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# What effect does direct content-based vocabulary instruction have on the reading comprehension of elementary students?

Trinae J. Williams

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**What effect does direct content-based vocabulary instruction have on the reading comprehension of elementary students?**

By

Trinae J. Williams

A Graduate Field Experience Submitted in Partial Fulfillment of the Requirements for the  
Masters of Arts

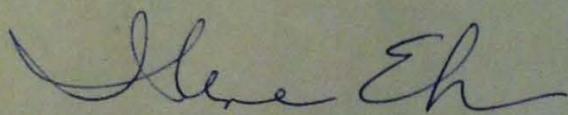
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At Cardinal Stritch University

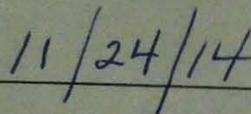
Milwaukee, WI

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Has been approved for Cardinal  
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(Advisor)



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**Table of Contents****Approval Page****Table of Contents****List of Tables****List of Figures**

<b>Abstract.....</b>	<b>7</b>
<b>CHAPTER ONE: Introduction.....</b>	<b>8</b>
Literacy Program.....	8
Student Background.....	9
Conclusion.....	10
<b>CHAPTER TWO: Review of Literature.....</b>	<b>12</b>
Vocabulary Acquisition.....	13
Reading Comprehension.....	15
Effects of direct instruction of vocabulary knowledge for reading comprehension.....	18
Effectiveness of Direct Instruction.....	20
Effects of Vocabulary Instruction on Reading Comprehension.....	21
Content Specific Vocabulary Instruction.....	23
Meaning-Based Vocabulary Instruction.....	27
Practices of Direct Instruction.....	28
Conclusion.....	32
<b>CHAPTER THREE: Procedures for the study/Assessment</b>	
Program Design.....	33
Participants.....	33
Pre-Assessment.....	36

Effects of Direct Instruction of Content-Based Vocabulary	4
Results.....	38
Materials.....	41
Method/Intervention.....	41
Data Collection.....	45
Post Assessments.....	47
<b>CHAPTER FOUR: Results</b>	
Post Assessment: Qualitative Reading Inventory.....	49
Intervention Weeks.....	56
Intervention: Week One: Vocabulary Assessment.....	57
Intervention Week One: Comprehension Assessment.....	58
Intervention: Week Two: Vocabulary Assessment.....	61
Intervention Week Two: Comprehension Assessment.....	62
Intervention: Week Three: Vocabulary Assessment.....	63
Intervention Week Three: Comprehension Assessment.....	64
Intervention: Week Four: Vocabulary Assessment.....	65
Intervention Week Four: Comprehension Assessment.....	66
Conclusion.....	67
<b>CHAPTER FIVE: Discussion.....</b>	<b>70</b>
Intervention: Connection to Existing Research.....	70
Explanation of Results.....	71
Addressing Research Questions.....	73
Strengths and Limitations.....	74
Conclusion.....	75

<b>Appendix A.....</b>	<b>76</b>
<b>Appendix B.....</b>	<b>77</b>

### List of Tables

Table	Page
1. Table 4.1.....	49
2. Table 4.2.....	50
3. Table 4.3.....	51
4. Table 4.4 .....	52
5. Table 4.5.....	53
6. Table 4.6.....	55
7. Table 4.7.....	58
8. Table 4.8.....	60
9. Table 4.9.....	61
10. Table 4.10.....	62
11. Table 4.11.....	63
12. Table 4.12.....	65
13. Table 4.13.....	65

**List of Figures**

Figure	Page
1. Figure 1.....	71
2. Figure 2.....	72

### **Abstract**

This investigation examined the effects of direct instruction of contextually-based vocabulary on the reading comprehension of elementary students. The participants in this investigation included five students enrolled in the Cardinal Stritch University City Center Summer Reading Project ranging from 3<sup>rd</sup> to 5<sup>th</sup> grade, two females and three males. These students were all identified as having needs in the area of reading comprehension proficiency. Vocabulary was chosen as the means to address reading comprehension based upon existing research that connected vocabulary acquisition to improved comprehension skills. The interventions of this study focused on providing students with contextually-based vocabulary through direct instruction. The direct instruction included the use of graphic organizers and collaboration with peers while being led by an instructor. Students then applied the instruction of contextually-based vocabulary to reading comprehension exercises. The results indicated that students in this study demonstrated slight increases in successful reading comprehension as evidenced in the results of classroom assessment as well as the Qualitative Reading Inventory-5, a informal inventory that provides information regarding conditions under which students can successfully identify words and comprehend text . Although students showed some progress in the routine and method of implementation of the interventions, the results of the study were affected by the time constraints.

## **CHAPTER ONE**

### **INTRODUCTION**

Standardized test scores show a prevalent achievement gap in reading proficiency within schools in Milwaukee County in Milwaukee, WI. This achievement gap indicates that students who are struggling readers continue to fall further behind their peers in reading proficiency as they matriculate to the next grade level. Therefore, this investigation focused on literary, specifically in the area of reading comprehension. Reading comprehension is a necessary skill for reading proficiency but also has a critical role in achievement for other areas of academics. In this study, five students ranging from 3<sup>rd</sup> to 5<sup>th</sup> grade, received interventions using a combination of direct instruction through graphic organizers and collaborative learning. These interventions focused on providing students with contextually-based vocabulary. The investigation was designed to allow students to apply vocabulary to reading comprehension, resulting in improved comprehension skills. This chapter includes a description of the program that this investigation was conducted under, as well as information regarding student background and academic achievement.

#### **Literary Program**

The participants in this study were students who had been enrolled at the Cardinal Stritch University Literary Center for academic tutoring in area of reading. Cardinal Stritch University Literacy Staff approached parents of 3<sup>rd</sup>-5<sup>th</sup> grade students at the Literacy Center-City Center and explained the Urban Special Education Summer Reading Project. This project was an academic enrichment program focused on reading and writing. The Summer Reading Project consisted of 18 elementary student participants

from various schools within Milwaukee County, Wisconsin. As a researcher within the Urban Special Education Summer Reading Project, an investigation involving student reading comprehension was conducted in collaboration with the summer program.

Students in the program rotated between three 50-minute instructional sessions. These sessions included one-on-one literary tutoring, a reading/writing workshop, and a science workshop. The participants in this particular investigation included five students within the reading/writing workshop.

### **Student Background**

The following background information regarding each student participant in the study was based upon detailed registration information completed by the parent/guardian. The registration form included demographic information such as the student's age and sex, as well as academic information based upon the child's performance during the regular school year and parent observation. Student A was a male in the 5<sup>th</sup> grade. During the regular academic school year he received specialized services in the area of reading based upon an Individual Education Plan (IEP). Student A's IEP highlighted that he had specific learning disabilities and Attention Deficit Disorder. The parent shared concerns about significant delays in reading comprehension and the lack of interest in literature in general, due to struggles with phonetics and fluency.

Student B was a female in the 3<sup>rd</sup> grade. She received no specialized services per an Individualized Education Plan. The parent shared Student B's most recent report card. This report card was the standardized report card for Milwaukee Public Schools-Elementary Schools, 2014. The report card indicated the Student B received a score of basic, meaning meeting expectations just below grade level, in the areas of

phonetics/decoding, fluency and the recognition of key details within text. The parent expressed concerns regarding Student B's reading comprehension and study skills.

Student C was a male in 4<sup>th</sup> grade. He received no specialized services per an Individualized Education Plan. The parent shared that Student C showed progress in areas of academics during the regular school year. The parent did, however, express concern regarding Student C's writing skills in terms of accuracy, expression and completeness.

Student D was a male in 5<sup>th</sup> grade. He received specialized services per an Individual Education plan. The information was limited for this student since the parent did not provide details regarding the areas of service or further academic concerns.

Student E was a female in the 3<sup>rd</sup> grade. She received no specialized services per an Individualized Education Plan. The parent highlighted that Student E enjoyed reading and that it was an activity she often engaged in. The parent also shared concerns about Student E's delays with reading fluency and reading aloud.

### **Connection to Common Core State Standards**

The interventions, that will be outlined in detailed further into this study, focused on increasing student's ability to comprehend text. The catalyst for the intervention goal of increased comprehension was the use of context-based vocabulary through direct-instruction. The interventions aimed to address not only reading comprehension, but focused on the development of vocabulary. This is in alignment with specific Common Core States Standards, in particular, the Reading Standard for Literature, Grade 3, which reads, "by the end of the year, (students will) read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 2-3 text complexity band

independently and proficiently” (“English Language Arts Standard-Literacy-R.L 3.10”, n.d.).

### **Conclusion**

Students who have a vocabulary base in contextual instruction show greater proficiency in inferring meaning from text than students who do not (Baumann, Edwards, Boland, & Olejnik, 2003). The content of the interventions in this study were based partially upon the student background and level of academic achievement. The research gathered in the following chapter further supported the design of the interventions. These interventions included a combination of direct instruction through the use of graphic organizers and peer collaboration. The purpose of the research was to investigate whether students who receive direct instruction of contextually-based vocabulary will have greater achievement in reading comprehension.

## **CHAPTER TWO**

### **REVIEW OF LITERATURE**

In early elementary school, students' are taught reading skills through a sequential process. The sequential process includes decoding, comprehension and retention.

Decoding on a basic level involves children's ability to recognize that letters represent the sounds of spoken words. As children master each letter of the alphabet, they map these letters to the sounds they represent. Comprehension, in terms of reading, is the understanding the written word. Comprehension ultimately depends on the ability to decode and master sight words. When that word recognition becomes automatic students' are better able to concentrate on the meaning of whole sentences and paragraphs while they read. As they read, children also learn to simultaneously connect information within the context of a selection and relate what they are reading to what they already know. Retention, the final task in reading is retaining, or remembering, what has been read. Children must be able to organize and summarize the content and readily connect it to what they already know.

However, there are gaps in literacy acquisition among students in early elementary school. These gaps specifically manifest in the area of comprehension. Not all students' grasp these fundamental skills as readily as their peers. Students', who have a strong grasp of these skills by early elementary, remain consistent in areas of reading growth. Inversely, students' who struggle with early literacy skills continue to struggle as they matriculate in grade levels (Ouelette, 2009). Teaching students' vocabulary from a specific context will provide them with the background knowledge they need to comprehend text. Teaching this vocabulary through direct instruction, which is the active

instruction led by a teacher who facilitates engagement and often repetition with students, expedites the process of comprehension, especially for struggling readers. The combination of these two components ultimately aids in students' improvement in reading comprehension.

The purpose of this study is to examine the effects of direct instruction of contextually based vocabulary on the reading comprehension of elementary students. My hypothesis asserts that students who receive direct instruction of contextually based vocabulary will increase their abilities to comprehend text as evidence through work samples and classroom assessments. This chapter summarizes studies that address the important questions pertaining to this action research project: What is direct instruction? What are the advantages to teaching vocabulary through direct instruction? What literacy instructional strategy practice improves reading comprehension development of elementary school students? What advantages will students have when provided with context vocabulary base in terms of improved reading comprehension? How does direct instruction and contextually based vocabulary improve students reading comprehension? The first section focuses on vocabulary acquisition for students in elementary school. The second section focuses on the effects and advantages of direct-instruction. The third section focuses on reading comprehension and how these components work in conjunction to improve reading comprehension overall.

