Strategies for Struggling Readers to Increase Reading Comprehension in Fourth Graders

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Strategies for Struggling Readers to Increase Reading Comprehension in Fourth Graders

By

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M.S. Literacy Education

Supervised by

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Abstract

Students who come from urban settings face many challenges, including reading and comprehending texts. This paper focuses on the question “What specific literacy strategies can help low achieving fourth grade students who come from an urban setting increase their reading comprehension?” Using data collected from staff and student questionnaires, student work, and audio recordings, the conclusion is that there are multiple strategies that lead to the increase of reading comprehension. The successful strategies that increase a child’s reading comprehension that were found during this research can be used to educate teachers about which strategies support reading comprehension for students who come from an urban setting.
Literacy Strategies for Struggling Readers to Increase Reading Comprehension

Learning how to comprehend a text while reading is a critical strategy that students need to acquire. According to Chang and Ku (2015), “Reading is generally viewed as crucial and fundamental to learning” (p.278). In order to learn and advance in school, it is crucial to comprehend what is being read. Literacy is a broadly defined word that comes with many definitions behind it. Some definitions are as simple as saying that literacy is just reading and writing. Others can be more intricate as in breaking literacy down into parts. While looking at literacy for the purpose of this research paper, I looked specifically at what kinds of literacy strategies would help a child to bring up their reading levels. Strategies such as using context clues while reading, checking for understanding, prediction, rereading, and many more were researched and implemented.

The topic of reading comprehension is of great importance due to the fact that comprehension is a crucial strategy needed to learn in all areas of schooling. Reading comprehension is a skill that is learned through multiple means of teaching and includes a variety of strategies. Using explicit teaching has shown to significantly help readers understand a text. Hagman, Casey, and Reid (2012) found “Research has suggested that explicit and systematic instruction in reading comprehension strategies can be an effective way to help students overcome difficulties understanding text” (p.111). These strategies including explicit instruction can be used with any child who struggles to read, with or without learning disabilities. In order to be a successful reader, a person must possess the strategy of comprehension rather than just the ability to read the word on the page. Words have meaning and unless a person understands the words the reading is then meaningless. Implementing intervention is said to help increase a child’s reading ability. According to Gelzheiser, Scanlon,
Vellutino, and Hallgren-Flynn (2011), “Response to Intervention (RTI) is predicated on the hypothesis that if struggling readers are provided with intervention that is research based and more intensive than traditional classroom instruction, they will show increased rates of growth in reading” (p.280). Response to intervention shows that having additional help and more instruction than traditional teaching time is necessary to help bring up the reading abilities in children and help to increase their ability to comprehend texts.

In the fourth grade class that I currently teach in I have less than five students reading just at grade level, the rest are significantly behind in their reading achievement. It is also important to know that I teach in a general education setting and that only two of my 22 students are classified with an IEP (Individualized Education Plan). My students all have the ability to learn new strategies as well as implement them into their reading. These students have the drive and want to become more successful, it is just a matter of finding the strategies that will work with these particular students. Providing necessary materials is needed to help them succeed. In my class, I know that many of my students are living in poverty and do not have access to books. When I teach my GRAIR (Guided Reading Accountable Independent Reading) groups, I use reading a-z books so the students can keep the books. The children can then take the book home and practice reading as well as have appropriate books at their reading level.

In taking practicum classes, I have learned that it is important to hone in on the students and their interests in order to help to give them strategies that will work for them when it comes to literacy. It is also important to give the students material that is of interest to them. When reaching out to the children, make sure the work is at their instructional level so that the material is not too easy or too hard for them. Having materials appropriate for the child is especially important so that students do not lose interest or become frustrated while learning. It is also
important to treat each child with respect and dignity. All children have the ability to be successful, it just takes some time to find the appropriate strategy to use while learning to comprehend.

I looked into all the factors that might be making the children to be less successful than other children. I also looked into ways to make the children to become more successful in reading comprehension; I implemented strategies to use when teaching both low and high achieving students. At the end of this research, I ended up researching multiple reading comprehension strategies and implemented some to help boost the students’ comprehension abilities.

The main focus on this study was guided by the research question “What specific literacy strategies can help low achieving fourth grade students who come from an urban setting increase their reading comprehension?” I used a variety of tools in order to collect data to answer the research question. These tools were teacher and student questionnaires, student work, and a transcription of the recorded working sessions. The findings of the research showed that with explicit instruction using the literacy strategies discussed in the research were successful. The strategies helped increase the comprehension in both groups but also revealed that some students struggled when required to write or utilize background knowledge. The research also revealed that using story maps was a difficult strategy for the students to use independently. Students who lack the ability to write their own thoughts have a difficult time completing a story map even when the story map is tailored to fit their ability level while using an appropriate text that meets their reading level. Implications for the teachers include using explicit instruction as well as pre-teaching vocabulary and making predictions. The implementation of story maps is
recommended but requires a lot of teacher assistant and should be closely monitored until the students have a solid grasp on how to use them independently.

