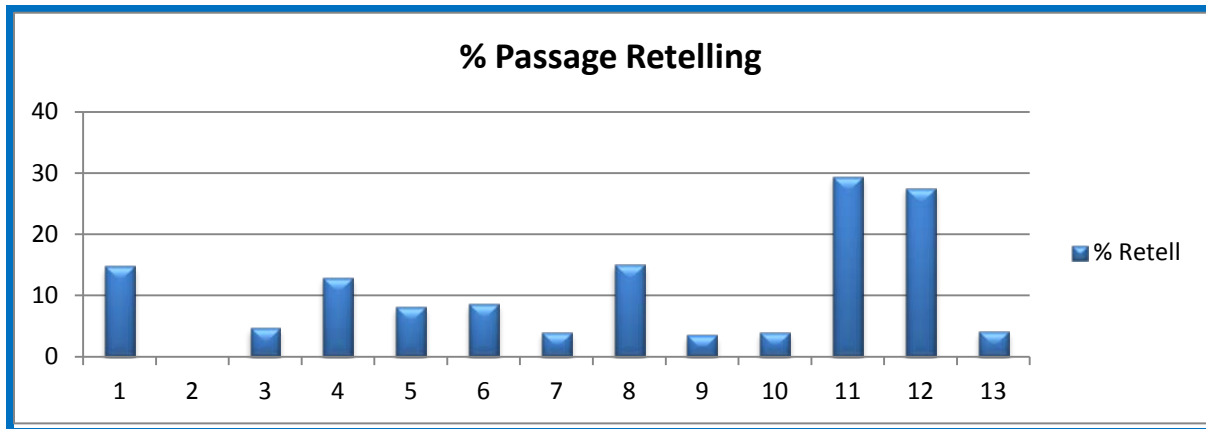
Next, the researcher determined the instructional level for comprehension through students’ retelling of the read expository passage without referring to the passage as well as explicit and implicit comprehension questions based on the expository passage read.

Comprehension Assessment Data Results and Analysis

Following the reading of expository passages, students were asked to retell the passage as if it was being told to someone who did not hear the passage. Additionally, students answered explicit and implicit comprehension questions about the passages without the benefit of referring to the read passage. Explicit questions answers came directly from the passage while clues from the expository passages provided answers to implicit questions. The various expository passages had five, six, eight or ten questions for students to answer. The 5 to 10 comprehension questions were scored as right or wrong; partial answers were not considered.

Passage Retelling Results and Analysis. The expectation was for students to organized expository retelling around the main idea and supporting details. The scoring of the retelling passages for each student was scored by comparing the ideas on the examiner’s score sheet and the ideas recalled by the student.

Chart 4: Passage Retelling Data Results and Analysis - Pre Test

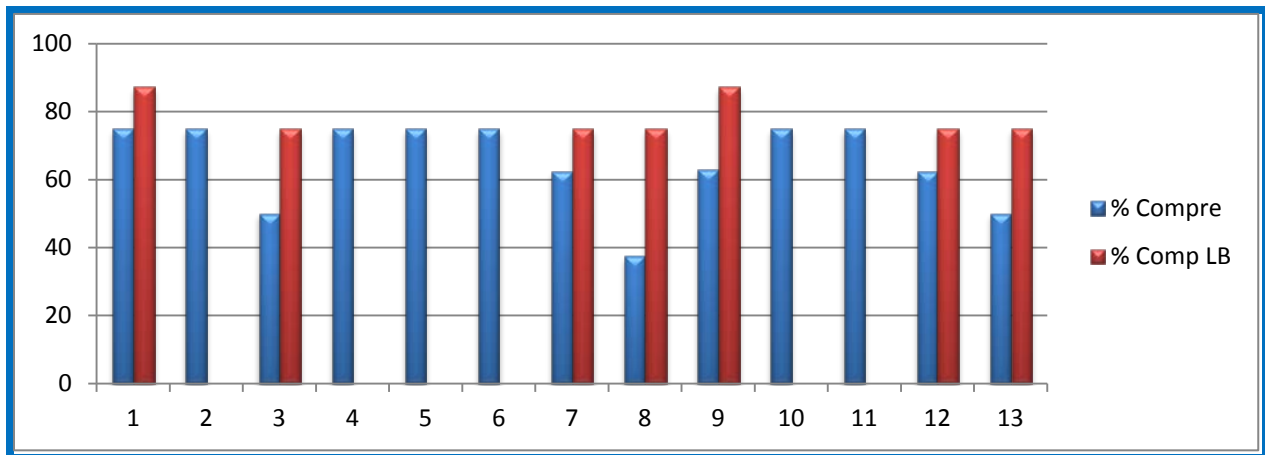


Students’ ability to retell the expository passage ranged from 0% to 29% of the events was presented in Chart 4. The 7th grade students’ retelling of the passage ranged from 4% to 29.4%. All 7th grade students retold some events of the expository passage read. However, one 8th grade student did not recall and retell any events of the expository passage. Another 8th

grade student retold 27.6% of the passage. As stated above, the retelling of the expository passages was not to determine instructional reading level but the ability to organize the expository retelling around main ideas and supporting details. It appears that students struggled with the skill to articulate the main idea and supporting details sequentially.

Comprehension With and Without Look-Backs Results and Analysis. The 5 to 10 comprehension questions were scored as right or wrong; partial answers were not considered. The independent level (90% or above), instructional level (67% to 89%) or frustration level (below 67%) was the guideline used to determine the Level of Comprehension for each student (Leslie & Caldwell, 2011).

Chart 5: Comprehension With and Without Look-Backs



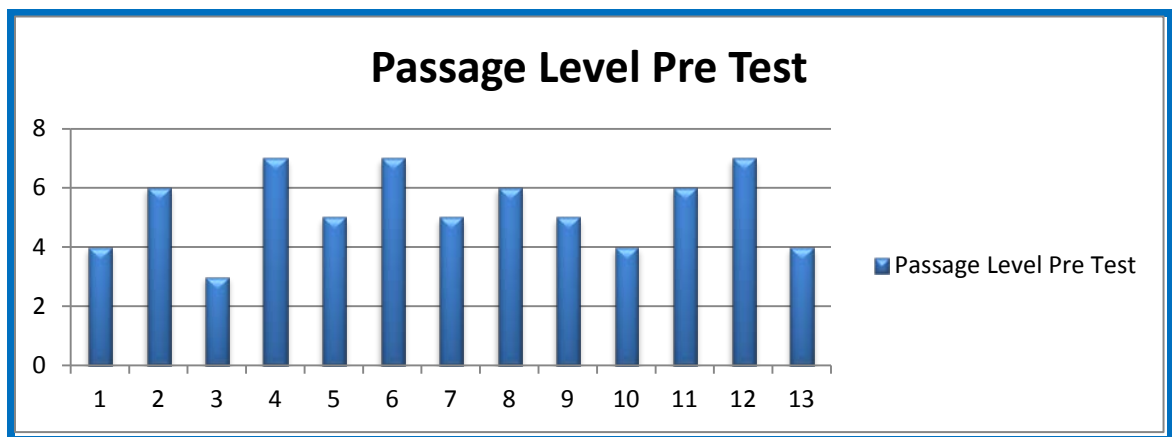
The findings in Chart 5 demonstrate that students scored 37% to 75% on comprehension questions without referring to the printed expository passage. The seventh graders answered 37% to 75% of the comprehension questions correctly while 8th grade students answered 62.5% to 75% comprehension questions correctly. After students answered questions, the Look-Back strategy was an opportunity provided for students to locate answers to missed questions or to change responses. Students who took advantage of the Look-Back strategy increased their comprehension score to 87.5%, an increase of individual score ranging from 12.5% to 24.5%.