### **Vocabulary Acquisition**

Students acquire a large amount of their vocabulary during the school years, most of which is attributed to exposure rather than direct instruction (Nagy & Anderson, 1984). Vocabulary acquisition for an elementary student is defined as, a student learning

a new word by demonstrating that she or he can correctly associate the target word with its corresponding object (Suggate, Lenhard, Neudecker, & Schneider, 2013).

Reading and language experiences both contribute to the development of vocabulary, thus having a broader lexicon is an advantage for reading. The purpose of the research study by Suggate, Lenhard, Neudecker, & Schneider (2013), is to investigate the effects of vocabulary acquisition of 2<sup>nd</sup> versus 4<sup>th</sup> grade students. The researchers assessed the potential effects using three control groups. In one group, student's read independently, in the other group student's were told a story orally and in the final group student's actively participated in sharing a story from a text. This research was driven by two question's: whether target-word learning was greater in any of the story control groups varying as a result of the students' grade level and whether learning in a particular control group (independent reading, oral story telling or story sharing from text) related to the students existing skills.

Researcher's hypothesized several outcomes. Students with greater reading comprehension would acquire more vocabulary words through independent reading and students with greater vocabulary would acquire more target words from oral story telling.

The participants in this research consisted of 20, second grade students and 14 fourth grade students. There were 11 males in each grade level group. All students were from Germany and all but two students identified their ethnicity as German. Three of the participants spoke a second language and all students who participated had at least one parent who received a higher formal education.

Students began the experiment by individually taking the PPVT-IV (Peabody Picture Vocabulary Test) test of receptive vocabulary administered by a Doctor of

Philosophy student and two trained psychology and education students. After the assessment students were paired and received all three types of story telling within one session. After the session students were administered a test that assessed decoding, reading comprehension and vocabulary acquisition.

As a result of this study researchers found that the participants in fourth grade performed better on the vocabulary acquisition test. Students learned the least number of words when reading the stories independently and the most words were acquired from story sharing from text.

Researchers concluded that students with greater receptive vocabulary performed better in the oral story telling groups. Those students with better reading comprehension skills learned more during independent reading. Therefore, there was implicit rationale of vocabulary acquisition through the exposure of oral language for students at the elementary level.

Students have shown the ability to learn vocabulary simply through exposure. In addition, students who have a larger vocabulary are more successful in reading comprehension. Therefore, exposing students to the vocabulary they will encounter across content through direct instruction will potentially increase their reading comprehension in those areas as well; working to reach that percentage of students lacking in foundational skills who continue to fall behind in reading comprehension.

### **Reading Comprehension**

Reading comprehension is demonstrated through a student's ability to take away knowledge and information from text. In education it is a widely accepted theoretical view that most students learn reading comprehension through the simple view, that is,

students develop word decoding and listening comprehension and the outcome is comprehension of text. Children simultaneously develop a variety of literacy skills. Therefore, while students' are learning foundational skills, such as decoding, they are also acquiring vocabulary and content knowledge. Although vocabulary is not the sole contributor, it cannot be an overlooked factor in a child's ability to comprehend text. Vocabulary provides meaning to content, and understanding meaning of content in turn allows students to better demonstrate reading comprehension.

In the research by Verhoeven & Leeuwe (2008), the process in which students at the elementary level demonstrated reading comprehension was examined in a longitudinal study. The purpose of this study was to determine the specific effects of word decoding, vocabulary and listening comprehension on reading comprehension. Researchers focused on two theoretical frameworks that created their hypotheses, lexical quality and the simple view. Thus, researchers hypothesized that word decoding and vocabulary would be the critical determinants of reading comprehension and that reading comprehension would be the product of word decoding and listening comprehension.

The participants in this study included a representative sample of 2,143 students from the Netherlands. This sample of students was stratified based upon socio-economic status of the families as well as cultural backgrounds. The participants were from 118 elementary schools and began the study around the mean age of 6 years and 8 months. There were 1,082 male students and 1,061 female students in the study. Students were involved as participants from first grade until sixth grade, tested half way through the school year.

All students received the same method of literacy instruction common in elementary schools in the Netherlands. This instruction included a phonics-based program in first grade. As students increased to the next grade level, they received explicit instruction in word decoding skills using word attack activities. Students also received instruction in text comprehension strategies and book reading activities, which became more complex as students matriculated to the next grade levels.

Twenty-four well-trained graduate students were responsible for tracking student data by administering tests to the students mid way through each school year. These tests included three word-decoding assessments in which the graduate students administered to each child individually in a 10-minute session. The other assessments administered included a vocabulary test, listening and reading comprehension assessment; these were administered to individual classrooms as a whole group.

As a result of the study researchers found that students who proficiently acquired a combination of word decoding, vocabulary and listening comprehension skills showed better performance in reading comprehension in first grade, whereas in the following grades vocabulary acquisition led as the predictor for reading comprehension.

Researchers concluded from this study that vocabulary strongly influences reading comprehension and that, as mentioned in the lexical quality hypothesis, word decoding and vocabulary were indeed critical determinants of reading comprehension. It is important to also note that researchers identified reading development as a continuum.

Returning to Verhoeven & Leeuwe's (2008) findings, these researchers asserted that after the foundations of first grade, vocabulary played a large factor in students' successful reading comprehension. This supports the concept of teaching students'

vocabulary through direct instruction, with the result of improved performance in reading comprehension. Simply decoding and reading words in text does not elicit comprehension. Students must be able to apply meaning to words in order to extract information. If a student can decode a multi-syllable word, this is an achievement. However, if those students can not identify the meaning of that same word when encountered in text, they will not be successful in their literacy development as a whole.

### **Effectiveness of direct instruction of vocabulary knowledge for reading**

#### **Comprehension**

Exposure to language is at the grassroots of vocabulary acquisition. Students at varying abilities show improvement when they have the opportunities to be exposed to vocabulary in comparison to those who lack those opportunities. In the following study by Kim & Thompson (2013), the researchers' findings seemingly refute the notion of increased academic success with direct vocabulary instruction as opposed to that of self-regulated practice. However, the connecting aspect to this research is that all students received prior exposure to context-based vocabulary. Individual students will respond differently to instructional methods, however, providing that initial opportunity for exposure remains consistent.

The Kim & Thompson (2013) study examined the effect of self-regulation in conjunction with direct vocabulary instruction on the acquisition of science word knowledge by third grade English language learners with learning disabilities. Researchers' suggested that when given the opportunities to be exposed to academic vocabulary, the above mentioned demographic of students would increase in academic success based on vocabulary knowledge, implicit acquisition of word meaning and

comprehension. The dependent variable in this study was the students' acquisition of word definitions.

The participants in this study included four third-grade students who were identified as English language learners. These students were from a Title I elementary school in Central Texas, in which more than half of the students were identified as coming from low-income families. The four students who participated were from the one bilingual third grade classroom in the school, which had 21 students.

Prior to beginning of the study, researchers developed a target word list. The study was divided into seventeen 30 to 35 minute sessions, in which 5 minutes was devoted to the testing of vocabulary knowledge. In each session, six words were taught at a time. Students underwent two phases across the 15 weeks of the research. The first phase, was identified as the baseline phase. In this phase, students participated in a routine that included five activities as follows: activating prior knowledge of target words, providing student-friendly definitions of the words, explaining word meaning in context using pictures and examples, participating in activities for word acquisition and reviewing the target words. In the second phase students underwent the same five activities; however, they received less teacher direction and intervention. They were left to set individual goals and self-monitor. As a result, Kim & Thompson (2013), found that despite the high level of intensity of the baseline phase (direct instruction), participants showed low levels of acquisition of word meanings when only direct vocabulary instruction was used.

Direct instruction, when paired against other methods or combination of methods is not the homogenous answer for vocabulary instruction as it relates to reading

comprehension, as evident in the previous research study. The argument is not that direct instruction is the only manner of instruction resulting in increased reading comprehension, but rather that this is indeed an effective practice in the aiding of reading comprehension. The study by Baumann, Edwards, Boland & Olejnik (2003), highlights this assertion as direct instruction is compared to more traditional instruction methods of vocabulary.

### **Effectiveness of Direct Instruction**

Baumann, Edwards, Boland, & Olejnik (2003) conducted a study comparing the effects of morphemic and contextual analysis instruction to the effects of textbook based vocabulary instruction. The researchers' question for this study was: What are the effects of integrated instruction in morphemic and contextual analysis strategies embedded within subject matter lessons on fifth grade students' ability to learn new words meanings and improve their reading comprehension?

The participants in this study were 157 fifth grade students from eight classrooms. These classrooms were within a public school in the southeastern region of the United States. The participating fifth grade classrooms were deemed as racially and ethnically diverse.

This study was implemented with a mixed method approach, which included quantitative/descriptive and dominant/less dominant design. The eight classrooms of fifth grade participants were divided into two instructional groups. One group of students received the morphemic and contextual analysis instruction (MC) and the other group of participants received textbook-based vocabulary instruction (TV), meaning students

received a vocabulary list from the standard curriculum. This instruction was integrated into the fifth grade social studies curriculum.

Researchers found that TV students were more successful in learning textbook vocabulary. MC students were more successful at inferring meanings of words from novels and inferring meanings of morphologically and contextually decipherable words on a delayed test, but not immediately. All groups did not differ on a comprehension measure or a social studies learning measure. Researchers' concluded that the results of the study were in support of the assertions to teach specific vocabulary and morphemic analysis, with some evidence for the efficacy of teaching contextual analysis.

Having a vocabulary base through context as evident in the group of students who received the morphology and context instruction aided in the student's ability to better handle text in terms of inferring meaning. The influence of vocabulary is key in strategies leading to successful reading comprehension.

### **Effects of Vocabulary Instruction on Reading Comprehension**

The study conducted by Nelson and Stage (2007) assessed the effects of contextually based vocabulary knowledge on reading comprehension. The researchers' simply hypothesized that specific instruction in contextually based multiple meaning vocabulary would indeed have an effect on students' performance in reading comprehension and vocabulary knowledge. Thus, there were two variables employed in conducting this study. The study consisted of a control and uncontrolled group. The controlled group received the standard language arts instruction alone (non-specific treatment), and the uncontrolled group received instruction of vocabulary with multiple

meaning. This was embedded in the standard language arts instruction offered to all students over a three-month period.

The participants in this study included 283 students, 134 third graders and 149 fifth graders enrolled in small Mid-western public school system. These participants were drawn from 16 third and fifth grade classrooms. Third and fifth grade classrooms were randomly assigned to an experimental or non-specific treatment condition.

The third and fourth grade students received either instruction of vocabulary with multiple meaning embedded in the standard language arts instruction offered to all students over a three month period or the standard language arts instruction alone (non-specific treatment). Students were pre tested and based upon their scores were classified into two groups, emerging and high-level knowledge of vocabulary. With this, Level I and II of multiple meaning target words were selected within the groups. Students were then post-tested at the conclusion of the three-month instruction period, using a standardized assessment of vocabulary knowledge and reading comprehension, the Gates-MacGinitie Reading Test (4<sup>th</sup> Edition). Classroom teachers within this three-month span delivered all instruction.

Based upon the data gathered from the pre and post-test, the study found that students who received instruction of vocabulary with multiple meanings (contextually based) generally showed statistically significant gains in their vocabulary knowledge and reading comprehension relative to students who did not. This result revealed that students generally showed improvement in their reading comprehension skills from pre to post treatment. In addition to this, students who began with low vocabulary knowledge and

reading comprehension achievement tended to show greater gains than those with the average high achievement. This result was more profound in third graders.