**Theoretical Framework**

When looking at literacy it is important to know that there are many components within the topic. Literacy has multiple components to it, Freebody and Luke (1990) state: “Literacy is a multifaceted set of social practices with a material technology, entailing code breaking, participation with the knowledge of the text, social uses of text, and analysis/critique of the text” (p. 15). Literacy is broken down into specific parts and is put into methods on how to achieve literacy successfully. Literacy is not something that is picked up on and mastered right away; it is a skill that is learned. Having reading broken up into several parts makes it easier to analyze what the reader already knows and what they don’t know. Having readings broken up into smaller parts is beneficial to the reader, the reader may have achieved portions of the skills and only need to focus on specific aspects in order to achieve a full understanding of reading and comprehension. Kucer (2009) discusses literacy as:

> Becoming literate means learning to effectively, efficiently, and simultaneously control the linguistic, cognitive, sociocultural, and developmental dimensions of written language in a transactive fashion. In a very real sense every act of a real world use of literacy involves these four dimensions. (p. 5)

Students who are low in the area of reading comprehension struggle to attain being completely literate. While it is possible for these children to attain the strategies needed to become better readers, they face many obstacles in doing so.
One theory that will guide my study is Culture as a disability theory. Part of this theory holds that “American education has numerous made-to-order general categories for describing children in trouble” (McDermott and Varenne, 1995, p. 331). This theory discusses how a dominant culture sets the standard for what is considered to be acceptable. In the dominant culture if anyone does not live up to their standards then they are automatically labeled as having a disability. In our society today, the white middle class people have set the set of norms. The children who do not fall into this set of norms are automatically labeled or are considered to be behind. In this case, oftentimes children who are not meeting grade level reading or mathematics are deemed behind and in jeopardy of failing in school as well as the state exams. It is sad that other cultures that live in our society are placed under the umbrella of a set norm. People from other cultures are judged and made to look as if they are not as smart as others.

McDermott and Varenne (1995) state:

It is the anthropologist’s ideal setting for making two strong points: the first, that we are arrogant to think we know better than people in other cultures, and the second, that we are foolish to not appreciate how much is known by others in their own terms. (p.325)

The society we live in is arrogant, blind as well as ignorant to believe that children who come from an urban setting are not as competent as their peers in different school districts. When looking at numbers and test scores that is how one can perceive that. In order to really understand the reality of the situation, it is necessary to take a step back and see what the culture the children live in take pride in and how they live rather than jump to conclusions.

McDermott and Varenne (1995) state:
The problem in assuming that there is one way to be in a culture encourages the misunderstanding that those who are different from perceived norms are missing something, that it is their doing, that they are locked out for a reason, that they are in fact, in reality, disabled. (p.326)

Children from an urban setting that have low reading scores or do not comprehend a text as well as their peers from a different area are not disabled. Our society has made them disabled. In order to help these children become successful education needs to be geared at the needs of each child. Using a set and premade curriculum is not going to help these children achieve, it is going to ruin them. Teaching children something they do not understand rather than giving them the tools needed to become successful is just hurting their self esteem and making them believe that they can not do it. Reading comprehension is a critical tool to have and it must be taught and it must be taught when the child is ready to learn it, not when the set of norms says the child should learn it.

**Research Question**

For the purpose of this study, using the topic of reading comprehension in students who are struggling readers will be researched. The research question is the following: What specific literacy strategies can help low achieving fourth grade students who come from an urban setting increase their reading comprehension?

**Literature Review**

Comprehension is a vital skill needed by all in order to further their knowledge in all subjects throughout the school years. Bellinger and DiPerna state “comprehension is an essential component of increasing knowledge, learning, and communicating information one has read” (p.
Comprehension is a skill that not only helps a child to understand what it is they read, but also gives them the ability to learn and build background knowledge so that they can associate the knowledge to new information they will learn. A lot of research has been done on students who are struggling readers and the different literacy strategies that can help bring up the students’ reading comprehension when reading. Eason, Goldberg, Young, and Geist (2012) state “Reading comprehension is an essential skill for children in school settings and beyond. A broad range of tasks requires children to comprehend written text, particularly as children progress in school and are expected to learn more independently” (p.515). Having the ability to comprehend what was read is a necessary skill for all children to have in order for them to be successful during their school years. If a child is unable to comprehend early on, it will only make for the older school years to be more difficult. In order to find ways to help the struggling reader as well as do research on it, one must review recent studies that have been conducted on implementing different comprehension skills to see what was most successful or what combination of strategies work best.

There are three main themes that will be discussed in this literature review. The first theme is intervention using explicit teaching. This theme will focus on how intervening into the regular curriculum and using explicit instruction to teach a strategy will help to raise a struggling reader’s ability to comprehend a text. The second theme will discuss how technology can either help or impede a student’s ability to comprehend the reading. Technology, such as using a computer program, may have an impact in the way a child is able to improve their comprehension. The third theme addressed will discuss using specific strategies such as improving reading fluency or using note taking to enhance the ability to comprehend. Some studies suggest that if a child who increases his/her ability to read fluently, then the child will
better able to comprehend the text. Other studies suggest that reading fluency has no impact on a child’s comprehension abilities. It is important to note that the strategies that will be discussed are aimed at supporting struggling readers. Some of the studies include the implementation of the strategies with children who have learning disabilities as well. The studies will show whether or not the skills taught had an impact on the child’s ability to increase their reading comprehension. Some of the studies will show that there was no significant difference in the child’s ability to comprehend when taught a specific strategy.