Two (50%) eighth grade students took advantage of the opportunity to use the Look-Back strategy. One of the two student’s comprehension score remained the same while the other student’s comprehension score increased by 25%. Conversely, five (38%) of 7th grade students increased their comprehension score by using the look-back strategy. The seven students who used the Look-Back strategy increased the number of ideas and concepts ranged from 12.5% to 25%. The use of the Look-Back strategy increased student comprehension score from 12.5 to 37.5 percentage points. The Look-Back strategy was effective.

Instructional Reading Level Data Results and Analysis

Based on the level of word identification (Chart 1) and level of comprehension (Chart 4), the highest instructional reading levels of the student participates on the QRI-5 pre-test is show in Chart 6. Students were reading passages from grade 2 to grade 6. The 7th grade students read passages from grade 2 to grade 6. The 8th grade students read expository passages from grade 3 to grade 6. Although the results varied from student to student, the results show student participants highest Instructional Reading Level on expository text ranged from grade 2 to grade 6.

Chart 6: Instructional Reading Level Data Results and Analysis - Pre-Test



In summary, the thirteen student participants currently in grade 7 and grade 8 were able to read the pre-test expository passages at reading levels as high as Upper Middle School Level and as low as Level 3, which is considered the word identification levels. The Level of Comprehension was between 62.5% and as high as 75%. However, the level of comprehension was enhanced with look-backs as high as 87.5%. Although the cwpm rates are within the instructional reading level on the expository passages, students were below their current placement. Overall, students' highest instructional reading levels were between level 2 and level 6, which is as much as 5 years below their current grade. Next, part 3 focused on the data collected weekly - reading and comprehension logs.

Oral Reading Fluency and Comprehension Logs

There were two expository texts used throughout the reading project. The text focused on the subject areas of science and social studies. The expository texts were divided into 3 or 4 readings. Every week the thirteen students' reading fluency and comprehension of the readings were assessed. However, not all student participants were present for every assessment session.

Tuesdays. In order to determine the weekly fluency rate, students were audio-recorded as they individually read the passage introduced on Monday for one minute. Table 5 presents the Reading Log of weekly oral reading fluency rate for the duration of the fluency-comprehension project as well as the number of correct words per minute and the percentage of the words read correctly.

The student participants' correct words per minute ranged from 88% and 100%. There was not a consistent increase and/or decrease in percentage points. The cwpm of the four students present for each assessment ranged from 97% to 100%. The cwpm of students absent one day ranged from 69% to 100%; students absent two days cwpm scores ranged from 76% to

100%; however, the students who were absent 4 or more days had the lowest cwpm score ranged from 88% to 97%. The 7th grade student average cwpm ranged from 76% to 100% and the 8th grade student average cwpm ranged from 69% to 100%.

Thursdays. The researcher implemented the topic/main/detail comprehension strategy to measure student level of comprehension. Students identified the main idea of the reading, a minimum of 3 support details for each main idea and construct main idea sentences. The weekly results are reflected in the Table 4.

Table 4: Comprehension Log

	Main Idea (14)	Main Idea %	Supporting Details (42)	Support Details %	Main Idea Summary (14)	Main Idea Summary %	Absences
1	6	42.8	15	35.7	1	7.1	0
2	7	50	23	54.7	3	21.4	0
3	4	28.5	3	7.1	0	0	4
4	7	50	15	35.7	2	14.2	0
5	3	21.4	7	2.3	0	0	1
6	2	14.2	6	14.2	0	0	1
7	5	35.7	11	26.1	1	7.1	1
8	3	21.4	9	21.4	2	14.2	1
9	2	14.2	2	4.7	1	7.1	2
10	3	21.4	0	0	0	0	2
11	3	21.4	6	14.2	0	0	2
12	5	35.7	11	26.1	1	7.1	0
13	6	42.8	14	33.3	2	14.2	2

Students determined the main idea and three supporting details for each main idea from the expository passage readings. Some passages had more than one main idea. The expository passage readings had 14 main ideas and 42 supporting details that students were to identify. Students identified up to 50% of the main ideas and 54.7% of the supporting details. Next, students were to construct a main idea summary sentence from the main idea and supporting details. Students constructed 7.1% to 21.4% main idea summaries.

Table 5: Reading Log

Week	1 19-Mar		2 11-Apr		3 18-Apr		4 25-Apr		5 14-May		6 20-May		7 23-May	
Student	CWPM	%	CWPM	%	CWPM	%	CWPM	%	CWPM	%	CWPM	%	CWPM	%
1	120	98.3	133	97	141	97	113	98	100	98	125	97	147	99
2	183	98.9	171	97	201	100	148	99	170	100	168	100	180	100
3	absent	absent	absent	absent	37	88	absent	absent	89	97	85	95	absent	absent
4	163	100	173	98	181	99	148	99	173	99	173	99	189	100
5	96	96.9	68	98	91	95	85	97	absent	absent	71	97	83	97.6
6	146	98.6	absent	absent	170	99	133	98	152	100	121	99	172	97.7
7	catapult	catapult	108	97	158	69	148	95	137	100	128	99	126	96.9
8	catapult	catapult	171	97	168	98	136	98	147	99	149	99	195	99.4
9	absent	absent	61	96	45	76	54	93	64	97	absent	absent	70	95.8
10	53	94.6	70	93	absent	absent	50	96	51	86	48	92	absent	absent
11	absent	absent	97	97	absent	absent	77	94	121	100	109	98	95	100
12	161	98.7	170	99	154	100	140	99	142	100	146	100	164	100
13	catapult	catapult	91	98	117	97	98	95	105	97	112	95.5	absent	absent

The four students present for each assessment identified 5 (35.7%) to 7 (50%) main ideas, 6 (26.1%) to 23 (54.7%) support details were identified and 1 to 3 main idea summaries constructed. The students absent one day identified 3 (14.2%) to 5 (35.7%) main ideas, 6 (14.2%) to 11 (26.1%) supporting details identified and 1 to 2 main idea summaries constructed. Students with 2 absences identified 2 (14.2%) to 6 (42.8%) main ideas, 0 (0%) to 14 (33.3%) supporting details identified and 1 to 2 main idea summaries constructed. Students absent 4 days for the comprehension assessment identified 4 (28.5%) main ideas, 3 (7.1%) supporting details identified and 0 (0%) main idea summary sentences constructed. The seventh grade students averaged 3.5 main ideas, 6.6 supporting details and .66 main idea summaries. The 8th grade students averaged six main ideas, 15 supporting details and 1.75 main idea summaries. Students were challenged when asked to state the main idea and provide details from the passage to support the main idea they determined. It was an extreme challenge for students to construct a main idea summary using the main idea and supporting details. At the end of the intervention period, students were reassessed using the QRI-5. Next, part 4 will present the data collected after the implementation of the repeated reading instruction strategy. The same process used for the pre-test was used for the post assessment.