This study lends support to the concept that as students have a broadened exposure to vocabulary knowledge, they will in turn improve upon their acquisition of reading comprehension. Furthermore, students' understanding of vocabulary having different meanings and functions will help to heighten their awareness of context and elicit clarity in comprehension.

### **Content Specific Vocabulary Instruction**

In the longitudinal study conducted by Sun, Zhang, & Scardamalia (2008), researchers examined content knowledge building and written vocabulary. The purpose of this research was to test the effects of sustained knowledge building in subject areas on the productive written vocabulary growth of students in grade 3 to 4. The researchers hypothesized that there would be high correlations between student engagement in sustained knowledge curriculum in science and social studies and their vocabulary growth.

Participants in this study were from the Institute of Child Study Laboratory School of the University of Toronto. Participants consisted of a class of 22 students, 11 students were female and 11 male. All participants were in third grade and ranged from ages seven to eight. The demographics of the participants represented multi cultural and racial backgrounds of middle class families. This experiment was a longitudinal study over the course of two school years. Researchers analyzed students' engagement in literacy and vocabulary growth, using their knowledge building work in social studies and science as evidence.

In third and fourth grade students had different teachers who had been trained in the knowledge building pedagogy and the use of Knowledge Forum (the tool which researchers used to track student progress). In third grade students were given a curriculum that investigated worms, plants, and geography. In fourth grade students were given a curriculum that investigated living things, light and medieval times. Each curriculum included instruction in whole group, individual and small group work. Students' then directed to an online discourse called Knowledge Forum, in which they would complete tasks and projects that extended and reviewed the content taught in class. This forum provided a public space in which student work was recorded and provided detailed records of each student's note writing and reading behavior. Researchers also utilized running records and observations from classroom teachers' to aid in data analysis.

As a result, researchers found that there was significant growth in productive written vocabulary of the students from grade 3 to grade 4. In fourth grade researchers found that all students were able to incorporate content specific terms at or below grade level and many above grade level when writing. There was also a high correlation between student engagement in the knowledge building curriculum and their overall vocabulary growth.

Researchers concluded that productive vocabulary could indeed be developed through sustained knowledge building in subject area. Consequently, the argument asserted, is that, teaching vocabulary in conjunction with specific content will result in the increase of student vocabulary knowledge.

There is also research that refutes the idea of direct instruction for the means of vocabulary acquisition, stating that students acquire vocabulary in school through incidental learning. Looking at the results of a study by Nagy, Herman, & Anderson (1985) based on incidental learning will help to compare its effects to direct instruction.

The purpose of the study was to explore the extent to which each state of incidental learning from context during free reading affects the major mode of vocabulary acquisition during the school years. In addition, researchers examined the “volume of experience with written language, interacting with reading comprehension ability, as the major determinant of vocabulary growth” (p. 234). The hypothesis of this study was derived from previous research conducted by Nagy and Anderson (1984), suggesting that a large volume of a student’s vocabulary acquisition occurs during the school years without direct instruction from teachers. Consequently, direct instruction is not a significant factor in vocabulary acquisition.

The participants in this study consisted of 70 eighth grade students identified as average and above average. This identification was assessed through school personnel and the Gates-MacGinitie reading test. Fifty-seven of those students completed the study in its entirety and thus the data was pulled from those 57 students only.

Students were assigned either a spy narrative or an exposition on river systems at random. These two pieces of literature were tested against prior knowledge and knowledge of target words to assure there was no differences between the texts given to each group. As a result, there was no difference found between the texts. Students were then given a vocabulary tasks based upon the text they were assigned that consisted of copies of their randomly assigned passages, as well as question booklets related to their

specific passage. They received 10 minutes to complete the passage, re-reading as many times as they choose during that 10-minute period. After the 10 minutes were up, students were asked to respond to recall questions from the booklets. They were not allowed to look back at the passage while completing this task. Once the story memory task was completed each student was tested individually on target words. They were required to read the word then tell what it meant or use it correctly in a sentence. The final part of the process required students to complete a multiple-choice test regarding the passage.

The results found that at each level of difficulty for the individual target word test and the multiple-choice test, the majority of students performed better. This indicates the students correctly identified more words and in conjunction answered more questions correctly for the task that related to the passage they read. However, the interaction of the Learning from Context with the standardized measure of reading comprehension was shown to not be statistically significant in the target word identification nor the multiple choice test.

This study highlights a connection between vocabulary knowledge and reading comprehension. When students were familiar with the vocabulary, they performed better on the comprehension activity. Students showed improvement in reading comprehension with exposure to vocabulary, even though the vocabulary was not taught explicitly. Students demonstrating improvement with this example of incidental vocabulary learning lends supports to the hypothesis that when students are directly taught vocabulary, prior to being exposed to content, their reading comprehension will therefore be improved as well.

**Meaning –Based Vocabulary Instruction**

The purpose of the multi experimental study conducted by Jenkins (1978) was to assess the effects of vocabulary instruction on word knowledge (meaning based) and reading comprehension. The study compared several methods that employed either a practice instruction or a non-instructional condition for the participants. The focus will be on the first experiment in this study.

The participants in this study included twelve fourth grade students, eight females and four males, ranging in ages 9 to 10. These students were selected from two classrooms, according to their performance on a vocabulary-screening test. This sample of participants were also required to have orally read at least 75% of the experimental pretest of vocabulary words correctly, yet identify no more than 10% of the word meanings on this test correctly.

This study utilized four experimental conditions in which all students participated. These conditions included: meaning of context, meanings given, meanings practiced, and no meanings control. In each of the previously mentioned conditions, all students received two index cards each with a target word on it. Students read the word out loud twice, then for a third time silently. The index card activity was followed by additional procedures according to students' specific condition.

For the meaning of context condition students had no direct instruction. They read two sentences; one sentence used a target word while the other a synonym of that target word. In the meanings given condition students read a sentence with a target word. The experimenter then stated the meaning of that target word, and used it in a sentence that would be familiar in context to the student. In the meanings practiced group, students

read a single target word, the experimenter then stated a synonym and a sample sentence using the target word and asked students to repeat both. Lastly, with the no meanings control condition, students read the given target words printed on the cards.

The results of this experiment showed that according to data collected from the pre and post test of each students, students in the meaning practiced condition performed the best on the vocabulary assessment, followed by the meanings given condition, then the meanings practiced condition and lastly the no meanings control condition. Students best comprehended the sentences in which the vocabulary was taught by practice and least comprehended those taught by context.

The conclusion of this study indicated that, in general, students learned and retained the greatest amount of vocabulary words by the practice method of instruction, also identified as direct instruction. While when simply told synonyms in context, students learned and retained the least amount of vocabulary.

### **Practices of Direct Instruction**

Direct instruction is an active term; it involves the instructor engaging in an on-going dialogue and applying practice to the topic at hand. Fien, Baker, Park, Chard, Williams & Haria (2011) conducted a study exploring the effects of vocabulary instruction on struggling first grade students. The purpose of this research study was to evaluate the effect of small group instruction on the vocabulary and comprehension of first grade students identified with low language and vocabulary skills. The researchers hypothesized that there would be a significant effect on gains in vocabulary and comprehension of those students who received small group vocabulary instruction.

The participants in this study included 102 first grade students who scored below the 50<sup>th</sup> percentile on relational vocabulary. These students were grouped by classroom and matched according to vocabulary scores based upon a standardized assessment. Additionally, these students were enrolled in Title I schools in the Pacific Northwest. Out of the total students, 54 received the small group instruction and included 55.6% females and 44.4% percent males. Fifty-two of the participants were in the controlled group, receiving only the whole group instruction and consisted of 40.4% females and 59.6% males.

These groups of students were then randomly assigned to 18 classrooms and received one of two conditions, as mentioned. All students in the 18 classrooms received and participated in a Read Aloud Curriculum. The 54 students that were placed in intervention groups received additionally 20 minutes of small group instruction twice a week for a period of 8 weeks. Each of the small groups consisted of 2-5 students. During the 20 minute period students worked with the purpose of increasing vocabulary comprehension as related to text. A facilitator used a tool that accompanied the vocabulary curriculum entitled, *Big Books*, to guide instruction during this intervention time. Big Books was an 11 X 14 inch layout that highlighted, extended and overlapped vocabulary that was taught within the whole group instruction. It included specific context related questions and illustrations that evoked student participation with the vocabulary. The remaining participants within the control group received the whole group Read Aloud Curriculum, without additional interventions.

The results of the experiment found that students who received small group instruction reliably outperformed their controls on vocabulary assessments and

expository retells but not on narrative retails. Researchers concluded that their findings provide an initial support for implementation of small group instruction in addition to whole group read aloud practices for the purpose of increasing students vocabulary and expository retelling skills for at risk first grade students.

Students within the intervention groups received direct instruction of vocabulary strategies and, as a result, performed better in comparison to their peers, supporting the assertion that explicit vocabulary instruction does indeed aid in student reading comprehension.

The purpose of the study by Keer & Verhaeghe (2005) was to explore narrowing the gap between widely used instructional practices for reading comprehension and the research evidence in the field of reading comprehension instruction. The study designed, implemented and evaluated complex sets of instructional interventions blending both instructional practice with research, with the goal of enhancing the reading comprehension achievement and self-efficacy of second and fifth graders. The purpose of the experiment was to compare the effectiveness of tutoring variants as instructional techniques as a means to practice strategies of reading comprehension. This included three components: teacher-led whole class activities, same age peer tutoring activities, and cross age peer- tutoring activities.

The researcher proposed six hypotheses in regards to components of this experiment. However for the purpose of research aimed towards reading comprehension, the three initial hypotheses will be described as opposed to the later. Hypothesis one states: explicit reading strategies with teacher led whole class or peer- tutoring activities enhances reading comprehension achievement of second and fifth graders as opposed to

traditional reading comprehension instruction. Hypothesis two states: practicing reading strategies in cross age or same age peer tutoring generates an increased amount of positive outcomes in reading comprehension of second and fifth graders as opposed to more traditional teacher led practice during whole class activities. Lastly, the third hypothesis asserts that improvement in reading comprehension will be more apparent in second and fifth grade students functioning as tutees and tutors within the cross age peer tutoring activities than for their peers who participated in same age activities.

The participants in this study included 444 students in the second grade and 454 students in the fifth grade. These students came from 44 classes with male and females and 25 different schools in Flanders, Belgium.

Researchers used pretest, posttest and retention test control group design. Participating classes were assigned one of four research conditions. These included a class that implemented explicit instruction followed by teacher-led whole group activities, a class that implemented the explicit instruction with cross age peer tutoring, a class that received explicit instruction with same age peer tutoring and a control group which received traditional reading comprehension strategies without explicit instruction or peer tutoring. These classes were taught by a selection of teachers from the schools from which the students came. The study continued throughout the entire school year, including 50 minute instruction daily.

Overall, researchers found that with the interventions, (explicit reading strategies and peer tutoring), there were significant effects. Students in these conditions, on average, increased their scores from the pre to post standardized test. In addition to this, those students who acted as tutors (fifth grade tutors to second grade tutors) scored better

on the retention test, and showed evidence of retaining reading comprehension strategies up to 6 months after their participation in the study.

The researchers concluded the findings of the study demonstrate the educational benefits of creating and implementing reading comprehension instruction from the cognitively based models of the comprehension process. This supports the notion of the need to modify prevailing instruction practices and curriculum for teaching comprehension. Explicit instruction leads to better reading comprehension, adding vocabulary to this will help to further students' improvement in reading comprehension.