Comprehension includes more than just reading; comprehension is how well a person understands what is being said or asked. Students understand the importance of reading from a very young age. In a study done by Cobb (2011), she took right to the students to see how they comprehended what a good reader is and what they need to do. The students were given a task of drawing pictures of who a good reader was and what that person looked like. Children who struggled in reading would draw pictures of friends or family holding a book. The children had concepts of what a good reader is supposed to do and they varied in answers as the children went into higher grades. Cobb (2011) found that kindergartners didn’t really have an idea on what a good reader was supposed to do or look like. By the time first grade came around, the students were more specific in their descriptions. The study discusses what some first and second graders had to say. Cobb (2011) found that “First-graders were focused on decoding and seemed to view “good reading” as sounding out words correctly” (p.233). In general the children were starting to understand that it is important to know how to read the words on the pages and how to pronounce them correctly. In the research done by Cobb (2011) they found that “By 2nd grade, the children were becoming aware that meaning is important, as more students referenced comprehension and comprehension strategy use” (p.233). As the children get older they start to
realize the importance to knowing they have to understand what they are reading and that there are multiple ways to learn comprehension. As an educator it is important to know that the children have a sound understanding of what good reading is and that there is a reason behind the teaching of reading. Teaching comprehension to students who are under achieving or struggling to learn the skill, teachers must also look at the way that they teach the strategy and also what strategies they are using when giving the instruction. In a study done by Klinger et al. (2010), they looked at what teaching strategies teachers used when teaching and whether or not the teachers were teaching comprehension strategies at all. The study found that the majority of teachers were only teaching one specific strategy in their lessons. Klinger et al. (2010) found that most teachers would only ask one comprehension question to follow up on what the text had to say. Teaching students who are under achieving or have learning disabilities requires a teacher to teach multiple strategies. Teaching multiple reading comprehension strategies is important because these students are not all going to learn the same way and will require differentiation in order to be successful. Klinger et al. (2010) found:

In the 124 lessons we observed, only 82 addressed comprehension (66%). The absence of comprehension instruction in 34% of the lessons led us to wonder if teachers prioritized word study over comprehension instruction or if comprehension instruction was taught more often in the general education classroom. (p.71)

Since comprehension is a critical tool needed to be successful in reading, teachers need to be more aware of what their instruction is constructed of. Word study is an important part of enhancing comprehension in the student but so is learning strategies to use while reading. This study shows the importance of recognizing what it is that the educator is teaching so they can be more successful in their instruction. In a study done that goes along the lines of reading
comprehension and teacher instruction, Stuz, Schaffner, and Schiefele (2016), discuss the importance of student motivation of reading to the outcomes of reading comprehension. The study was done on intrinsic motivation, the involvement the reader has, versus extrinsic motivation, competition oriented reading. Intrinsic readers read texts that are of interest to them and at their leisure, extrinsic reading is more of a reading competition to see who can read the most words. Having the ability to read more words than another student does not mean that he/she can comprehend more of the text than his/her peers. Stuz, Schaffner, and Schiefele (2016) found that students who were involved in intrinsic reading had higher levels of comprehension than those who had extrinsic motivation. The results of this study suggest that teachers should find ways to intrigue their students in reading and find materials that will intrinsically motivate them to read. This data agrees with Klinger et al. (2010) in the means that the teachers need to be aware of what they are teaching as well as the materials being used. Comprehension has a higher chance of being attained when a student is reading something of interest to them. Reading something of interest will intrinsically motivate the child to want to read and therefor will do better when learning new comprehension strategies. In the next parts of this paper, specific types of instruction and specific strategies will be discussed and ways to improve a child’s comprehension will be discussed.

**Researched Interventions and Direct/Explicit Instruction**

Direct/explicit instruction is a way of teaching that leads children’s attention directly to a specific strategy being taught. It involves students’ participation and is aimed at producing a specific learning outcome. Direct/explicit instruction involves a lot of teacher modeling so the child can see how the strategy being taught should look and what needs to be done in order to use said strategy. Using direct instruction while teaching a reading comprehension strategy is
necessary for a child to learn the strategy itself and come to understand it and start to utilize it in daily readings.

Intervention is a type of instruction that is separate from the regular curriculum that takes place in either whole group or small group settings when students are struggling in a specific area. There is also response to intervention (RTI) which is “predicted on the hypothesis that if struggling readers are provided with intervention that is research based and more intensive than traditional classroom instruction, they will show increased rates of growth in reading” (Gelzheiser et al., 2011, p280). Reading comprehension is an area that often times calls for more support to help the student achieve learning the skill. Read aloud intervention is a type of intervention in when the teacher or a specially trained teacher on the topic will focus on enhancing reading comprehension.