Pre-Test and Post-Test Comparative Analysis

The post-test assessment was used to document growth based on the repeated reading strategy intervention. Table 6 shows the computation of the pre-test and post-test raw scores of the QRI-5 Reading Inventory expository passages. Below the comparative analyzes of the QRI-5 Reading Inventory pre-test and post-test of mean, median and standard deviation, are several charts. Each chart demonstrates a comparative subtest analysis. Specifically, Chart 7 – Word Identification Levels Comparative Analysis, Chart 8 - Total Accuracy Comparative Analysis,

Table 6: Pre-Test and Post-Test Comparative Analysis

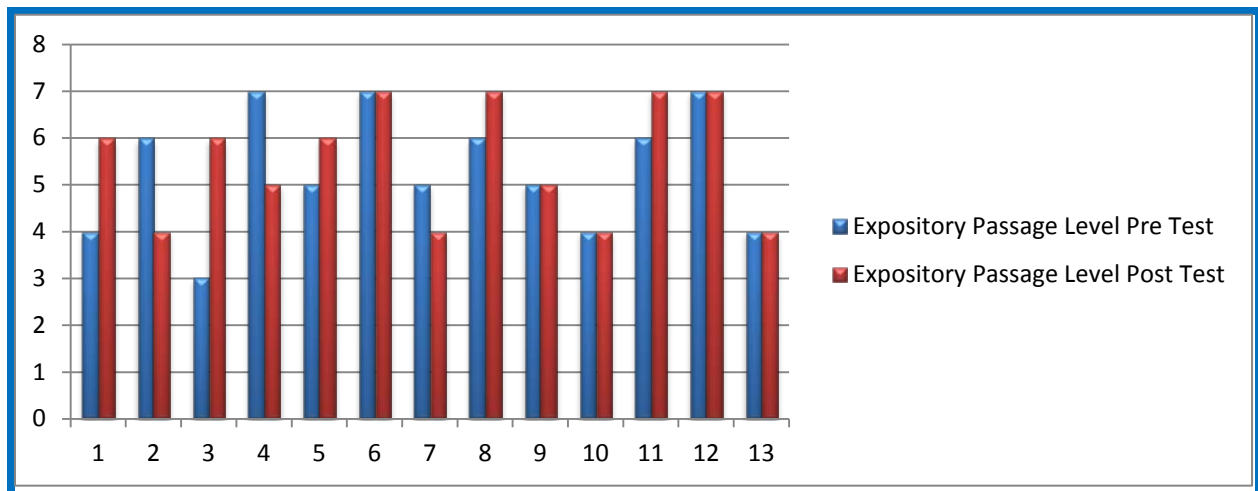
	Word Identification		Total Accuracy		Correct Words per Minute		Passage Retelling		Comprehension w/o Look-backs		Comprehension w/ Look-Backs		Instructional Reading Level	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1	4	6	97.7	93.3	101	91.7	14.8	40.7	75	75	87.5	0	3	5
2	6	4	99.6	99.6	162.5	171.4	0	19.1	75	37.5	0	50	3	3
3	3	6	98.4	94.3	88	43.6	10.2	19.6	50	62.5	75	75	3	6
4	7	5	97.6	98	126	137	12.9	35.1	75	87.5	0	100	5	5
5	5	6	95.9	95.9	64	68.7	8.1	22.9	75	62.5	0	87.5	5	5
6	7	7	98.6	98.5	138	116.3	8.5	7.2	75	20	0	70	6	7
7	5	4	97.1	97.7	109.9	116.7	4	57.4	62.5	87.5	75	100	4	3
8	6	7	99	97.3	143	128.2	15.1	43.7	37.5	75	75	0	6	6
9	5	5	96.9	97.6	62	72.5	3.5	14.8	63	37.5	87.5	87.5	4	5
10	4	4	94	95.7	70	57.9	4	28.5	75	100	0	0	2	3
11	6	7	96.3	96.4	78	65.5	29.4	36.2	75	70	0	90	6	7
12	7	7	99.4	99.6	153	137.2	27.6	9.3	62.5	62.5	75	75	6	6
13	4	4	98.4	96.9	104	116.7	8.7	38.2	50	12.5	75	100	3	3
Mean	5.308	5.538	97.61	96.985	107.65	101.8	11.29	28.669	65.423	60.769	42.308	64.2308	4.308	4.92308
Median	5	6	97.7	97.3	104	116.3	8.7	28.5	75	62.5	75	75	4	5
StDevS	1.316	1.266	1.575	1.8699	34.529	38.052	8.868	14.778	12.651	26.681	40.996	39.1895	1.437	1.49786
Correlat	0.393		0.446		0.897		0.001		0.1366		-0.074		0.748	
P Value	0.285		0.122		0.117		0.002		0.2795		0.1017		0.027	

Chart 9 - Passage Retelling Comparative Analysis, Chart 10 - Comprehension without Look Backs Comparative Analysis, Chart 11 – Comprehension with Look Backs Comparative Analysis, Chart 12 - Highest Instructional Reading Level Comparative Analysis, and Chart 13 – Correct Words per Minute Comparative Analysis are presented.

Oral Reading Fluency Comparative Analysis

Word Identification Comparative Analysis. The informal reading inventory Chart 7 – Word Identification level comparative analysis the pre-test scores were negatively skewed which indicated that the student average Word Identification Level increased from pre-test [5.30] to post-test [5.53]. The average Word Identification Level increased by .23 points. This shows that the average scores increased slightly. The median raw scores of the Word Identification level pre-tests [5.15] and the post-test [5.76] increased by .61 of a point. This indicates that 50% of the scores are higher than 5.76.

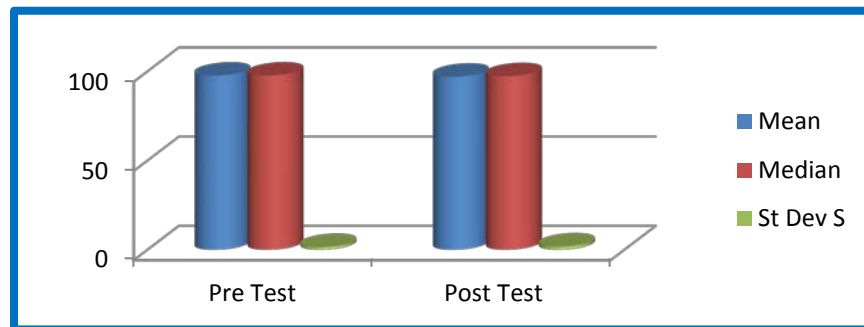
Chart 7: Word Identification Level Comparative Analysis



The Standard Deviation for Word Identification is higher for the pre-tests [1.31] than the post-tests [1.26], which indicated that the scores are closer around the mean. The introduction of the fluency-comprehension repeated reading strategy increased mean scores but only slightly.

Total Accuracy Comparative Analysis. The informal Reading Inventory Chart 8: Total Accuracy analysis demonstrates the pre-test scores were negatively skewed indicating there were a few scores that were lower (outliners), which lowered the pre-test score artificially. The post-test mean score was negatively skewed indicating there were a few low scores (outliners) which lowered the post-test scores falsely. This indicates that the mean scores could have been higher. The mean pre-tests score of 97.60 decreased to a mean post test score of 96.90, thereby, a decrease of .80 of a point. This shows that the average scores decreased slightly.