### **Conclusion**

As upper elementary school students exchange learning to read for reading to comprehend, vocabulary becomes essential in grasping contextual meaning. Although some research suggests that students obtain large amounts of their vocabulary during school years apart from direct instruction from teachers (Nagy and Anderson, 1984), other research combats this notion. Nelson & Stages (2007) study concluded that students directly taught multiple meanings of vocabulary words through direct instruction showed statistically and educationally significant gains in their vocabulary knowledge and reading comprehension relative to students who did not.

Therefore, reading comprehension is improved when students' have strong vocabulary knowledge. With a vocabulary knowledge base across content areas, students' are able to identify and apply vocabulary to text in order to better extract meaning. Direct instruction of content-based vocabulary provides the opportunity for students, particularly those who struggle in acquiring reading foundations, to make the necessary connections of words to overall context.

## CHAPTER THREE

### PROCEDURES FOR THE STUDY

This action research study was implemented at Cardinal Stritch University Literacy Center –City Center. Cardinal Stritch University Literacy Staff approached parents of 3<sup>rd</sup>-5<sup>th</sup> grade students at the Literacy Center-City Center and explained the Urban Special Education Summer Reading Project. This project was an academic enrichment program focused on reading and writing. The Summer Reading Project consisted of 18 elementary student participants from various schools within Milwaukee County, Wisconsin. Ten students were female and 8 students were male. Nine of these students identified themselves as African American, 5 identified as White, 1 identified as Latino and 3 students identified themselves as Other.

#### **Program Design**

The Summer Reading Project offered instruction in the areas of science, reading/writing and one-on-one tutoring for specific literacy needs. Through the duration of the four week program, students rotated daily to a different instructor in each of these areas for a period of 50 minutes. This study utilizes the participants within the reading/writing period of instruction.

#### **Participants**

From the 18 students within the Summer Reading Project program, 5 of these students were participants in this specific research study. Of these five participants 3 were males and 2 were females, ranging from 3<sup>rd</sup> to 5<sup>th</sup> grade. The 5 participants varied in reading abilities, yet all students were identified as struggling readers in comprehension or foundational skills. The following specific information in regards to the 5 participants

was retrieved from the review of several records. These records included parent surveys and Individualized Education Plans, which are documents that address the academic, social and emotional challenges of students who have been identified as having special needs. In addition, the records include observations gathered by a licensed Special Education teacher, who served as the one-on-one reading tutor for the participants throughout the Summer Reading Project program.

Student A was a male in 5<sup>th</sup> grade. He had good word identification skills and was described by the tutor as having read with decent fluency and expression. He generally read at a good pace although he sometimes needed to be reminded to slow down because his fast pace of reading impeded his comprehension of text. His word identification skills and fluency were at a higher level than his comprehension skills. He had a difficult time recalling important events in sequential order for both narrative and expository texts. Typically, he was able to recall the events from the very beginning of a text as well as the end but struggled to remember those events and important ideas that fell within the middle. Student A was better able to answer explicit and implicit comprehension questions when he is was given the opportunity look back in a text but struggled to do so without looking back at the text. In this setting, implicit questions referred to those questions that required the reader to draw conclusions and make inferences based on deduction, interpretation and prior knowledge. Explicit questions referred to the reader's ability to extract information that was clearly expressed within a text. Comprehension was an overall observed area that needed improvement for Student A.

Student B was a female in 4<sup>th</sup> grade. Student B read with good speed and accuracy. She was able to correct herself during reading and/or reread a line if she

believed it would help her with the understanding of a passage. In terms of comprehension, Student B was able to answer broad questions about a text; however, she struggled to remember specific details about what she just read.

Student C was a male in 5<sup>th</sup> grade. His ability to identify sight words was very poor. Based on observations from his one-on-one reading tutor, Student C read very slowly and stumbled over many of his words. He often skipped over unfamiliar words and replaced them with other words that looked similar. Many of his miscues changed the meaning of the text. Student C's explicit and literal comprehension skills were quite strong within a narrative text. He could remember and retell very specific details of a text. However, implicit comprehension and extracting the main idea or theme from a text were areas that he struggled in. Student C tended to latch on to a set amount of specific details and used those details to answer multiple questions, even if they were unrelated to the text.

Student D was a male in the 3<sup>rd</sup> grade. Student D showed strength in the area of fluency based upon observation and previous records. He was able to read text with good speed and accuracy. Student D read above his grade level according to records. Student D had strong background knowledge of grade level vocabulary. Student D notably struggled with his attending skills, which impeded in his completion of assessments.

Student E was a female in the 3<sup>rd</sup> grade. Student E was observed as having understanding of the purpose of punctuation in a text, which helped her to read with expression. Student E came into the program with several different decoding skills that she applied when she reached an unfamiliar word when reading. Comprehension is a relative strength for Student E based upon previous records and observation. When

reading narratives, Student E was able to combine her background knowledge with information from the text to answer implicit comprehension questions as well as explicit questions. When reading narrative texts, Student E benefited from the option of looking back in the text to answer comprehension questions. Student E struggled to recall ideas from texts in sequential order, especially those ideas that were in the middle of the text.

### **Pre-Assessment**

The Qualitative Reading Inventory is an informal inventory that provides information regarding conditions under which students can successfully identify words and comprehend text. The Qualitative Inventory also helps to determine the conditions that appear to provide an unsuccessful result in word identification and comprehension. The results of this assessment can be used to estimate student reading levels as well as evaluation of intervention instruction. For the purpose of this research study, the focus was on reading comprehension. Each participant was assessed using the Qualitative Reading Inventory-5 as a baseline to identify his or her initial level of reading comprehension prior to intervention.

The Qualitative Reading Inventory-5 assessment was 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 are used to design and evaluate intervention instruction. Finally, the QRI-5 documents student growth.

For the purpose of this study the students' scores for the comprehension portion of the QRI-5 were extracted only. The comprehension portion of the QRI-5 identifies students' reading comprehension levels by three labels: frustration, instructional and independent. The administration and scoring of this portion of the assessment is as follows:

Students read a presented passage. The passage is selected based upon the students' scores in the word identification and fluency portions of the assessment, as well as prior knowledge of the content. Students then read the passage independently and are prompted to retell the passage to the best of their ability. After the retelling, the examiner asks a series of comprehension questions and scores them accordingly. The questions are both explicit and implicit. Explicit questions have answers that are stated directly in the passage. These questions determine whether students can recall and understand information directly from the text. Implicit questions require the student to use clues from the passage to make inferences in order to answer successfully. Both types of questioning are evidence of successful reading comprehension.

In scoring each question, examiners are determining the response as either correct or incorrect. Passages each have five, six or eight questions overall. As students received a score of independent or instructional, the examiner would assess the student with another passage of increased difficulty. The percentage of correct questions determines one of three levels. The independent level is attained when a student answers 90% or above of questions correctly. An instructional level is attained when a student answers 89% to 67% of questions correctly, and a frustration level (below 67%) of overall comprehension questions answered correctly. Examiners also calculate the percentage of

explicit question vs. implicit question answered correctly by adding the total number of each type of question answered correctly and dividing it by the overall number of questions answered correctly. Each participant's individual results and observation from the baseline assessments are as follows:

### **Results**

Student A was a male in 5<sup>th</sup> grade. On passage 1 of the Qualitative Reading Inventory-5, he answered 3 explicit questions with 75% accuracy, without looking back at the text. He answered 2 implicit questions with 50% accuracy, without looking back and overall answered 62.5% of his eight comprehension questions correctly. This placed him at an instructional level. On passage 2 he answered the 3 explicit questions with 75% accuracy, without looking back at the text. He answered 3 implicit questions with 75% accuracy, without looking back and overall was able to answer 75% of the comprehension questions correctly. This placed him at an instructional level. On passage 3 he answered 3 explicit questions with 75% accuracy, without looking back at the text. He answered 3 implicit questions with 75% accuracy, without looking back and overall was able to answer 50% of the comprehension questions correctly. This placed him at an instructional level. On passage 4 he answered the 1 explicit question with 25% accuracy, without looking back at the text. He answered the 3 implicit questions with 75% accuracy, without looking back and overall was able to answer 50% of the comprehension questions correctly. This placed him at a frustration level. The examiner noted that while Student A recalled the passages and answered the comprehension questions, he struggled recalling the important details in sequential order. This impeded his ability to successfully answer the comprehension questions at an instructional level as

the difficulty of the passages increased. Student A is better able to answer explicit and implicit comprehension questions when he is given the opportunity to look back at a text but struggled to do so without the text.

Student B was a female in 4<sup>th</sup> grade. On passage 1 of the Qualitative Reading Inventory-5, she answered 4 explicit questions with 100% accuracy, without looking back at the text. She answered 1 implicit question with 25% accuracy, without looking back and overall answered 63% of eight comprehension questions correctly. This placed her at a frustration level; thus the examiner ceased testing at passage 1. The examiner noted that during the assessment Student B was able to answer broad questions about the text; however, she struggled to remember specific details about what she had just read. The examiner also noted that Student B was able to provide a general overview of the passage she read, however, Student B did not remember many important details. Based upon the percentage of her score at 63%. Student B was near to receiving an instructional score in which she needed 67% percent of comprehension question answered correctly.

Student C was a male in 5<sup>th</sup> grade. On passage 1 of the Qualitative Reading Inventory-5, he answered 4 explicit questions with 100% accuracy, without looking back at the text. He answered 1 implicit question with 50% accuracy, without looking back. Note that although the administration guides of the Qualitative Reading Inventory-5 discourage scoring with partial points, the examiner gave Student C a half correct score for the fore mentioned implicit question, thus explaining the accuracy of 50%. Overall, he answered 89% of questions with accuracy. This placed him at an instructional level. On passage 2 he answered the 4 explicit questions with 100% accuracy, without looking back at the text. He answered 1 implicit question with 50% accuracy, without looking back.

This placed him at an instructional level, with an overall percentage of 89% accuracy. Due to student's unfamiliarity with the remaining passages, the test administrator ceased testing after passage 2. Through observation the examiner noted that overall, Student C's explicit and literal comprehension skills were quite strong within a narrative text, based upon his response to the explicit comprehension questions. He could remember and retell very specific details at his instructional level.

Student D was a male in the 3<sup>rd</sup> grade. On passage 1 of the Qualitative Reading Inventory-5, he answered 1 explicit question with 50% accuracy, without looking back at the text. He answered no implicit questions accurately. This placed him immediately at the frustration level; thus the test administrator ceased testing at passage 1.

Student E was a female in the 3<sup>rd</sup> grade. On passage 1 of the Qualitative Reading Inventory-5, she answered 4 explicit questions with 100% accuracy, without looking back at the text. She answered 4 implicit questions with 100% accuracy, without looking back. This placed her at an independent level. On passage 2 she answered the 4 explicit questions with 100% accuracy, without looking back at the text. She answered 3 implicit questions with 75% accuracy, without looking back. This placed her at an instructional level. On passage 3 she answered 3 explicit questions with 75% accuracy, without looking back at the text. She answered 3 implicit questions with 75% accuracy, without looking back. This placed her at an instructional level. Through observation during the comprehension portion of the assessment, the examiner noted that, overall, Student E's comprehension was a relative strength. The examiner also noted that when reading narratives, Student E was able to combine background knowledge with information from the text to answer implicit comprehension questions as well as explicit questions. Student

E did struggle to recall ideas from texts in sequential order at her instructional level, especially those ideas that were in the middle of the text.