In one study, read aloud intervention was used with students in a first grade class. A trained instructor on how to use read aloud as an intervention and what strategies to focus on for listening comprehension as well as reading comprehension taught the class whole group. In this study, the author discusses how listening and reading comprehension are that of the same. The authors argue that in order to be successful in reading comprehension students need to have the ability to recognize words on the page and be able to read them. Baker et al. (2013) states “when students have strong word-reading skills, reading comprehension and listening comprehension should be highly aligned, suggesting that underlying strategies should support both reading and listening comprehension” (p.333). In order for this strategy to be successful the child needs to be taught the skills required in order to have the strong word recognition. Explicitly teaching strategies is needed for a struggling reader to bring up their reading comprehension. Self-
Regulated Strategy Development (SRSD) is a research-based intervention that focuses on the teaching of different strategies. Dunn-Davison et al. (2012) describe the model as:

SRSD instructional lessons include six stages for explicitly teaching strategy acquisition:
(a) develop pre-skills, (b) discuss the strategy, (c) model the strategy, (d) memorize the strategy, (e) guided practice, and (f) independent practice. Procedures for self-regulation (i.e., self-instruction, goal setting, self-monitoring, and self-reinforcement) are embedded into each SRSD instructional stage. (p.1134)

Inside of the one intervention program in this study, it explicitly teaches six strategies to help a struggling reader bring up their comprehension skills. The need for so many strategies to target one area in reading, the component of comprehension, shows that it is not something that is learned easily and is not necessarily acquired naturally. In the same study that utilized SRSD, they also implemented Think before reading, think While reading, and think After reading (TWA). Dunn-Davison et al. (2012) state “TWA has been validated as effective in improving reading comprehension performance for students with and without disabilities who are struggling with content learning” (p.1135). TWA is a set of strategies that require direct modeling from the instructor in order for it to be effective and learned the appropriate way. TWA is explicitly taught and used as an intervention for teaching comprehension. In this study using the SRSD and TWA the findings proved that implementing such strategies does increase comprehension and is effective in bringing up under achieving students levels of comprehension. This increase in underachieving students’ levels of comprehension tells us that direct/explicit instruction using an intervention program does help.
Another study was conducted that utilized the SRSD intervention and the RAP strategy, which supports the conclusion that these methods are successful in teaching low achieving students how to comprehend a text. Hagman, Casey, and Reid (2012) conducted a study using the SRSD intervention model, which implemented the RAP strategy, and this study too came up with similar results that direct instruction of specific strategies in an intervention block does bring up the reading comprehension of struggling readers. The RAP strategy consists of Reading a paragraph, Ask myself “What was the main idea and two details?” and Put it into my own words (Hagman, Casey, & Reid, 2012). In order to successfully teach the RAP strategy, a teacher needs to explicitly teach it to the students. The way to explicitly teach this strategy, the teacher is going to need to explicitly model it for the students. In explicitly modeling for the student it is going to help them paint a picture of what it is that they need to be doing. This explicit teaching is especially needed when working with low achieving students. A student who is low achieving is often lacking the strategies needed to even start comprehending a text given to them. The study using the SRSD model and the RAP model has shown to increase a students’ comprehension. This increase in student comprehension is seen when Hagman, Casey, and Reid (2012) state their findings.

In another study that uses explicit instruction and the intervention strategy “talking about books” which is seen in the research based program Soar to Success, targeted struggling readers who were diagnosed as Learning Disabled (LD). The study was unsuccessful to prove that explicit instruction is a crucial tool to teaching comprehension. In this study, students were placed into small groups that were based on previous testing done within the school. The groups focused on talking about books and then asking and answering questions related to those books. This strategy used directed response and questioning (Hollenbeck, 2013). In this study
researched by Hollenbeck it proves that the strategy that the instructor was using was unsuccessful when she came to the conclusion, she states:

However, a significant portion of instructional time involved discussion of the outcomes of independent work, rather than explicit instruction. Embedded into these discussions were *strategy cues*, primarily reminders to stop and think or reread text; however, beyond these prompts, strategies were not connected to reading comprehension, nor was the strategy use made explicit. Wendy’s attempts at *modeling* and *guided practice* were often focused on leading students to the correct answer, rather than scaffolding skill development. (p.121)

In order to have a strategy that is explicitly taught be successful, the teacher has to implement the strategy in the correct manner. This study does not say that the strategy of “talking about books” is an unsuccessful strategy in itself. If the instructor followed the program *Soar to Success* in its entirety, perhaps the results would have been different.

Another intervention program that is delivered by the classroom teacher is Targeted Reading Intervention (TRI) and this particular intervention is designed to meet the needs of kindergarten to first grade students who come from low socioeconomic status (Amendum, Ginsberg, & Vernon-Feagans, 2011). As discussed throughout this paper it has been shown that multiple literacy strategies are needed in order to teach one specific intervention method. Amendum, Vernon-Feagans, and Ginsberg (2011) state:

The TRI reading model highlights the centrality of reading comprehension as the ultimate goal of early reading instruction while also showcasing several interrelationships among other important reading subprocesses. These cognitive subprocesses of word
identification, fluency, vocabulary, and comprehension also interact with a more affective aspect of reading termed motivation and engagement, which we believe merits particular attention for struggling beginning readers. (p.110)

When utilizing the TRI strategy it is implemented in a one to one setting for approximately 15-20 minutes. The lesson consists of working on re-reading for fluency, word work, and guided oral reading. During the lessons when teaching these strategies, direct instruction of each strategy is used. The study has shown that using the direct/explicit instruction of these strategies agrees with other studies that the type of instruction is successful. Amendum, Vernon-Feagans, and Ginsberg (2011) show that their hypothesis was correct when they analyzed the results of their study when they come to the conclusion that:

Struggling focal kindergarten and first-grade students who received TRI significantly outperformed struggling focal students from control schools on all spring reading outcomes after controlling for fall scores. Specifically, struggling students who received the TRI ended the year with significantly higher Word Attack, Letter/Word Identification, Passage Comprehension, and Spelling of Sounds scores than their struggling peers who did not receive TRI. (p. 123)

Direct and explicit instruction has proven to be beneficial in almost all the studies analyzed. It is important to implement the intervention in the correct manner in order to make the research successful.