Chart 8: Total Accuracy Comparative Analysis

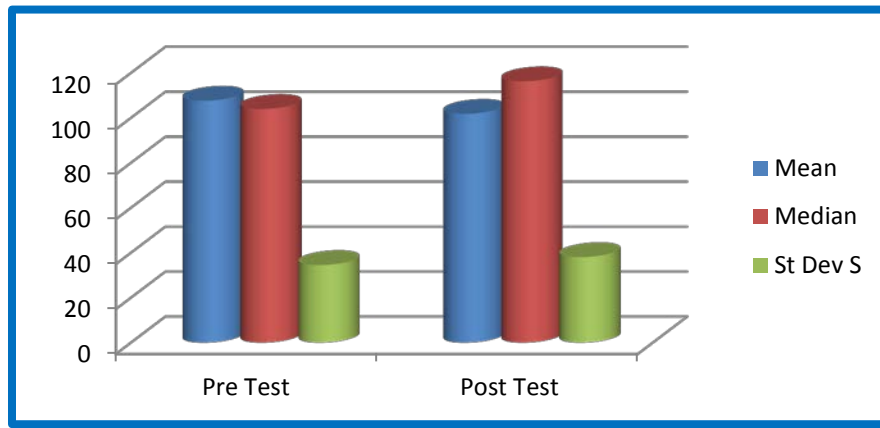


The median raw scores of the total accuracy pre-test [97.65] and the post-test [97.30] decreased slightly by .25 of a point. This indicates that 50% of the scores are higher than 97.30. The Standard Deviation for Total Accuracy is higher for the post-tests [1.86] than the pre-tests [1.57] which indicated that the scores are spread out farther from the mean. The repeated reading strategy did not appear to be effective.

Correct Words per Minute Comparative Analysis. The informal reading inventory sub-test Chart 9: Correct Words per Minute (cwpm) analysis demonstrates the pre-test scores were positively skewed which indicated there were lower student scores. The average scores decreased from the pre-test score of 107.64 to the post-test score of 101.80. This shows that the average scores decreased. The median raw scores of cwpm pre-test [104] and the post-test [116.30] had an increase of 12.3 points. The post-test [116.30] is to the right of the mean score

showing there were more higher scores. This indicates that 50% of the scores are higher than 116.3. The standard deviation for the informal reading inventory correct words per minute is higher for the post-test [38.05] than the pre-tests [34.52], which indicated that the post-tests scores were spread out farther from the mean score. The implementation of the Repeated Reading Strategy shows that the students' fluency and comprehension improved.

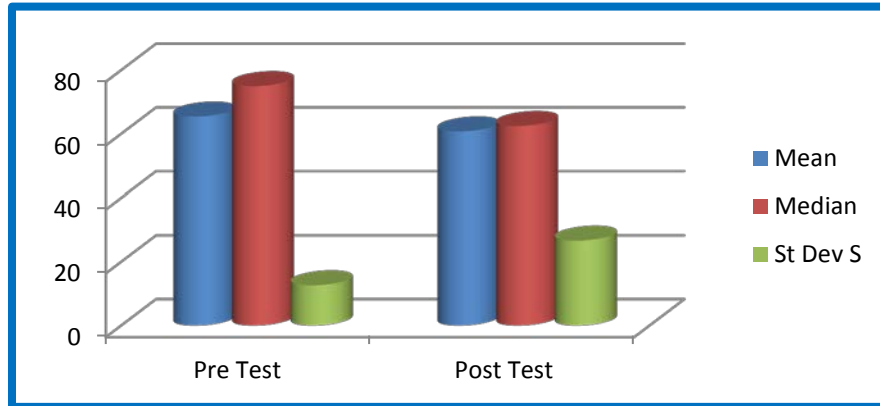
Chart 9: Correct Words per Minute Comparative Analysis



Comprehension Comparative Analysis

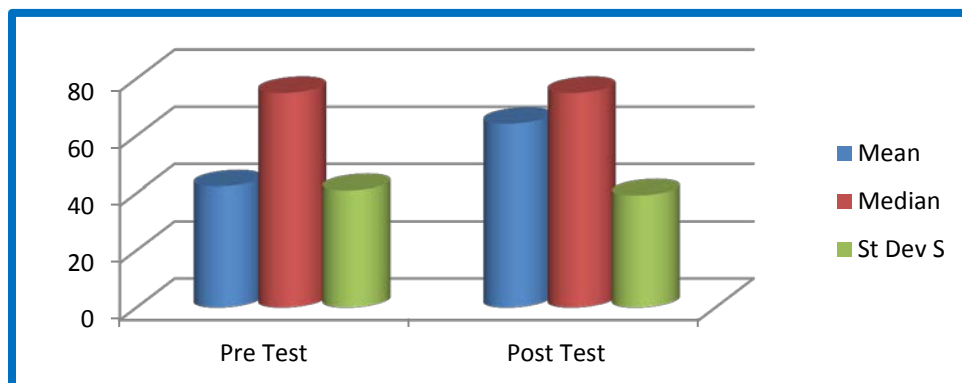
Passage Retelling Comparative Analysis. The informal reading inventory sub-test Chart 10: Comprehension - Retelling analysis demonstrates the pre-test score were negatively skewed which indicated student average scores increased from pre-test [11.29] to post-test scores of 28.66; thereby, the average score increased by 17.37 points. This shows that the average score increased. The median raw score of the pre-test [8.70] and the post-test [28.5] were also skewed negatively demonstrating the post-test scores increased by 19.8 points. This indicates that 50% of the scores are higher than 28.5. The standard deviation for comprehension retelling is higher for the post-test [14.77] than the pre-test [8.86], which indicated that the post-tests scores are farther from the mean score. The repeated reading strategy appeared to be effective.

Chart 10: Passage-Retelling Comparative Analysis



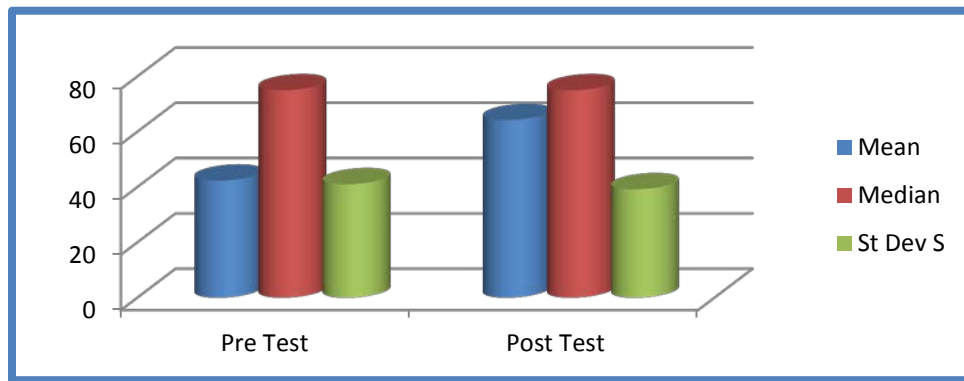
Comprehension without Look-Backs Comparative Analysis. The Comprehension without Look Back strategy Chart 10 analysis demonstrated the pre-test scores were to the right of the mean demonstrating there were more higher scores (negatively skewed). However, the students’ average scores decreased by 4.66 points from the pre-test scores of 65.42 to post-test score of 60.76. The median raw scores of the Comprehension without Look Back strategy on the pre-test [75] and post-test scores [62.5] decreased by 12.5 points. The post-test scores were negatively skewed showing that 50% of the scores were higher than 62.5. The sample standard deviation for Comprehension without Look Back strategy is higher for the post-test [26.68] than the pre-test [12.65] which indicated that the scores are spread out farther from the mean. The Repeated Reading strategy appeared to be effective.