### **Materials**

Extracting words directly from texts, a vocabulary list was compiled for each week of the intervention. The text varied in content. Also, the books used in the research were gathered from the Cardinal Stritch Library and reflected a range of reading levels based upon participants' results on the Qualitative Reading Inventory-5.

### **Method/Intervention**

The research study span was four weeks. During the first 2 days of the first week students were assessed using the Qualitative Reading Inventory- 5 (QRI-5). A licensed Special Education teacher, who had received training on the administration, assessed each student individually. During this first week, the intervention process was combined into 2 days. The following weeks, students received a pattern of interventions using methods of direct instruction of contextually-based vocabulary. A week consisted of four days, Monday through Thursday, each session lasting 50 minutes. On day one of each week students received six target vocabulary words based upon a specific content area. For example, week two's content area was natural sciences, specifically focusing on volcanoes. The vocabulary words for that week were *magma*, *fault*, *crater*, *lava*, *crust*, and *plate*. These vocabulary words were written on a large poster for all students to see. The students also received an individual copy of the words on a sheet of paper. Each word was read out loud as a group; students were encouraged to follow along, looking at each word as it was said, either on their individual sheet or the large poster. After the words were read, students then received a vocabulary chart for each word. The

vocabulary chart was a graphic organizer divided into four squares. The content of each square was as follows: defining the target word, using the word in a complete sentence, applying a synonym and antonym to the word drawing a picture representing the word.

The first vocabulary chart was completed as a whole group, to model the expectations and method desired for completing the chart. The instructor asked the students to pick one of the vocabulary words at random. For example, the word magma was chosen. The instructor posed the question to the group, what is magma? The instructor guided students to think to themselves silently of thirty seconds. While the students thought, the instructor would dialogue out loud, asking students to think about what they already knew about volcanoes, pictures they had seen, or even movies that possibly would help them define the word, magma. After the thirty seconds passed, students were then instructed to talk to the peers around them about the possible definition of the word for another thirty seconds. Once this time elapsed, the instructor would bring the groups' attention back together, asking one or two students to share their ideas out loud about the possible definition of the vocabulary word. Once the group came to a consensus concerning the definition, the instructor would write the definition on a large poster paper. Students copied the definition onto the correlating square on their vocabulary chart. If students could not come to a consensus or correct definition of the word, the instructor would provide a definition, along with examples to ensure comprehension. The instructor then led the group to the following square. In the following square students were asked to write the vocabulary word twice then write a complete sentence using the word. As with the definition, the instructor asked students to think to themselves for thirty seconds and then discuss with peers for thirty seconds. After this time concluded, the instructor would

call on a student to share the complete sentence. The instructor would then write the sentence on the large poster as students copied it onto the correlating square. The instructor then lead students to the following square in which they were required to apply a synonym and antonym to the word. The same process of thinking to themselves and then discussing with peers was applied. Once the group came to a consensus, the instructor copied the synonym and antonym onto the large poster as students copied it onto the correlating square. It needs to be noted that all vocabulary words did not have an applicable synonym or antonym, at the students grade level. The last portion of the vocabulary chart required students to draw a picture or symbol of the vocabulary word. The instructor would ask a participant to come to the large poster paper and draw their picture of the vocabulary word, explaining why they choose to portray what they did. Students then completed the correlating square on their individual vocabulary chart. The duration of this entire process was about ten minutes. Students were then directed to complete the remaining five vocabulary charts, working with peers. During this time, the instructor rotated to each individual student to offer assistance, give feed back, and informally assess student understanding. Once the charts were completed, the instructor brought the students' attention back together as a group. Each vocabulary word was reviewed and corrections to the contents of each square were applied as needed. This process concluded the 50-minute period of intervention for day one.

On day two of each week, students listened to a story based upon the specific content of the week. Continuing with the example of volcanoes, students listened to the instructor read informative text about volcanoes aloud. The text reiterated the vocabulary words of the previous day, providing visuals and examples. After listening to the story, students

were directed to choose from a selection of books to read independently. The selection of books were specific to the content of that week, varying from two grades levels above to two grade levels below the students current reading grade levels. Students had 35 minutes to read their selected book independently and 10 minutes to complete the comprehension chart. The comprehension chart was a graphic organizer that consisted of four areas as follows: main idea, two supporting details, an interesting fact, and something students did not understand. Students completed the comprehension chart independently. During this time the instructor rotated amongst students, offering individual assistance, support and discussion. Note, on week one of the study the instructor modeled how to completed the comprehension chart, using whole group instruction, mirroring the process in which the vocabulary chart was completed as a whole group. The last 5 minutes of day two's session students would share with the group the information on their comprehension chart, regarding the book they had chosen. This concluded the time for day two's intervention session.

On day three, students reviewed the target vocabulary words through a matching activity. The definition of each vocabulary word was written on a large index card and posted around the walls of the room. The vocabulary words were written on large index cards and placed on a table in the center of the room. Students were given sixty seconds to match the definitions with the correct vocabulary word. If after the sixty seconds some words were matched incorrectly, the instructor gave the students sixty additional seconds to find their mistakes. Students were given up to three opportunities to correctly match the words to the correct definition. After the activity was completed, each word and definition was reviewed as a whole group. If all the definitions were matched correctly

the first time, students proceeded to the remainder of the session's activities. If the vocabulary was not correctly matched on the first attempt, confusions and rationale behind initial choices were discussed as a group. The instructor would present questions such as: What made you choose this definition? What ideas did you have when you read the vocabulary word? What did you remember from day one's vocabulary chart activity? After the conclusion of the matching activity, students were then given a writing prompt to respond to in which they were required to use all of the target vocabulary words in context. For example, week's two prompt read, you have to help your younger sibling write a short report about volcanoes. Write out the information you would share with him/her about the important things they need to include in their report. Students were allowed to use their vocabulary charts in order to complete the prompt. This activity concluded day three's session time. Note, these writing prompts were used to fulfill the writing requirements for the Summer Reading Project. The writing prompts were used as an informal check for understanding by the instructor but were not ultimately used in quantitative data results, as the focus of the study was reading comprehension. On the fourth day, students completed a vocabulary quiz in which they had to match each word with the correct definition by drawing a line from the definition to the vocabulary word. The remainder of the session students had the opportunity to select a different book from the week's theme and read independently; this concluded day four's session.

### **Data Collection**

For each week of intervention three pieces of data were collected to evaluate student progress: the comprehension chart, the writing sample and the vocabulary quiz. Each of these pieces of data was used as tool to address the important questions

pertaining to this action research project: What is direct instruction? What are the advantages to teaching vocabulary through direct instruction? What literacy instructional strategy practice improves reading comprehension development of elementary school students? What advantages will students have when provided with context vocabulary base in terms of improved reading comprehension? How does direct instruction and contextually based vocabulary improve students reading comprehension? The comprehension chart was used to assess students' ability to apply the direct instruction they received the previous day of intervention to context when reading. A rubric was created that scored students' completion of the comprehension chart. The rubric assessed three of the four components of the comprehension chart, which included main idea, supporting detail, and interesting fact. The points on the rubric ranged from 0 to 3, with 3 being the highest and indicating the most proficient and complete responses, and 0 indicating the lack of completion or response to the information required. Every week each student completed a comprehension chart. The chart was scored according to the rubric and these scores were recorded.

In addition to data retrieved from the comprehension charts, students were assessed with a weekly vocabulary quiz of the target word list. This quiz required students to match the vocabulary word to its correct definition. Each correct answer was worth one point. The number of total vocabulary words were then divided by the number of correctly answered matches to get a percentage of accurately matched words. This assessment was done to evaluate how well students had an understanding of the vocabulary words through the direct instruction they received. Students' outcomes on the vocabulary quiz were compared to their performance on the comprehension chart to

further answer as to whether or not direct instruction and/or vocabulary knowledge had an effect on reading comprehension.

The writing samples were not used as quantitative data. However, they were used in an informal manner to check in with each individual student regarding understanding of the vocabulary terms prior to taking the vocabulary quiz.

### **Post Assessments**

At the conclusion of the four-week period of intervention, students were again assessed using the Qualitative Reading Inventory-5. This was done the fourth day for the fourth and final week of the research study, students were again individually administered the assessment under the same conditions as the initial assessment. All of the data outcomes were then examined for each individual student as well as the intervention group as a whole.

For the each individual student, the baseline data according on the Qualitative Reading Inventory-5 was taken into consideration when looking at the expected outcome of their intervention tasks. For example, Student A scored within an instructional level for the majority of the assessed passages of the QRI-5; thus it was expected that he would be successful in completing the comprehension charts. Therefore, more focus was placed upon his use of the vocabulary words after direct instruction. The scores for student's comprehension charts and vocabulary quizzes were also examined; looking for progression from the first week to the last week of intervention. In addition to this, a correlation between the ability to correctly identify vocabulary word definitions to successful completion of the reading comprehension chart was examined. Lastly, participant's initial results of the QRI was compared to the post intervention results in

order to provide evidence as to whether the intervention had an effect on overall reading comprehension. In the following chapter these results are both illustrated and discussed in further detail.

## CHAPTER FOUR

### RESULTS

This study investigated the effects of direct instruction of content-based vocabulary on reading comprehension. The intervention for this study included weekly instruction of target vocabulary with the use of graphic organizers and matching activities. The results of these interventions were measured through pre-and post-test using the Qualitative Inventory-5 as well a weekly classroom assessments of reading comprehension and a vocabulary quiz of the target words. Each week, composed of four days, students were exposed to vocabulary within a specific content area. Prior to beginning the intervention, students were individually assessed using the Qualitative Reading Inventory-5. The results of this assessment were used as an additional measure of growth in reading comprehension at the conclusion of the intervention period. The study included five students ranging from 3<sup>rd</sup> to 5<sup>th</sup> grade. This chapter will present each of the participant's individual results and progress throughout the intervention, pre-and post assessment data will be compared along with weekly progress as shown through comprehension and vocabulary assessment scores.

#### **Post Assessment: Qualitative Reading Inventory**

As mentioned, students were assessed on reading comprehension using the Qualitative Reading Inventory-5 prior to beginning interventions. Each passage of literature within the Qualitative Inventory-5 is followed by questions to help determine reading comprehension. The percentage of correct questions determines one of three levels. The independent level is attained when a student answers 90% or above of questions correctly. An instructional level is attained when a student answers 89% to 67%

of questions correctly, and a frustration level (below 67%) of overall comprehension questions answered correctly. After the four week period of interventions students were given the same reading comprehension assessment and the results were compared.