**How Technology Supports Reading Comprehension**

Technology can play a vital role in the aiding of increasing reading comprehension. Studies done by Lysenko and Abrami (2014), Oliver (2009), Pearce and Gale (2009), and Liu,
Wu, and Ko (2014) have shown that technology can increase a child’s comprehension skills. We live in a world where technology is seen in almost every aspect of life and is becoming more and more widely used by children. Technology based programs are becoming more available to teachers to use as a means to teach their students. Using technology does not mean that one day technology will take over a teacher’s job; what using technology means is that web-based programs are going to be available to use to help guide a struggling learner or help to enhance a grade level student in their education. In the study conducted by Lysenko and Abrami (2014) they state:

Computers can provide immediate individual feedback based on a student’s learning condition. They also allow students to control their learning pace. As well, students can work independently with computers, thus enjoying more opportunities to learn on their own and with peers. Finally, subject content delivered by multimedia may strengthen students’ motivation to read. (p.164)

What these finding tells us is that technology can be used to target a class full of diverse learners and that using technology is motivational for students. When a child is being taught the skills they specifically need to comprehend what they are reading, then they are going to work harder to master those skills. Hagman, Casey, and Reid (2012) found that children do better in reading comprehension when the child is taught explicitly the skill they need. Explicit teaching of a strategy can help a child to overcome the difficulty he/she may have when reading a text. If a child is relearning skills that they already know, there is a higher chance of the child losing interest and therefore not producing their best work.
In the study done by Lysenko and Abrami (2014), two studies were conducted together and then synthesized on whether two web-based programs when used together would help increase a child’s reading comprehension. The two programs that were used in conjunction with each other were ABRACADABRA (ABRA) and ePEARL. ABRA is an online tool that uses a balanced approach when helping students improve their comprehension. The other tool, ePEARL, is a digital portfolio to help students track their growth and to set personal goals for themselves.

The ABRA program guides students in the areas of phonological awareness, letter-sound recognition, and helps in self-regulated learning. Self-regulated learning strategies are essential for all students to have the ability to do, but technology has the ability to increase knowledge in the area of self-regulation. When teaching reading comprehension to a diverse population of children in a classroom, technology may help to make it easier to teach the specific skills needed by a child in making it so multiple strategies can be taught at one time without the teacher having to create multiple lessons to teach. In the study conducted by Lysenko and Abrami (2014) they stated that “Research also suggests that reading comprehension instruction delivered by computer technology may reduce the challenges that teachers face as they try to implement multiple, complex reading strategies in the classroom” (p.163). This study argues that using technology helps to achieve higher comprehension when using the two programs (ABRA and ePEARL) in conjunction with one another. In their findings the study has proven to be beneficial and to in fact raise students’ comprehension scores as well as other literacy areas. Lysenko and Abrami (2014), state in their findings:

Specifically, students in classes where ABRA and ePEARL were implemented with fidelity demonstrated higher learning gains in vocabulary and reading comprehension as
measured on a standardized test. In the second study ABRA and ePEARL students significantly outperformed their peers in the control group on a written expression sub-scale of a standardized writing measure. (p.170)

In another study done using technology to help increase a child’s comprehension, using concepts maps on a computer-based program was looked at. The study was aimed at enhancing a child’s science vocabulary and comprehension of texts. Oliver (2009) argues that using such programs with pre-selected terms for the concept map will help to increase the amount of information the child learns and comprehends. It also increases a child’s engagement into the activity versus just reading a text without using a concept map. This study is different than the previous study in the way that the technology is used to improve reading comprehension. The previous study looked at two different programs that were web based and used in conjunction with one another whereas this study is using a specific program targeted at using expository science texts and the use of concept mapping to help increase a child’s comprehension. Oliver (2009) explains that concept mapping holds a diagnostic value when it comes to reading comprehension. He also explains the importance of using such strategy as it helps enhance the relationship to the author and the text. We understand the importance of concept mapping when Oliver (2009) writes, “Concept maps are a promising strategy for improving reading comprehension, particularly for helping learners understand relationships used by the authors of expository texts” (p.404). In this study students were pre-taught how to use the program before using it in the study. After the students were assigned a specific chapter in a science text then given specific headings to classify the concepts under.

The study shows that it was successful in use but it did not provide an increase in comprehension, the results were moderate. These results tell us that there was no significant
increase or decrease in the ability to comprehend the expository text (Oliver, 2009). Oliver shows the success of the students when his findings show:

Students were generally more successful at classifying sub-concepts under subordinate headers than they were at identifying more specific sets of two and three sub-concepts within those categories. Identifying concept sets is a necessary precursor to phrasing specific concept relationships beyond more general relationships with subordinate headers. (p. 408)

The results of the study tell that when given support of pre made headers for the topic, a child has a better chance at being able to organize the information into the correct categories. When this information is compared to the earlier study where the students used programs to learn specific comprehension strategies, it is easy to see that not all comprehension strategies may work for a specific set of children especially when using different types of texts. Science texts are not especially easy in the first place as the terms are not necessarily something that is used in daily life. The ABRA and ePEARL programs were helping students to increase their comprehension in the manner of different types of texts.