Chart 11: Comprehension without Look Backs Comparative Analysis



Comprehension with Look-Backs Comparative Analysis. Students were given the opportunity to look back at the expository passage to locate answers as well as correct answers already given. The informal reading inventory sub-test Chart 12 Comprehension with Look Back strategy comparative analysis demonstrates the post-test scores were negatively skewed. The mean pre-test scores of 42.30 increased to a mean post-test scores of 64.23; thereby, an increase of 21.93 points. indicating there were a few lower scores (outliners), which lowered the pre-test mean scores. The median raw scores of the Comprehension with Look Back pre test scores [75] and post-test scores [75] remained the same. This indicates that 50% of the scores are higher than 75. The sample Standard Deviation for Comprehension with Look Back strategy was higher for the pre-test [40.99] than the post-test [39.18], which indicated that the scores are closer to the mean. The implementation of the Repeated Reading Strategy shows that students improved their oral reading comprehension

Chart 12: Comprehension with Look-Back Comparative Analysis

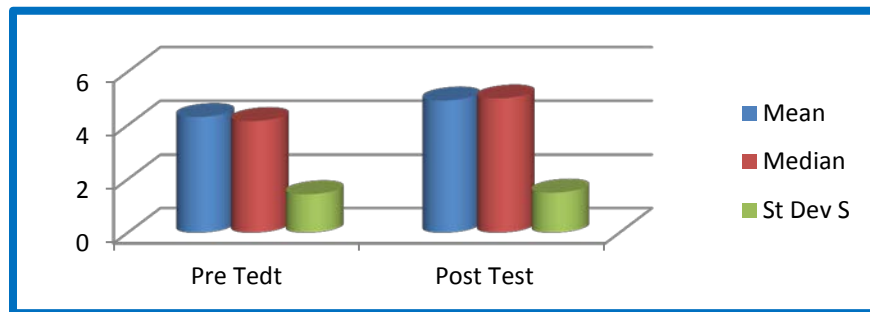


Instructional Reading Level Comparative Analysis

The informal reading inventory sub test Chart 13: Highest Instructional Reading Level analysis demonstrates the pre test scores were positively skewed indicating there were a few scores that were lower (outliners), which lowered the pre-test mean score artificially. The post-test mean scores were negatively skewed indicating there were a few scores (outliners), which

lowered the post-test scores artificially. The mean pre-tests score of 4.30 increased to a mean post-test score of 4.92, thereby, an increase of .52 of a point. The median raw scores of the highest instructional reading level pre-test [4.15] and post-test [5.0] were also skewed negatively demonstrated the post-test scores increased. This indicates that 50% of the scores are higher than 5.0. The Standard Deviation for the Highest Instructional Reading level is slightly lower for the pre-test [1.43] than the post-test [1.49] which indicated that the post-test scores are farther from the mean score.

Chart 13: Highest Instructional Reading Level Comparative Analysis



Other Comparative Analysis

After the pre-test and post-test comparative analysis, the pre-tests and post-tests scores of Word Identification [.40], Total Accuracy [.45], Correct Words per Minute [.90], Passage Retelling [.00], Comprehension without Look Backs [.14] and Comprehension with Look – Backs [-.07] were correlated. The correlation coefficient, which is the strength or degree of the relationships, was determined by using the general interpretation in Table 7.

Table 7: General Interpretation of Correlation Coefficient

Size of Correlation Coefficient	General Interpretation
.8 to 1.0	Very Strong Relationship
.6 to .8	Strong Relationship
.4 to .6	Moderate Relationship
.2 to .4	Weak Relationship
.0 to .2	Weak or No Relationship

Source: Salkind, N.J., 2000, p.96

The correlation strength of the relationships between the pre-tests and the post-tests were: very strong relationships between the pre-test and post-test of Correct Words per Minute (.90) and a strong relationships between pre-test and post-test of Highest Instructional Reading level (.75). There was a moderate relationship determined between the pre-tests and post-tests of Total Accuracy (.45) as well as Word Identification (.40). There was a weak to no relationship between the pre-tests and post-tests of Passage Retelling (.00), Comprehension without Look-Backs (.14) and Comprehension with Look-Backs (-.07). The conclusion drawn from the correlation between the pre-test and post-test is that they are related.

The researcher hypothesized that the Repeated Reading strategy would significantly effect oral reading fluency and reading comprehension of middle school students. The null hypothesis states there is no significant increase in oral reading fluency and reading comprehension of the middle school students. For each pre-test and post-test of the QRI-5 Reading Inventory a one-tail dependent t-test was completed with the probability level of $p < .05$ to investigate causation.

The computations of the t values for Word Identification [.285], Total Accuracy [.122], Correct Words per Minute [.117], Comprehension without Look-Backs [.279], Comprehension with Look-Backs [.102] and Highest Instructional Reading Level [.027] are shown in Table 8. The obtained t values were compared to the values in the abbreviated table of critical values of the t distribution in Table 9. The critical value under $p < 0.05$ was 1.796. The obtained t values of Word Identification, Total Accuracy, Correct Words per Minute, Comprehension without Look-Backs, Comprehension with Look-Backs and Highest Instructional Reading Level do not exceed the critical value under $p < 0.05$, which is 1.796. Therefore, the null hypothesis that states there is no different between the pre-tests and the post-tests are rejected.

Table 8: T Values

t value	0.285		0.027		0.122		0.117	
	Word Identification		Instruction Reading Level		Total Accuracy		CWPM	
	MEAN	n-2	MEAN	n-2	MEAN	n-2	MEAN	n-2
Pre Test	5.30	11	4	11	98	11	108	11
Post Test	5.53	11	5	11	97	11	102	11

t - value	0.002		0.279		0.102	
	Passage Retelling		Comprehension w/o LB		Comprehension W/LB	
	MEAN	n-2	MEAN	n-2	MEAN	n-2
Pre Test	11	11	65	11	42	11
Post Test	29	11	61	11	64	11

Table 9: Distribution of t values

	Level of significant for one-tailed test		
<i>df</i>	.10	.05	.01
11	1.364	1.796	2.718
<i>Source: Salkind, N.J., 2000, p.335</i>			

According to data collection and analysis of this research project, the Repeated Reading Strategy was effective in increasing the oral reading fluency and reading comprehension of middle school students.

Conclusion

The purpose of this study was to determine the effects of repeated reading instruction on oral reading fluency and comprehension of middle school students. The presentation of the data collected was in four parts. Part 1 provided demographic information from student reading interviews, home and background information, teacher survey. Part 2 presented the QRI-5 Reading Inventory pre –test assessment analysis that measured the word identification level, total

accuracy, highest instructional reading level, and correct words per minute. In addition, presented in part two were comprehension data collected through passage retelling and questions. The third part of the chapter was comprised of the weekly oral reading fluency and comprehension assessments. The reading log presented oral reading fluency rates and comprehension log presented topic/main idea/details strategy scores. Part 4 concentrated on the comparative analysis of the pre-tests and post-tests scores. Now, chapter 5 will provide a discussion of the results related to the review of literature, strengths and limitations of the study as well as recommendations for future research.