**Table 1.1****Student A**

<b>Comprehension</b>	<b>Initial Assessment</b>	<b>Post Assessment</b>
<b>QRI-5 Retelling and Questions</b>		
Grade	Level 3	Level 3
Narrative/Expository	Narrative	Narrative
Familiar/Unfamiliar	Familiar	Familiar
Retelling	15/55 = 27%	20/96 = 21%
Comprehension	3 explicit 75% w/o lookbacks	3 explicit 75% w/o lookbacks
	2 implicit 50% w/o lookbacks	3 implicit 75% w/o lookbacks
	RL= 3.9    FP= P	RL= 3.8    FP= Q
Passage	The Friend	A New Friend from Europe
Independent/Instructional/Frustration	Instructional	Instructional
Grade	Level 3	Level 4
Narrative/Expository	Narrative	Narrative
Familiar/Unfamiliar	Familiar	Familiar
Retelling	15/74 = 20%	16/47 = 34%
	3 explicit 75% w/o lookbacks	3 explicit 75% w/o lookbacks
	3 implicit 75% w/o lookbacks	3 implicit 75% w/o lookbacks
	RL= 3.2    FP= O	RL=4.3    FP=P
Passage	A Special Birthday for Rosa	Jonny Appleseed
Independent/Instructional/Frustration	Instructional	Instructional
Grade	Level 3	Level 4

Narrative/Expository	Expository	Narrative
Familiar/Unfamiliar	Familiar	Familiar
Retelling	17/51 = 33%	20/68% = 29%
	3 explicit 75% w/o lookbacks 100% with lookbacks	2 explicit 50% w/o lookbacks
	3 implicit 75% w/o lookbacks 100% with lookbacks	2 explicit 50% w/o lookbacks
	RL= 2.6    FP= O	RL= T    FP= 4.4
Passage	Where Do People Live?	Tomie dePaola
Independent/Instructional/Frustration	Instructional	Frustration
Grade	Level 4	
Narrative/Expository	Narrative	
Familiar/Unfamiliar	Familiar	
Retelling	14/47 = 30%	
Comprehension	1 explicit 25% w/o lookbacks	
	3 implicit 75% w/o lookbacks  Total Questions: 50% (4/8)	
	RL= 3.3    FP= R	
Passage	Amelia Earhart	
Independent/Instructional/Frustration	Frustration	

On the post assessment Student A maintained an instructional level for the first three passages completed. On the fourth passage Student A decreased from an instructional level to a frustration level.

**Table 1.2**

**Student B**

Comprehension	Initial Assessment	Post Assessment
<b>QRI-5 Retelling and Questions</b>		
Grade	Third	Third
Narrative/Expository	Narrative	Narrative
Familiar/Unfamiliar	Unfamiliar	Unfamiliar

	Retelling	Retelling
	4 explicit 100% w/o lookbacks	4 explicit 100% w/o lookbacks
	1 implicit 25% w/o lookbacks	4 implicit 100% w/o lookbacks
RL=            FP=	RL= P    FP= 3.9	RL= P    FP= 3.9
Passage	“The Friend”	“The Friend”
Independent/Instructional/Frustration	Frustration	Independent
		<b>7/30/2014</b>
Grade		Fourth
Narrative/Expository		Narrative
Familiar/Unfamiliar		Unfamiliar
		Retelling
		3 explicit 75% w/o lookbacks
		0 implicit 0 w/o lookbacks
RL=            FP=		RL= N/A FP=N/A
Passage		“Amelia Earhart”
Independent/Instructional/Frustration		Frustration

On the post assessment Student B increased from an initial level of frustration to an independent level on the passage assessed.

**Table 1.3**

**Student C**

<b>Comprehension</b>	<b>Initial Assessment</b>	<b>Post Assessment</b>
<b>QRI-5 Retelling and Questions</b>		
Grade	Fifth	Fifth
Narrative/Expository	Narrative	Narrative
Familiar/Unfamiliar	Unfamiliar	Unfamiliar
	Retelling	Retelling
	1 explicit 13% w/o lookbacks	3 explicit 75% w/o lookbacks

	0 implicit 0% w/o lookbacks	3 implicit 75% w/o lookbacks
RL=                  FP=	RL= N/A    FP= N/A	RL= N/A FP=N/A
Passage	“Patricia McKissack”	“Patricia McKissack”
Independent/Instructional/Frustration	Frustration	Instructional
Grade		Sixth
Narrative/Expository		Narrative
Familiar/Unfamiliar		Unfamiliar
RL=                  FP=		RL= N/A FP=N/A
Passage		“The Early Life of Lois Lowry”
Independent/Instructional/Frustration		Frustration

On the post assessment Student C increased from an initial level of frustration to an instructional level on the passage assessed.

**Table 1.4**

**Student D  
Comprehension**

<b>QRI-5 Retelling and Questions</b>	<b>Initial Assessment</b>	<b>Post Assessment</b>
	Date: 7/8/14	Date: 7/30/114
<b>Grade</b>	Primer	One
<b>Passage</b>	“A Night in the City”	<b>“The Bear and the Rabbit”</b>
<b>Narrative/Expository</b>	Narrative	Narrative
<b>Familiar/Unfamiliar</b>	Unfamiliar	Familiar
	Retelling: 21 of 36 ideas (58%)	Retelling 14 of 31 ideas (45%)
	4 explicit 100% w/o lookbacks	4 explicit 100% w/o lookbacks

	1 implicit 50% w/o lookbacks	0 implicit 0% w/o lookbacks
<b>RL=</b> <b>FP=</b>	RL= 1.5   FP= G	RL= 1.6   FP= G
<b>Independent/Instructional/Frustration</b>	Instructional	<b>Instructional</b>
<b>Grade</b>	1	2
<b>Narrative/Expository</b>	Narrative	Expository
<b>Familiar/Unfamiliar</b>	Familiar	Familiar
	Retelling: 25 of 44 ideas (56%)	Retelling 13 out of 42 ideas (30%)
	4 explicit 100% w/o lookbacks	2 explicit 50% w/o lookbacks
	1 implicit 50% w/o lookbacks	3 implicit 75% w/o lookbacks
<b>RL=</b> <b>FP=</b>	RL= 1.8   FP= I	RL= 2.2   FP= J
<b>Passage</b>	“The Surprise”	“Seasons”
<b>Independent/Instructional/Frustration</b>	Instructional	<b>Instructional</b>

On the post assessment Student D maintained an instructional level for the passages assessed.

**Table 1.5**

**Student E**

<b>Comprehension</b>		
	Date: 07/08/14	Date: 07/29/2014
<b>QRI-5 Retelling and Questions</b>		
Grade	Level 2	Level 3
Narrative/Expository	Narrative	Narrative
Familiar/Unfamiliar	Familiar	Familiar
	20/52=38% Retelling	26/55= 47% Retelling
	4 explicit 100% w/o lookbacks	4 Explicit 100% w/o lookbacks
	4 implicit 100 % w/o lookbacks	3 implicit 75% w/o lookbacks
	RL= 2.3   FP= M	RL= 3.9   FP=P

Passage	The Family's First Trip	The Friend
Independent/Instructional/Frustration	Independent	Instructional
Grade	Level 3	Level 4
Narrative/Expository	Narrative	Narrative
Familiar/Unfamiliar	Familiar	Familiar
	19/74= 26% Retelling	22/68= 32% Retelling
	4 explicit 100% w/o lookbacks	4 explicit 100% w/o lookbacks
	3 implicit 75 % w/o lookbacks	3 implicit 75% w/o lookbacks
	RL= 3.2 FP=O	RL= 4.4 FP=T
Passage	A Special Birthday For Rosa	Tomie dePaola
Independent/Instructional/Frustration	Instructional	Instructional
Grade	Level 3	Level 4
Narrative/Expository	Narrative	Narrative
Familiar/Unfamiliar	Familiar	Familiar
	26/55 =47% Retelling	16/47=34% Retelling
	3 explicit 75 % w/o lookbacks	2 explicit 50% w/o lookbacks
	3 implicit 75% w/o lookbacks	3 implicit 75% w/o lookbacks
	RL= 3.9 FP=P	RL=3.3 FP=R
Passage	The Friend	Amelia Earhart
Independent/Instructional/Frustration	Instructional	Frustration

On the post assessment Student E decreased from an independent to an instructional level on the first passage she was given. She maintained an instructional level for the following passage she was given and decreased from an instructional level to a level on frustration on the final passage she was assessed on. Overall, four of the five

participants either maintained or increase their levels on performance on the post assessment after receiving interventions over the course of four weeks.

**Intervention Weeks:**

The study included four weeks of interventions. Each daily intervention session totaled 50 minutes per day. Classroom assessments were given twice each week. A reading comprehension assessment was given on day two of each week and a vocabulary assessment was given on day four of each week.

Each week mirrored the same process of interventions and assessment; what differed were content-based vocabulary word lists presented each week. On day one of the 50-minute session students worked with the instructor to complete graphic organizers for each of the six vocabulary words. The graphic organizer had four components: defining the target word, using the word in a complete sentence, applying a synonym and antonym to the word and drawing a picture representing the word. On day two of the intervention session students listened to literature related to and including the target content vocabulary words for that week. After listening to the literature, students chose their own book to read from a selection of similarly related literature. Students were given 35 minutes to read the book they selected and then were asked to complete a comprehension assessment regarding that book. This assessment was presented to participants in the form of a graphic organizer and included the following: main idea, two supporting details, an interesting fact, and something students did not understand. On day three, participants were given a matching activity in which they had to match the target vocabulary words with the definitions. Participants also completed a writing prompt that served as an informal check for understanding of the vocabulary words within context.

On the fourth day of an intervention week, students took a vocabulary assessment. On the assessment students had to match the words to the correct definition. Each week, the reading comprehension assessment and vocabulary assessment were collected from each participant and scored.

### **Intervention: Week One: Vocabulary Assessment**

The content for week one intervention was nature/wild-life. The content-based vocabulary word list included six vocabulary words: *species*, *endangered*, *habitat*, *litter*, *territory* and *camouflage*. The results for each participants score on the vocabulary quiz are as follows:

**Table 4.6: Vocabulary Assessment Week 1**

Student	Week	Vocab %
A	1	100%
B	1	0%
C	1	100%
D	1	100%
E	1	100%

Students A received 100% on his vocabulary assessment, matching 6 of the 6 vocabulary words correctly to their definitions. Student B received 100% on her vocabulary assessment, matching 6 of the 6 vocabulary words correctly to their definitions. Student C received 0% on his vocabulary assessment, matching 0 of the 6 vocabulary words correctly to their definitions. Student D received 100% on his vocabulary assessment, matching 6 of the 6 vocabulary words correctly to their definitions and Student E received 100% on her vocabulary assessment, matching 6 of the 6 vocabulary words correctly to their definitions.

Four of the five participants received a score of 100% on week one's vocabulary assessment with student B scoring 0%. The four participants who scored 100% on the vocabulary assessment shared with the instructor that they had previous knowledge of the vocabulary words from classroom instruction from the regular school year. The student who received 100% on the vocabulary assessment also noted prior knowledge of the vocabulary words before intervention.