In another study, the use of technology was geared a bit differently. It looked at the ways in which reading fluency would increase a child’s comprehension and how it would predict a score in reading comprehension on a state test. This concept is different from the other studies as it looks at a different literacy strategy when trying to increase a child’s comprehension score. The study conducted by Pearce and Gale (2009) looked at a child’s reading fluency when utilizing DIBLES and DORF, which is Dynamic Indicators of Basic Early Literacy Skills
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(DIBELS) Oral Reading Fluency (DORF). Pearce and Gale (2009) describe the two web based programs as:

DIBELS is a comprehensive system of reading curriculum-based measures including phoneme segmentation fluency, initial sound fluency, nonsense word fluency, word use fluency, and oral reading fluency. DORF is a 1-min fluency task that measures both accuracy and speed of reading text. (p. 421)

In a different light, the study done by Liu, Wu, and Ko (2014) looked at whether prediction and online discussions could help a child to acquire reading strategies naturally and enhance his or her comprehension of the reading using an online discussion. The study was done in the Chinese language using fifth grade students. The study was done using a textbook not used in school and was sure that none of the students had read the texts previously. In this study, none of the students had any experience with making predictions on a text or online discussions. This differs from the study done by Sporer, Brunstein, and Kieschke (2008) where students used the prediction strategy and were familiar with it before they engaged in new comprehension strategies. The students in the study by Liu, Wu, and Ko (2014) were given a passage to read and were required to make predictions while reading to see if their prediction was correct. The students then engaged in an online discussion using the prediction technique at the same time. Unlike the previous studies done by Baker, Chard, Fien, Park and Otterstedt (2013) and Hagman, Casey, and Reid (2012), where multiple strategies helped to increase a child’s ability to comprehend, this study showed the opposite. Liu, Wu, and Ko (2014) found that the online discussion did not facilitate learning and that in fact the discussion activities may have caused a hindrance to the students and their reading comprehension when both activities were used at the same time. Liu, Wu, and Ko (2014) discovered:
The findings revealed that students in the prediction-discussion group, compared to the discussion group, did not perform as expected during the discussion, and their reading performance was slightly lower than the prediction group. Otherwise, discussion had a positive effect on the discussion group, and the prediction group performed best on the reading comprehension tests. (p. 243)

This study did not bring the results the researchers were looking for, but proved that using multiple strategies together does not necessarily increase a child’s ability to comprehend. In this case, when the strategies were used alone, they were successful and increased the comprehension of the texts. As discussed in the previous studies, using technology as a tool to help increase a child’s comprehension, it is not necessary to use multiple strategies at once to help increase comprehension. Sometimes just one will do but in the end technology proves to be a good tool to use to increase such a skill.

In a final study about technology, Pfost and Artlet (2013) assessed whether or not technology, such as using online activities (e-mail or chatting), increases a child’s comprehension in comparison to using traditional books. In this study, Pfost and Artlet (2013) looked at the correlations of children reading texts such as newspapers, novels, stories, tales, and non-fiction books and their comprehension ability versus those who read a lot on social media and e-mails and engaged in chats online. Unlike the previous studies done by Lysenko and Abrami (2014), Oliver (2009), Pearce and Gale (2009), and Liu, Wu, and Ko (2014), this study looks at the types of material read and the ability a child has to comprehend. No specific strategies were taught, but a correlation between the types of text read does play an integral role in the way a child comprehends. Pfost and Artlet (2013) found that:
Reading in online forums and chats showed significant negative association with reading comics; novels, stories, or tales; and nonfiction books. Reading nonfiction books, in contrast, showed a significant positive relation to reading online encyclopedias. Finally, reading comprehension showed a weak positive correlation with reading magazines or newspapers and nonfiction books alongside a strongly positive link to the reported amount of reading novels, stories, or tales. The frequency of using e-mails as well as online forums and chats related negatively to reading comprehension. (p. 93)

These findings, in contrast to teaching a specific strategy, tell us the importance of the material being read and the way a child is able to comprehend. Society is full of social media and online forums today and children are starting to use it at a much younger age. When in an educators shoes, it is important to provide reading material that is going to be of interest to the reader to help keep them engaged and wanting to read stories and books and keep them away from online forums as much as possible. Oliver (2009) found in his research that concept mapping helps in the aid of comprehension. In his research, he looked at how concept mapping could increase a child’s reading comprehension of science textbooks. Oliver (2009) found that using online tools could help increase a child’s comprehension of expository texts. With these findings by Oliver (2009) in using online tools for expository texts show that when using online tools appropriately can aid in the increase of comprehension. Pfost and Artelt (2013) show that the use of social media and online forums has a negative affect on reading comprehension in texts that relate to learning. Their findings help Oliver (2009) in his research to prove that online tools can be successful when used appropriately and not for socializing purposes. Pfost and Artelt (2013) findings help support Oliver (2009) due to the fact that Oliver is trying to find ways to increase a
child’s comprehension in expository texts which are educational and will further a child in their educational career. Using online applications such as email and social media do not help a child when reading to comprehend. Pfost and Artelt (2013) showed that not all reading materials are good for children to engage in and can negatively affect a child in their reading comprehension.