Chapter V

Conclusions

A major goal of reading instruction is for students to become fluent readers and proficient in reading comprehension (Kuhn and Stahl, 2003). In order to ensure this goal, it is important that fluent readers recognize words automatically and accurately rather than intentionally decoding words encountered in the text. It is equally important for fluent readers to read with prosody and expression. Moreover, readers' ability to construct meaning from the text is an important role played by fluency.

The purpose of this action research project was to determine what effects repeated reading instruction strategy has on oral reading fluency and reading comprehension of middle school students. This chapter will synthesize the problem, analysis the review of literature and data results. The sections of this chapter will focus on the explanation of action research results, strengths and limitations of the research, and recommendations for future research.

A number of reading models developed ascertain reading fluency as a competency in the primary grades; yet, some studies have found that the lack of fluency is an issue found among middle school students. The lack of fluency may limit the development of reading achievement among upper elementary, middle and secondary school students (Rasinski et al., 2009; Rasinski et al., 2005). Therefore, the review of literature indicated that fluency is important for developing reading comprehension at all grade levels. When students perform the reading task rapidly, effortlessly or without paying attention; hence, the reader is free to concentrate on the meaning of the text. In this way, fluency helps students become proficient readers (Mercer, Campbell, Miller, Mercer and Lane, 2000).

During the middle school years, it is important for students to be fluent in recognizing words; expand their knowledge needs as well as their ability to think critically and broadly

(Paige, 2011). Therefore, there is a need for effective strategies to promote reading fluency and comprehension among middle school students. Research says that increasing student fluency increases reading comprehension; therefore, fluent readers often comprehend text proficiently (Kuhn, 2005). The relationship between oral reading fluency and reading comprehension must consider the influence and implementation of comprehension and fluency instructional intervention strategies for middle school students.

Numerous studies support the use of repeated readings to increase the fluency of students at many reading levels and ages (Mercer, Campbell, Miller, Mercer, and Lane, 2000; Meyer and Felton, 1999). The oral reading fluency of middle school students can improve with the instructional method of repeated reading through the aim of meaningful and expressive oral interpretation of text. Additionally, repeated reading programs can be used in a variety of grouping formats in the classroom – class wide, small group, peer mediation. For this action research project, the program paired students together.

Reading comprehension is the result of the reader extracting and constructing meaning from the text, which is the framework for thinking about comprehension instruction (Irvin, 2007). By way of a balanced comprehension approach, teachers use explicit strategy instruction to assist students in becoming proficient users of individual comprehension strategies. The balanced comprehension approach is the interconnection of reader, text and activity. The use of explicit strategy instruction, a sequence of activities well established in the research literature begins with modeling followed by guided practice and independent practice.

After students read expository text using the repeated reading strategy, the main idea and supporting details were determined using topic/detail/main idea strategy. Many of the students

read the expository text with fluency; however, difficulty was in the identification of the main ideas with details to support the identification.

The literacy instructional practice to improve oral reading fluency and comprehension in this study was repeated reading. This study explored the effect repeated reading had on the oral reading fluency and comprehension of the middle school student. The hypothesis for the study was that the repeated reading strategy would affect oral reading fluency and reading comprehension of middle school students. The null hypothesis states there is no increase in fluency and comprehension of the middle school students. Next, presented are the results of this fluency-comprehension project.

Explanation of Results

The project students did not show outward excitement about increasing their oral reading fluency and reading comprehension. Throughout the project, the behavior and attitude of the student participants were not always conducive to learning. Occasionally, the researcher had to seek the assistance of the classroom teacher and/or the school administration in order to refocus the students. The refocus attempts of the researcher were not always successful. Therefore, there were rescheduled sessions.

The classroom teacher was always pleasant and interested in instructional strategies to improve teaching and learning in the classroom. Ms. Austin constantly expressed concern about the academic growth, social growth and behavior of the students in her classroom. Even though Ms. Austin was not a certified teacher, she always articulated a passion for teaching and student achievement. Additionally, Ms. Austin spoke of a behavior modification program she designed and wanted to implement school-wide at Alyce Hubert Christian Academy. The researcher encouraged her to pilot the program with the students in her classroom as the starting point.

The 60 to sometimes more than 90-minute sessions consisted of instruction, modeling, practice and assessment. After the initial session, the student behavior and academic skill level prompted the researcher to include lessons on vocabulary and word attack strategies. Additionally, Tuesdays focused on introducing the expository passage and implementation of the Repeated Reading strategy. Thursdays focused on reading comprehension and one-minute reading passage assessment.

Oral Reading Fluency

The analysis of the subtests of the Qualitative Reading Inventory-5 (Leslie and Caldwell, 2011) determined the impact the application of repeated reading strategy on oral reading fluency. The researcher hypothesized that the repeated reading strategy would increase oral reading fluency and reading comprehension on the post-test. The null hypothesis states there would be no increase. The fluency subtests were word identification level, total accuracy, instructional reading level, and correct words per minute. Here are the results of the analysis.

Word Identification Level. The word identification level plus the comprehension levels identified the instructional reading level of each student. A comparison of the pre-test [5.30] and the post-test [5.53] mean scores identified a weak relationship. The null hypothesis was rejected based on the t-test p-value [.28]. This indicates that the repeated reading strategy had an effect on students' oral reading fluency and comprehension. Therefore, the slight increase was an attribute of the implementation of the Repeated Reading strategy.

Total Accuracy. The researcher counted miscues of the expository passage to determine the instructional reading level. The count included self-corrections made by the student. A comparison of total accuracy identified a moderately statistically relationship between the pre-test [97.60] and the post-test [96.98] mean scores. The slight decrease in achievement continues

to place students in the highest instructional level. Based on the t-test p-value of .12, the null hypothesis was rejected. Therefore, the data seems to indicate that the Repeated Reading strategy was effective for oral reading fluency and comprehension.

Correct Words per Minute. The rate of oral reading suggests automaticity of word identification (Leslie & Caldwell, 2010). The oral reading rate of student participants in this project measured in correct words per minute (cwpm) was 107.64 on the pre-tests. After the implementation of the repeated reading strategy, the cwpm decreased to 101.80 on the post-tests. The results suggest a 5.84 decrease in the rate in which the students read the passages. While there was a decrease in the rate of oral reading, there was a very strong relationship to the repeated reading strategy. The null hypothesis was rejected based on the t-test p-value [.12]. This indicates that the repeated reading strategy had an effect on students' oral reading fluency and comprehension.

Highest Instructional Reading Level. The results of the assessments show that the sample student highest instructional reading level mean was 4.03. After the implementation of the repeated reading strategy, the post-test highest instructional reading level mean increased to 4.92. The comparison analysis showed a very strong statically relationship between the pre-test and the post-test. In addition, the p-value of .03 is less than the significant level of .05 thus the null hypothesis is accepted. While the highest instructional increased, it was not the results of the implementation of the repeated reading strategy.

The analysis of the QRI-5 Reading Inventory pre-test and post-test scored demonstrated that the repeated reading strategy appeared to have a positive effect on the oral reading fluency. The word identification level, total accuracy and correct words per minute revealed an increase in the mean from the pre-test to the post-test scores and rejected the null hypothesis which stated

the Repeated Reading strategy had an effect on oral reading fluency. Yet, the highest instructional level accepted the null hypothesis, which stated the Repeat Reading strategy did not have an effect on the oral reading fluency of students.