### **Intervention: Week One: Comprehension Assessment**

The reading comprehension assessment was delivered in the form of a graphic organizer, with four different sections. The purpose of this assessment was to measure how students applied the direct instruction of the vocabulary words to comprehension of literature in which those same words appeared. Three of these sections, the identification of the main idea, supporting details and interesting facts, were given scores 0 to 3, based on a rubric created by the instructor. The rubric measured comprehension in the areas of completeness, clarity and detail of responses. Participants were given a score, 0 to 3, in each of the three sections, based upon how their responses aligned with the expectations of the rubric. The rubric was as follows:

**Table 4.7: Classroom Reading Comprehension Assessment Rubric**

<b>Category</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>
<b>Main Idea</b>	Correctly identified the main idea of the text in it's entirety. Student communicated using a clear and concise complete sentence.	Partially identified the main idea. Student was not specific. Student communicated using a clear and concise complete sentence.	Vaguely identified the main idea. Student was not specific to the topic. Student did not communicate using a clear and concise sentence.	Did not identify the main idea. Student was not specific to the topic. Student did not communicate using a clear and concise sentence.
<b>Supporting Details</b>	Correctly identified two supporting ideas, based upon the chosen text. Student communicated using clear and concise complete sentences (2 sentences, one per each idea).	Correctly identified one of two supporting ideas based upon the chosen text. Student communicated using a clear and concise complete sentence.	Vaguely identified one of two supporting ideas based upon the chosen text. Student did not communicate using a clear and concise sentence.	Did not identify supporting ideas. Student was not specific to the topic. Student did not communicate using a clear and concise sentence.
<b>Interesting Facts</b>	Clearly communicated a specific fact directly in relation to the details in the given text. Student communicated using a clear and concise complete sentence.	Clearly communicated a general fact related to the details in the given text. Student communicated using a clear and concise complete sentence.	Vaguely communicated a fact directly in relation to the details in the given text. Student did not communicate using a clear and concise complete sentence.	Did not identify an interesting fact related to the given text. Student was not specific to the topic. Student did not communicate using a clear and concise sentence.

For the week one comprehension chart, Student A received a score of 2 in the area of identifying the main idea, a score of 2 in the area of identifying details and a score of 3 in the area of communicating an interesting fact; with a total score of 7 out of 9 possible points. Student B received a score of 2 in the area of identifying the main idea, a score of 3 in the area of identifying details and a score of 1 in the area of communicating an interesting fact; with a total score of 6 out of 9 possible points. Student C received a score of 1 in the area of identifying the main idea, a score of 1 in the area of identifying details and a score of 1 in the area of communicating an interesting fact; with a total score of 3 out of 9 possible points. Student D received a score of 0 in the area of identifying the main idea, a score of 0 in the area of identifying details and a score of 0 in the area of communicating an interesting fact; with a total score of 0 out of 9 possible points. Student E received a score of 2 in the area of identifying the main idea, a score of 2 in the area of identifying details and a score of 2 in the area of communicating an interesting fact; with a total score of 6 out of 9 possible points.

**Table 4.8: Classroom Reading Comprehension Assessment Week 1**

Student	Week 1	Main Idea	Details	Int. Fact	Total Score
A		2	2	3	7
B		2	3	1	6
C		1	1	1	3
D		0	0	0	0
E		2	2	2	6

The comprehension assessment allowed a maximum of 9 possible points. None of the participants achieved all 9 points. Out of the five participants the majority, being two students, receive 6 points. The highest score was 7 points and the lowest score was 0 points.

#### **Intervention: Week Two: Vocabulary Assessment**

The content for week two interventions was volcanoes/earthquakes. The content-based vocabulary word list included six vocabulary words: *lava*, *earthquake*, *magma*, *plate*, *fault*, and *crater*. The results for each participants score on the vocabulary quiz are as follows:

**Table 1.4: Vocabulary Assessment Week 2**

Student	Week	Quiz Score %
A	2	100%
B	2	33%
C	2	0%
D	2	33%
E	2	100%

Students A received 100% on his vocabulary assessment, matching 6 of the 6 vocabulary words correctly to their definitions. Student B received 33% on her vocabulary assessment, matching 2 of the 6 vocabulary words correctly to their

definitions. Student C received 0% on his vocabulary assessment, matching 0 of the 6 vocabulary words correctly to their definitions. Student D received 33% on his vocabulary assessment, matching 2 of the 6 vocabulary words correctly to their definitions and Student E received 100% on her vocabulary assessment, matching 6 of the 6 vocabulary words correctly to their definitions.

This week participants noted a lack of substantial prior knowledge of the vocabulary words in comparison to the vocabulary words of the previous week. Slightly less than fifty percent, two out of the five participants, received a score of 100%. While other participants received a score of 33%. The remaining participant, student C, again received 0% on the vocabulary assessment.

### **Intervention: Week 2: Comprehension Assessment**

**Table 4.9: Classroom Comprehension Reading Assessment Week 2**

Student	Week 2	Main Idea	Details	Int. Fact	Total Score
A		2	3	3	8
B		1	1	1	3
C		2	2	2	6
D		2	2	2	6
E		3	2	3	8

For the week two comprehension chart, Student A received a score of 2 in the area of identifying the main idea, a score of 3 in the area of identifying details and a score of 3 in the area of communicating an interesting fact; with a total score of 8 out of 9 possible points. Student B received a score of 1 in the area of identifying the main idea, a score of 1 in the area of identifying details and a score of 1 in the area of communicating an interesting fact; with a total score of 3 out of 9 possible points. Student C received a

score of 2 in the area of identifying the main idea, a score of 2 in the area of identifying details and a score of 2 in the area of communicating an interesting fact, with a total score of 6 out of 9 possible points. Student D received a score of 2 in the area of identifying the main idea, a score of 2 in the area of identifying details and a score of 2 in the area of communicating an interesting fact; with a total score of 6 out of 9 possible points. Student E received a score of 3 in the area of identifying the main idea, a score of 2 in the area of identifying details and a score of 3 in the area of communicating an interesting fact, with a total score of 8 out of 9 possible points.

The comprehension assessment allowed a maximum of 9 possible points. None of the participants achieved all 9 points. Out of the five participants two participants, however, two were one point away from receiving all 9 points. Two other participants received a score of 6, and one participant received a score of 3.

### **Intervention: Week Three: Vocabulary Assessment**

The content for week three interventions was narrative fiction. The content-based vocabulary word list included six vocabulary words: *thought*, *damage*, *timid*, *enthusiastic*, *furious* and *perplexed*. The results for each participants score on the vocabulary quiz are as follows:

**Table 4.10: Vocabulary Week 3**

Student	Week	Quiz Score %
A	3	100%
B	3	100%
C	3	16%
D	3	100%
E	3	100%

Students A received 100% on his vocabulary assessment, matching 6 of the 6 vocabulary words correctly to their definitions. Student B received 100% on her vocabulary assessment, matching 6 of the 6 vocabulary words correctly to their definitions. Student C received 16% on his vocabulary assessment, matching 1 of the 6 vocabulary words correctly to their definitions. Student D received 100% on his vocabulary assessment, matching 6 of the 6 vocabulary words correctly to their definitions and Student E received 100% on her vocabulary assessment, matching 6 of the 6 vocabulary words correctly to their definitions.

This week no participants received a score of 0% on the vocabulary assessment; the majority of students received 100%, with the exception of one participant who scored 16%. Overall, participants demonstrated no prior knowledge of the target word list when brainstorming during the first portion of interventions. It is to be noted that unlike the scientific domain of week one and two's word list, these words were narrative based with some being grade level high frequency words.

### **Intervention: Week 3: Comprehension Assessment**

**Table 4.11: Classroom Comprehension Reading Assessment Week 2**

Student	Week 3	Main Idea	Details	Int. Fact	Total Score
A		3	3	3	9
B		1	1	1	3
C		3	2	3	8
D		2	3	2	7
E		3	3	3	9

For the week three comprehension chart, Student A received a score of 3 in the area of identifying the main idea, a score of 3 in the area of identifying details and a score

of 3 in the area of communicating an interesting fact, with a total score of 9 out of 9 possible points. Student B received a score of 1 in the area of identifying the main idea, a score of 1 in the area of identifying details and a score of 1 in the area of communicating an interesting fact, with a total score of 3 out of 9 possible points. Student C received a score of 3 in the area of identifying the main idea, a score of 2 in the area of identifying details and a score of 3 in the area of communicating an interesting fact, with a total score of 8 out of 9 possible points. Student D received a score of 2 in the area of identifying the main idea, a score of 3 in the area of identifying details and a score of 2 in the area of communicating an interesting fact, with a total score of 7 out of 9 possible points. Student E received a score of 3 in the area of identifying the main idea, a score of 3 in the area of identifying details and a score of 3 in the area of communicating an interesting fact, with a total score of 9 out of 9 possible points.

The comprehension assessment allowed a maximum of 9 possible points. During week three, two of the participants achieved all 9 points. Two other participants, however, received close scores of 8 and 7, while the remaining participant scored a total of 3 points.

#### **Intervention: Week Four: Vocabulary Assessment**

The content for week three interventions was outer space. The content-based vocabulary word list included six vocabulary words: *galaxy*, *universe*, *orbit*, *lunar*, *gravity*, and *asteroid*. The results for each participants score on the vocabulary quiz are as follows:

**Table 4.12: Vocabulary Week 4**

Student	Week	Quiz Score %
A	4	100%
B	4	100%
C	4	100%
D	4	100%
E	4	100%

Students A received 100% on his vocabulary assessment, matching 6 of the 6 vocabulary words correctly to their definitions. Student B received 100% on her vocabulary assessment, matching 6 of the 6 vocabulary words correctly to their definitions. Student C received 100% on his vocabulary assessment, matching 6 of the 6 vocabulary words correctly to their definitions. Student D received 100% on his vocabulary assessment, matching 6 of the 6 vocabulary words correctly to their definitions and Student E received 100% on her vocabulary assessment, matching 6 of the 6 vocabulary words correctly to their definitions.

This week all participants received a score of 100% on the vocabulary assessment. Through informal observation during day one of the intervention week, two of the five participants demonstrated some prior knowledge of the vocabulary words.

#### **Intervention: Week 4: Comprehension Assessment**

**Table 4.13: Classroom Comprehension Reading Assessment Week 4**

Student	Week 4	Main Idea	Details	Int. Fact	Total Score
A		3	3	3	9
B		3	2	0	5
C		3	2	3	8
D		2	3	3	8
E		3	3	3	9

For the week four comprehension chart, Student A received a score of 3 in the area of identifying the main idea, a score of 3 in the area of identifying details and a score of 3 in the area of communicating an interesting fact, with a total score of 9 out of 9 possible points. Student B received a score of 3 in the area of identifying the main idea, a score of 2 in the area of identifying details and a score of 0 in the area of communicating an interesting fact, with a total score of 5 out of 9 possible points. Student C received a score of 3 in the area of identifying the main idea, a score of 2 in the area of identifying details and a score of 3 in the area of communicating an interesting fact, with a total score of 8 out of 9 possible points. Student D received a score of 2 in the area of identifying the main idea, a score of 3 in the area of identifying details and a score of 3 in the area of communicating an interesting fact, with a total score of 8 out of 9 possible points. Student E received a score of 3 in the area of identifying the main idea, a score of 3 in the area of identifying details and a score of 3 in the area of communicating an interesting fact, with a total score of 9 out of 9 possible points.

The comprehension assessment allowed a maximum of 9 possible points. During week four, two of the participants achieved all 9 points. Two other participants, however, received close scores of 8, while the remaining participant scored a total of 5 points.

### **Conclusion**

The purpose of this research was to examine the effects of direct instruction of contextually-based vocabulary on the reading comprehension of elementary students. The hypothesis of this research asserts that students who receive direct instruction of contextually-based vocabulary will increase their abilities to comprehend text as

evidenced through formal and classroom based assessments. This hypothesis was supported in part by the research of Jenkins (1978). This research highlighted the increased reading comprehension performance of students who were given meaning-based vocabulary through direct instruction.

In addressing this hypothesis, several questions were posed while creating the intervention. The function of the intervention was to answer those questions: What are the advantages to teaching vocabulary through direct instruction? What literacy instructional strategy practice improves reading comprehension development of elementary school students? What advantages will students have when provided with context vocabulary base in terms of improved reading comprehension?