The ability of the reader to construct meaning from the text is an important role played by fluency. The analysis of the QRI-5 subtests passage retelling, comprehension without look-backs, and comprehension with look-backs determined the impact of the application of repeated reading strategy. Presented next are the results of the analysis.

Reading Comprehension

In addition to using the Qualitative Reading Inventory-5 to assess oral reading fluency, it was used to determine the level of comprehension. The reading comprehension subtests of the QRI-5 analyzed were passage retelling, Comprehension without Look-Backs, and Comprehension with Look-Backs. Here are the results of the analysis.

Passage Retelling. Each student did the expository passage retelling as if the researcher did not hear the passage reading. The comparison analysis of retelling pre-tests [11.29] and post-tests [28.66] support a weak statistical relationship in spite of 17.37 increases in score. In addition, the p-value of .00 is less than the significant level of .05 thus the null hypothesis is accepted. While the passage retelling increased, it was not the results of the implementation of the repeated reading strategy.

Comprehension without Look-Backs. After the students retold the expository passage, there were explicit and implicit comprehension questions asked. A comparison of the Comprehension without Look-Backs pre-test [65.40] and post-tests [60.76] identified a weak statistical relationship between the pre-test and post-test. Yet, based on the t-test p-value of .27 greater than the significant level of .05, the null hypothesis was rejected. Therefore, the data

seems to indicate that the Repeated Reading strategy was effective in increasing the oral reading fluency and comprehension of the middle school students. It also worth noting the students had greater difficulty with implicit questions than explicit.

Comprehension with Look-Backs. Students had the opportunity to refer to the expository passage to correct or answer questions they were unable to give. A comparison of the Comprehension with Look-Backs pre-test [42.30] and post-tests [64.23] also identified a weak statistical relationship. In addition, the p-value of .10 is greater than the significant level of .05 and the null hypothesis is rejected. While the comprehension with Look-Backs increased, it was not the results of the implementation of the repeated reading strategy. Thereby, indicating the implementation of repeated reading strategy did not have an effect on student comprehension. The implicit questions continued to challenge the students; however, students answered explicit questions with increased accuracy.

The analysis of the QRI-5 Reading Inventory pre-test and post-test scored support that the Repeated Reading strategy had a positive effect on reading comprehension with Look-Backs and reading comprehension without Look-Backs. However, the repeated reading strategy did not have an effect on passage retelling. Overall, the QI-5 analysis of the pre-test and post-test assessment support that the Repeated Reading strategy appeared to have a positive effect on oral reading fluency as well as reading comprehension.

Discussion

Relationship of the Current Project to Previous Research

To ensure the attainment for students to become fluent readers and proficient in reading comprehension, it is essential that fluent readers recognize words accurately and automatically (Kuhn and Stahl, 2003). Successful reading requires proficiency at combining the two critical

skills of effectively decoding words and thoroughly comprehending text. These are the imperative skills necessary in promoting successful reading (Griffith and Rasinski, 2004).

Students must focus their cognitive energy on word recognition and fluency as well as develop a high level of comprehension (Rasinski, Rikli and Johnston, 2009; Archer, Gleason and Vochon, 2003; Kluda and Guthrie, 2008; Rasinski, Pdak, Mckeen, Wilfong, Friedauer and Heim, 2005; Applegate, Applegate and Modia, 2009). The readers' ability to construct meaning from the text is an important role played by fluency.

The purpose of this action research project is to determine what effect repeated reading instruction strategy have on oral reading fluency and reading comprehension of middle school students. The researcher hypothesized that the Repeated Reading strategy would increase fluency and comprehension of middle school students. The null hypothesis states there is no increase in fluency and comprehension of the middle school students. This study tested the hypothesis with the middle school population at a Parental Choice Program in Wisconsin.

It is important to integrate reading fluency and comprehension into regular classroom instruction in all content areas. There is a need for explicit fluency building strategies because of the importance of fluency and comprehension. Fluency oriented instruction approaches ensure students have increased opportunities to read connected text and create student academic responsibility. Additionally, research-based instruction strategies increase fluency while promoting comprehension and vocabulary; thereby, overall increase reading achievement and reduce reading skills deficits.

Musti-Roa, Hawkins, and Barley (2009) study showed limited gains that suggested repeated reading increase oral reading fluency rates among struggling readers. In addition, Kuhn (2005) study concluded that repeated reading strategy was effective in helping students with

prosodic reading. Furthermore, current research concluded that the ability for students to comprehend the text comes from the interactions of words read in isolation, number of correct words read per minute, prosody and the ability to integrate various features of the reading process into a cohesive whole.

The literacy instructional practice to improve oral reading fluency and comprehension in this study was repeated reading. The findings from this study also showed gains that suggested repeated readings promote reading fluency rates. These findings were consistent with the hypothesis that the repeated reading instruction strategy had an effect on the oral reading fluency and reading comprehension of middle school students. While the majority of the findings from this study were found to validate research expectations, it was determined that the middle school students were proficient at oral reading fluency; yet, experienced a challenge with reading comprehension.

Strengths and Limitations of the Study

The strengths of this study were in the areas of instructional strategy, assessment tool and consistency. A practical instructional strategy that effectively promotes reading fluency and comprehension was Repeated Reading strategy. Linked to gains in reading comprehension is the Repeated Reading strategy.

The Qualitative Reading Inventory – 5 (Leslie and Caldwell, 2011) was the assessment tool used in this study. The QRI-5 is a nationally recognized reliable informal assessment instrument and used in other research projects. It contains expository and narrative passages from pre-primer through high school reading levels. The expository passages were measures used to assess oral reading and comprehension. Oral Reading used word identification, total

accuracy and level of comprehension determined highest Instructional Reading Level. Retelling, explicit and implicit questions measured students' Level of Comprehension.

There was consistency in the data collection process, which increased the strength of the project. The researcher conducted every aspect of the study. The study included pre-assessments, implementation of the intervention strategy and post-assessment. The researcher collected all descriptive data [reader interview, parent home and reading information, teacher survey]. In addition, the researcher, without the assistance of another person, completed analysis and evaluation of the data.

This study was limited to the student participants and teacher in one choice elementary school located in an urban city. The study was more generalizable to urban choice schools with similar race, ethnicity and socioeconomic characteristics. The degrees of interest, openness and cooperation of the participants were limitations of the fluency-comprehension project.

Additionally, interruptions of instruction such as spring break, Measures of Academic Progress testing, school personnel and class visitors were limitation of the project. In spite of attempts to embed the Repeated Reading strategy into the curriculum and instruction in the classroom, the strategy was seen as an addition to the classroom activities.

Recommendations for Future Research

Future researchers should consider the following recommendations in order to increase the effects of repeated reading strategy on oral reading fluency and reading comprehension of middle school students.

1. Further study may consider the exploration of other instructional practices such as Think-Alouds that improve or offer additional insight on the effect of oral reading fluency and comprehension development of the middle school student.

2. Future study may incorporate vocabulary strategies for unfamiliar/unknown words prior to the implementation of repeated reading and comprehension strategy.
3. Future study should investigate what effect students' self-monitoring of effort and achievement has on reading strategies awareness
4. Professional development opportunities offered by the administration for classroom teachers emphasizing literacy instructional strategies
5. More cognizant on the part of the classroom teachers of the difference oral reading fluency and comprehension strategies that can be used with middle school students

Additionally, there are research possibilities that may provide additional knowledge for urban school administrators and classroom teachers seeking to improve student achievement.