In order to address the advantages of teaching vocabulary through direct instruction, students were given a vocabulary assessment each week after being exposed to direct instruction. Participants understanding the vocabulary words were measured from the first to the last week of the intervention period. The scores were measured using percentages of correctly identified words to their definitions. Student's success or lack of it in understanding the given vocabulary after direct instruction intervention was compared to the outcome of their classroom based reading comprehension assessment. The comparison of vocabulary and reading comprehension assessments addressed the question of whether this literacy instructional strategy practice (direct instruction) improves reading comprehension development of elementary school students.

Overall, students who received higher scores on the vocabulary assessment also scored higher on the reading comprehension assessment in comparison to the other

participants. The following chapter will present intervention data in greater detail providing comparative information of pre-and-post formal and classroom assessment.

## CHAPTER FIVE

### DISCUSSION

Spanning a period of four weeks, five students participated in interventions involving reading comprehension. These interventions focused on providing students with contextually-based vocabulary through direct instruction. The direct instruction included the use of graphic organizers and collaboration with peers while being led by an instructor. Students then applied the instruction of contextually-based vocabulary to reading comprehension exercises. The participants in this study were all identified as having difficulties with reading comprehension. In this chapter, the results of the interventions are analyzed and connected to existing research. Additionally, the connections between the existing research and the results are used to answer questions that arose with the assertion of the hypothesis; that students who receive direct instruction of contextually based vocabulary will increase their abilities to comprehend text as evidence through work samples and classroom assessments. Finally, recommendations for overall instructional implementation are provided, based upon the results of the study sample.

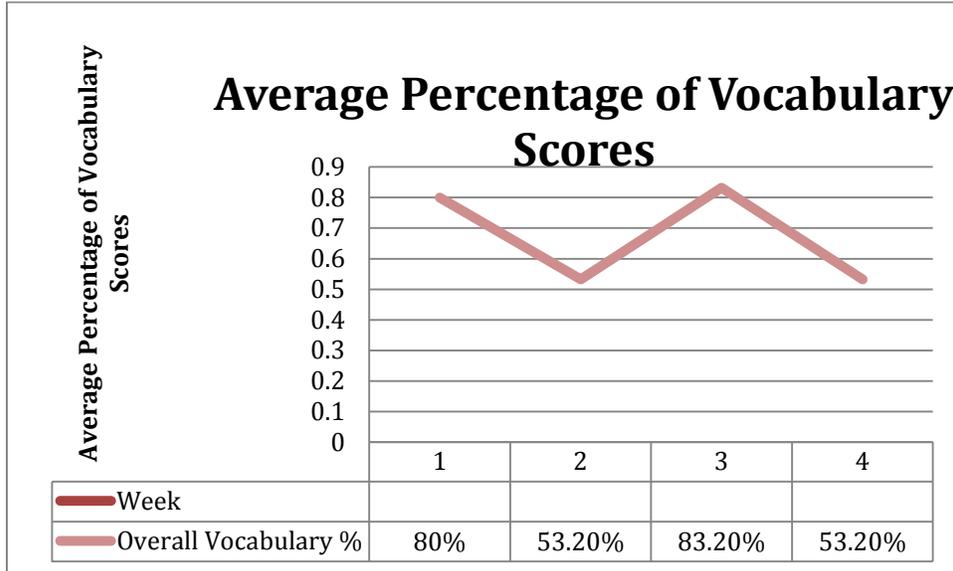
#### **Interventions: Connection to existing research**

The interventions for this study focused on the instruction of vocabulary chosen within specific domains, such as natural sciences or narrative fantasy. Within the investigation this was referred to as contextually-based vocabulary. The purpose of the vocabulary instruction was to address needs of reading comprehension. Based upon existing research vocabulary was chosen as the catalyst for the potential improvement of comprehension. This research includes the study by Suggate, Lenhard, Neudecker, &

Schneider (2013), which says that reading and language experiences both contribute to the development of vocabulary. Therefore, having a broader lexicon is an advantage for reading. After vocabulary was chosen as the method of intervention, the mode chosen was the use of direct-instruction. Direct instruction in the context of this study is defined as teacher-led instruction that encourages intentional student involvement in the content being taught. In the study by Keer & Verhaeghe (2005), direct instruction is carried out through the use of three components: teacher-led whole class activities, same age peer tutoring activities, and cross age peer- tutoring activities. The researchers concluded the findings of the study demonstrate the educational benefits of creating and implementing reading comprehension instruction from these cognitively based models of the comprehension process.

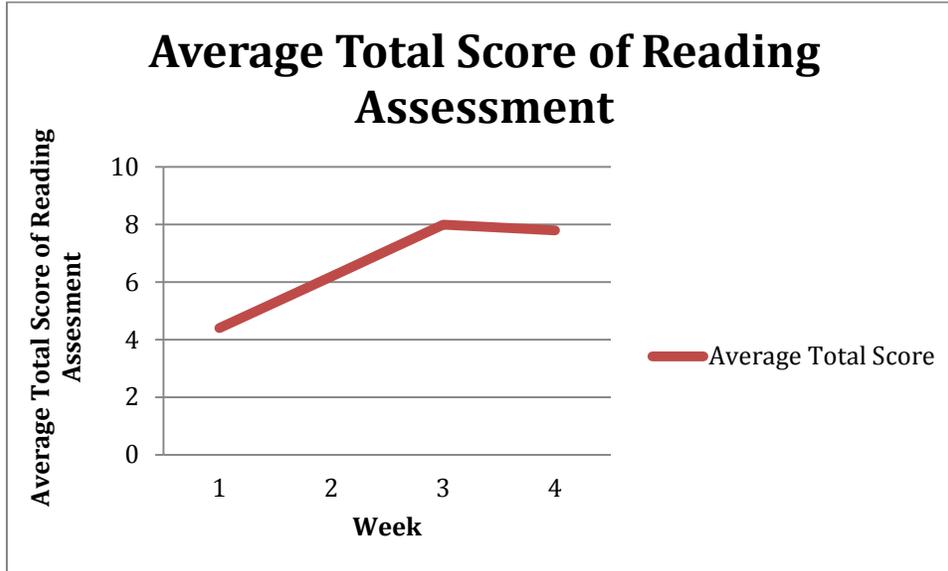
### **Explanation of Results**

Students were assessed weekly on their acquisition of context-based vocabulary, as well as on reading comprehension. After a period of 4 weeks, results showed that the average of the students' vocabulary scores fluctuated with each week of intervention. Week one of intervention students' scored an overall average of 80% on the vocabulary assessment, week two the overall percentage dropped to 53.2%, week three the percentage rose to 83.2% and finally week four the overall percentages dropped back down to 53.2%.

**Figure 1: Average Percentages of Vocabulary Scores**

The weeks, in which the majority of the participants scored higher on the vocabulary assessment, they also expressed more prior knowledge of the vocabulary words and context during the instructional portion of the intervention. Therefore, successful vocabulary acquisition varies with students' prior exposure to the context or lack thereof.

Students received a weekly reading comprehension assessment in relation to the context-based vocabulary word list presented that week. Overall, students showed a steady increase in their ability to successfully comprehend text through the completion of the assessment activity. This lends to the conclusion that while students did not consistently demonstrate successful understanding of the presented vocabulary, over a short period of four weeks, they were better able to apply what they did understand comprehension the of text.

**Figure 2: Average Total Score of Reading Assessment**

### Addressing Research Questions

After analyzing the results, questions regarding the purpose of the intervention could be addressed. The questions presented were as follows: What are the advantages to teaching vocabulary through direct instruction? What literacy instructional strategy practice improves reading comprehension development of elementary school students? What advantages will students have when provided with vocabulary from context in terms of improved reading comprehension? The results of the vocabulary assessment fluctuated from week to week; thus it is inconclusive whether or not direct instruction provided an advantage to the acquisition of the vocabulary itself. Those students who consistently did well on the vocabulary assessments shared that they did have prior knowledge and exposure to the content. With that being said, the results also illustrated that over time students performed better on the reading comprehension assessments after exposure to the vocabulary within content, linking exposure to the contextually-based vocabulary with improved reading comprehension. In looking at the Qualitative Reading

Inventory 5, students showed slight improvement in overall reading comprehension, which can be potentially attributed to their exposure to a range of contextually-based vocabulary over the course of four weeks.

### **Strengths and Limitations**

This study presented a series of strengths as well as clear limitations. The study was routine and consistent in terms of the implemented interventions. Students received a new set of six contextually-based vocabulary words each week. The direct instruction was teacher led through the use of graphic organizers. Students were given each assessment at the same point of each intervention week and given the same amount of time allotted to complete tasks. In addition to the routine of the interventions, the material provided (i.e. vocabulary word sets, books, design of graphic organizers and assessments), were all created to best address the learning needs of all participants involved, based upon the provided background information of each student.

The background information also proved to be a limitation of study. The depth of the background information for the participants in the study, specifically in the area of academics, varied among participants. Some participants had an abundant amount of information while others had little to none.

More critically, a limitation of the study was the time constraints. The total period of intervention spanned only four weeks. Within those four weeks students participated in the study a total of 50 minutes per day, Monday through Thursday. This 50 minute period included interventions, instruction, and assessment. The brief intervention period along with the small sample size of five participants prevented the conversion of results into

statistical data. Although the methods of the study can be connected to existing data, the results cannot be compared to existing statistical data.

### **Conclusion**

The students in this study demonstrated slight increases in successful reading comprehension as evidenced in the results of classroom assessment as well as the Qualitative Reading Inventory-5. Students' participation in the interventions aimed to expose them to contextually-based vocabulary through direct instruction. The use of contextually-based vocabulary addressed needs in reading comprehension. Although students showed some progress in the routine and method of implementation of the interventions, the results of the study were affected by the time constraints. Students would benefit from receiving intentional instruction in context-based vocabulary with the application to reading comprehension throughout the course of an extended period of time, such as over the course of the school year.

**Appendix A**

**Vocabulary Chart**

<p><b>Write It Out!</b></p> <p><b>Write the vocabulary words three times.</b></p> <p>1. _____</p> <p>2. _____</p> <p><b>3. Now use the word in a sentence</b></p> <p>_____</p> <p>_____</p>	<p><b>Define It</b></p> <p><b>Write out the definition of the vocabulary word we came up with as a class.</b></p> <p>_____</p> <p>_____</p> <p><b>Now write the definition in your own words.</b></p> <p>_____</p> <p>_____</p>
<p><b>Draw It!</b></p> <p><b>Draw a picture that will help you remember the word.</b></p>	<p><b>Work with It!</b></p> <p><b>Synonym (a word that means the same):</b></p> <p>_____</p> <p><b>Antonym (a word that means the opposite):</b></p> <p>_____</p> <p><b>Examples:</b></p>

**Appendix B**

**Comprehension Chart**

<p><b>Book Title:</b></p> <p><b>Theme:</b></p> <p><b>Main Idea:</b></p> <p><b>If I could only use 1 sentence what would I say this story is about...</b></p> <hr/> <hr/> <hr/>	<p><b>Supporting Idea</b></p> <p><b>2 other ideas I think are important...</b></p> <p>1. _____</p> <p>_____</p> <p>2. _____</p> <p>_____</p>
<p><b>What was interesting when I read was...</b></p> <hr/> <hr/> <hr/>	<p><b>If I were reading this to a friend I think they would have trouble understanding...</b></p> <hr/> <hr/> <hr/>

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