Therefore, there are recommendations for the school administration.

6. Create a system of continuous improvement that results in teachers teaching toward clearer and higher expectations in an accountable way (Common Core Standards)
7. Look at gaps in the curriculum and develop a long-term plan for reform based on the common core standards that create systems that support improvement of instruction, which will increase student achievement.
8. Proficiency readers of more complex texts need expert instruction, opportunity to read a wide range, and very deep volume texts; therefore, elevate the level of teaching and learning with Department of Public Instruction licensed educators.

The primary objective of Reading instruction is for students to become fluent and proficient in reading comprehension. Fluency is composed of accurate word decoding, rate, prosody and expression. When students are able to perform the reading task rapidly, effortlessly and without paying attention to decoding, they are able to concentrate on the meaning of the text. The

extraction and construction of meaning by the reader is reading comprehension and the framework for comprehension instruction. Some students are able to read words accurately, comprehend and learn from the text by reading. However, there are students who need instruction on how to approach the text to understand its content. These students have a problem with decoding words, fluency, understanding the meanings of words, relating content to prior knowledge, using comprehension strategies and/or monitoring understanding. Low reading achievement is a problem for many students especially in middle school.

As educators prepare students to be successful in an ever-changing society, every measure possible to seek answers and solutions to the teaching and learning challenges of all students in the area of reading must happen. A measure to include in the search for answers and solutions is the implementation of the common core standards. These standards will assist in the acceleration of student achievement in every classroom. In addition, instruction must include strategies to help the students read fluently and comprehend any text placed before them. Therefore, the challenge includes the identification and use of developmentally appropriate instruction that move and motivate students along on the path to constructing and extracting meaning from the text.

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Appendix A

Home and Family Background Information

Student's Name: _____

Date of Birth: _____ Age: _____

Current homeroom teacher's name: _____

Current Grade Placement: _____

Current classroom placement (check all that apply)

- Regular

 Learning Disabilities

 Emotionally Disturbed
 Cognitively Disabled

 Other _____

Do we have permission to communicate and exchange print information with school personnel and other institutions serving your child's learning needs? _____

How would you rate your child's early development in these areas? (Please circle all that apply)

- | | | | | |
|-----------------|--------------------------------|---------------------------------|--|------------------------------------|
| Crawling | <input type="checkbox"/> early | <input type="checkbox"/> normal | <input type="checkbox"/> somewhat late | <input type="checkbox"/> very late |
| Walking | <input type="checkbox"/> early | <input type="checkbox"/> normal | <input type="checkbox"/> somewhat late | <input type="checkbox"/> very late |
| Using Words | <input type="checkbox"/> early | <input type="checkbox"/> normal | <input type="checkbox"/> somewhat late | <input type="checkbox"/> very late |
| Combining Words | <input type="checkbox"/> early | <input type="checkbox"/> normal | <input type="checkbox"/> somewhat late | <input type="checkbox"/> very late |

Has your child had any problems in any of the following areas? (Please circle all that apply)

- | | | |
|---|--|---|
| <input type="checkbox"/> Vision | <input type="checkbox"/> Memory | <input type="checkbox"/> Early childhood education |
| <input type="checkbox"/> Hearing | <input type="checkbox"/> Hyperactivity | <input type="checkbox"/> Attention or concentration problems |
| <input type="checkbox"/> Speech | <input type="checkbox"/> Allergies | <input type="checkbox"/> Physical handicaps |
| <input type="checkbox"/> Sickle Cell Anemia | <input type="checkbox"/> Lead blood levels above average | <input type="checkbox"/> Referral to a psychologist or psychiatrist |

Please explain: _____

Describe your child's school progress: _____

Was your child ever retained? _____ Accelerated? _____ When? _____

If so, why? _____

With what results? _____

How does your child feel about school? _____

What kinds of reading materials are available in your home? _____

What material does your child use on his/her own initiative? What are his/her interests?

Does your child have difficulty in any of these other areas?

- Spelling
- Completing assignment on time
- Perseverance
- Penmanship
- Organization
- Motivation
- Written expression
- Other _____

Has anyone in your family had any of the following problems in school?

Word Recognition _____ Spelling _____

Reading Comprehension _____ Speech/Language _____

Written Expression _____ Attention/Concentration _____

Signature _____

Date _____

Appendix B
Reading Interest Inventory

Student Name: _____ Date: _____

1. When you are reading and you come to a WORD that is difficult, what do you do?
Do you ever do anything else?
2. After reading a story, chapter, or article you realize that you don't understand what you read what do you do?
3. Name someone who you know is a GOOD READER:
4. What makes her/him a good reader?
5. Suppose someone in your classroom is having difficulty reading how would you help that person?
6. What would a/your teacher do to help that person?
7. What is reading?
8. What kind of things do you and your family read at home?

YOU	FAMILY
------------	---------------
9. Do you like being read to?
10. What kind of books (genres) do you like to read?

11. Suppose you were given an assignment to answer questions after reading a passage or chapter. If you were given the choice would you be able to answer better if YOU READ the passage to yourself or if the passage was READ TO YOU?

12. How do you think you do with reading in school? What about writing?

13. What is the hardest part about reading?

14. What would you like to do better as a reader?

15. How are your grades in school? Do you have any concerns with any subjects?

16. Is there anything else that you'd like to share about yourself?

ADDITIONAL NOTES OBSERVATIONS:

Appendix C
Teacher Questionnaire

Name: _____ Date: _____

1. What would you say are the greatest needs in reading of you 7th/8th grade class this school year?

2. Describe for me a typical reading/language arts period in your classroom. (Include time spent, materials used, methods, grouping techniques)

3. What would you say is the greatest emphasis in your comprehension instruction and assessment? Do you emphasize recall of information, student response to the text or both equally?

Complete for: (student name)

1. How does _____ (student name) generally react to your instruction?

2. How would you characterize _____ (student name)
 - a. Ability
 - b. Attitude
 - c. Interests
 - d. Needs
 - e. Behavior

3. What do you know about the type of support _____ (student name) gets at home?

Appendix D

CORRECTION PROCEDURE CARD

Name: _____

Step 1**“Stop, The word is _____.”****Point to and say _____.****Step 2****“The groups of words are ____ ____
____.”****Point to and say the group of words.****Step 3****Tell your partner to “Say the group of
words three times fast or backward
and forward.”**

Appendix E

Vocabulary Strategy

Vocabulary: Meteors and Meteorites II

Word	Before Reading	Check	After Reading
collides			
constellation			
craters			
particles			
gravity			

Appendix F Reading Log

Student Name: _____

Session	Date	Number of Words Read Correctly	Number of stamps received
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			

Appendix G

Comprehension Activity

Instructions: Write a main idea for each section of the book in the left-hand boxes. In the right-hand boxes, list up to three details that tell more about the main idea.

MAIN IDEA (2)	DETAILS (3)
	1 2 3
Summary (4)	

Step 1: Read the entire text





Step 2: Reread the first section and identify the topic of the section

HINT: Ask self --- What is the author talking about in this section?

Step 3: Now go through the section and underline each thing/idea that the author tells you about the topic (These are the details)

Step 4: Construct a main idea sentence.

HINT: Ask yourself these questions ...

-  Is the author describing something: a person, a thing, a process or event?
-  Is the author comparing or contrasting two or more things?
-  Is the author explaining a problem or a solution?
-  Is the author explaining a cause and effect?