Specific Strategies to Increase Reading Comprehension

Multiple studies have been conducted and have been done on different types of strategies to increase a child’s reading comprehension skills. Rojas-Drummand, Mazon, Littleton, and Velez (2012, Dewitz, Jones, and Leahy (2009), Chang and Ku (2015), Marr, Algozzine, Nicholson, and Dugan (2011) have all researched literacy strategies to use in order to increase a child’s reading comprehension. Using a basal reading program to support reading comprehension has been researched, and following their lessons is one strategy to help teach specific comprehension skills. A study conducted by Jones and Leahy (2009) on the use of basal reading programs revealed that the programs don’t always meet the necessary needs of teaching necessary skills. They explain that some core reading programs don’t teach all the necessary skills and strategies to help increase a child’s comprehension in the manner it should. The study goes in depth on what the programs follow and what they provide for practice skills, this will be discussed more in depth in the later part of the paper. In a study done by Crowe (2005), he focused on the teaching of a specific strategy or skill such as, different types of feedback, to enhance comprehension. There are multiple different ways to teach comprehension and many different types of texts to read and interpret. Lee and Hughes (2012) investigated interpretive strategies to comprehend poetry as a means to increase the skill. Summarizing, questioning, clarifying, and predicting was used in one study and also used small group instruction and reciprocal teaching to enhance comprehension. Note taking strategies were researched and
evaluated on whether or not it helped to increase a child’s comprehension abilities. In a study that follows suit to the previous study done by Abrami and Lysenko (2014), discussed using technology to assess a child’s reading fluency and whether or not it has an impact on comprehension. Increasing a child’s fluency can benefit the child and increase their ability to comprehend a text. Begny (2011) discusses ways to enhance a child’s reading fluency and the instructional strategies used to have the fluency and comprehension of the child increase. This study does not agree with other research that has been conducted in the way that one study discusses the ways to enhance the reading fluency and the other study discusses the importance of having reading fluency. Both studies aim to raise a child’s reading comprehension. Begny’s study is different from the study conducted by Marr, Algozzine, Nicholson, and Dugan (2011). Their study discussed the importance of reading fluency and its effect on reading comprehension. Begny (2011) looked at how to increase the reading fluency and Marr, Algozzine, Nicholson, and Dugan (2011) looked at how the reading fluency impacted reading comprehension but did not teach any strategies to increase fluency. Reading motivation with intrinsic and extrinsic factors partakes in a child’s ability to comprehend texts was found in a different study.

Dewitz, Jones, and Leahy (2009) conducted a study on basal reading programs and what skills and strategies they used to teach comprehension, how they taught the skill, and what instructional design they followed. Their study found that the reading programs offered too many strategies to teach when comparing it to that of The National Reading Panel. The programs on average will offer 18 to 29 skills and strategies whereas The National Reading Panel recommends only teaching seven. The recommendation of teaching seven strategies is different from studies conducted by Baker, Chard, Fien, Park, and Otterstedt (2013) where they found that multiple strategies along with explicit instruction helped to increase a child’s reading
comprehension. The teaching of multiple literacy strategies can be beneficial in some cases whereas in others it is not so beneficial. Dewitz, Jones, and Leahy (2009) found that the instruction in these programs have shortcomings and may undermine the efficiency of the programs. They state:

The comprehension skills and strategies curricula are wide but not terribly deep. The structure of the curricula is often incoherent so that students and teachers do not know how skills and strategies relate to one another or how acquiring these sets of skills leads to becoming a better reader. (p. 121)

What the study done by Dewitz, Jones, and Leahy (2009) tells us is that these programs are not as good as using a different type of strategy. Basal reading programs offer too many strategies for a child to focus on. Having too many strategies makes it difficult for them to increase their reading comprehension due to the fact that they are concentrating too much on too many different strategies at once. In the previous studies discussed by Hollenbeck (2013), it was found that using direct and explicit instruction was to be very successful. If these programs are offering too many strategies then they are not necessarily focusing on the important aspect of teaching a specific skill with direct teaching and modeling. The findings of Dewitz, Jones, and Leahy (2009) agree with Baker, Chard, Fien, Park, and Otterstedt (2013) in that explicit instruction is a crucial element to increasing reading comprehension. The goal of these programs is to help students gain more strategies to enhance their education. With findings like these, teachers should be wary of using the program or know how to change it so that it works for them and their student.
In a study done by Rojas-Drummand, Mazon, Littleton, and Velez (2012), they took the educational program called Learning Together (LT) and implemented it to see how well students in a Mexican primary school would increase their reading comprehension. This type of instruction used collaborative learning in order to teach the skill. The aim of this strategy is to create a learning community so that the students learn together and create a strong tie between students, teachers, and parents. The program is used in small groups and is modeled after the direct instruction models as previously discussed in this paper. Rojas-Drummand, Mazon, Littleton, and Velez (2012) state:

Activities are intended to foster collaboration and effective oral communication, including importantly the use of ‘Exploratory Talk’. Briefly, with adult guidance, children are encouraged to collectively generate certain ‘ground rules’ or strategies for using ‘Exploratory Talk’. Then throughout the whole program, children adapt and apply these strategies for carrying out diverse team literacy projects. (p. 143)

In this activity the children will discuss with the teacher and learn from examples how to create the ground rules. The children take charge of their learning and use the strategies taught to them independently. Exploratory talk is very similar to the direct instruction in the way that the teacher teaches them the strategy to use but the children are given more responsibilities when it comes to the learning. The children are also required to learn the strategy and implement it immediately, which in turn allows for more authentic learning to take place. This type of learning is also seen in a study done by Crowe (2005) when the Communicative Reading Strategy (CRS) was used. In this study, the strategy taught was done with teacher guidance but the child was more independent in what they did. Independent learning is seen when Crowe (2005) describes CRS:
CRS uses contextually supported feedback to help children reconstruct the author’s message. The interventionist monitors what the child reads and how the child reads the passage to determine whether the child is constructing meaning from the text. The adult mediates the child’s reading through the use of discussion, prompts, and cues that help establish the topic, simplify complex sentences, explain new and unfamiliar vocabulary, and connect ideas across passages and units of text. (p. 34)

Although the two studies are different in some ways, they have similar results. The students in both studies successfully learned the strategy being taught and the information stayed with them a lot longer than it did in both of the control groups.

Chang and Ku (2015) conducted a study on the effects of note taking and reading comprehension. The study aimed to show that teaching students how to take notes would increase their ability in note taking as well as their reading comprehension. Like the study done by Liu, Ku, and Wu (2014), the students were presented a text that they had never seen before and it was in their native Taiwanese language. The students in this particular study done by Chang and Ku (2015) were given direct instruction on how to take notes and organize the information read. In note taking, the students also had to learn how to write quickly and reduce the information in the paragraphs at hand in order to make good notes. Although this study is focusing on one main strategy, it is actually broken up into multiple strategies in order to attain learning how to take good notes. Essentially it is using multiple methods in order to be successful at note taking and agrees with multiple studies previously discussed on the need to teach multiple strategies in order for a child to enhance their comprehension skills. This particular study focused on finding the main idea, finding the important information in paragraphs, identifying key words, organizing the information, and text structure. These are
important skills to have in order to be successful at taking notes on a text. Chang and Ku (2015) found that with the successful implementation of the above skills, the students who learned how to take notes reduced verbatim copying of the text and could paraphrase what they read. They state “The study yielded 2 findings: first, teaching students a note-taking strategy significantly improved their performance in note taking and reading comprehension, and second, poor readers showed the greatest gains in note-taking skills with instruction” (p. 278). All children will benefit from note taking strategies but students who are under achieving or poor readers will benefit the most from learning how to take notes.

Teaching reading fluency as a strategy to increase comprehension has proved to be successful. In a study done by Begny (2011), he used the Helping Early Literacy with Practice Strategies (HELPS) program. In this program, fluency building was taught and specific strategies were used. In his research, Begny (2011) stated that “The strategies include repeated reading, modeling, phrase-drill error correction, two verbal cueing procedures, goal setting, performance feedback, and a motivational/reward system” (p. 153). The use of these strategies in combination with each other helped to enhance the reading fluency of the child. In the study done by Pearce and Gale (2009), they used technology to test for reading fluency and track student progress. This tool could also be useful for the educator when using the HELPS program. Both studies discuss the importance of reading fluency on reading comprehension. Begny (2011) came up with positive results that students who participated in the HELPS program three times a week significantly outperformed their peers in the control group and increased their fluency and comprehension. Marr, Algozzine, Nicholson, and Dugan (2011) conducted a study on the effects of reading fluency and comprehension, and they too found that with higher reading fluency comprehension would increase. Their study focused on increasing a
child’s reading fluency and then would assess them quarterly on comprehension. Marr, Algozzine, Nicholson, and Dugan (2011) study also compares to the study done by Lysenko and Abrami (2014), in which Lysenko and Abrami discuss using an online tool to track student progress. Tracking student progress is essential data in order to know where the student started at and what kind of growth he/she has attained. As Marr, Algozzine, Nicholson, and Dugan (year) did their study, they found that students enjoyed seeing their progress. This information was found during observations. Marr, Algozzine, Nicholson, and Dugan state in their findings that “Anecdotal comments during informal observations completed during the study indicate that students looked forward to fluency practice, enjoyed the stories, liked working with a coach, and were eager to see their progress” (p. 32). Tracking a student’s performance is beneficial to both the educator and the child. Having a student intrinsically motivated to work hard to bring up their progress all while increasing their reading comprehension is a good thing. Having intrinsic motivators has been shown to be beneficial as we seen in the study conducted by Stutz, Schaffner, and Schiefele (2015). As discussed in other studies, using multiple strategies together and in the correct manner will help to raise the comprehension skills of low achieving readers.

Sporer, Brunstein, and Kieschke (2009) conducted a study using traditional instruction as the control group, and reciprocal teaching (RT) as the intervention condition. This study used a variety of methods when teaching reciprocal teaching, first they taught the students how to summarize, question, clarify, and predict. Traditional instruction was taught to all the students in the RT group. The third group focused on the strategies learned in the RT group but were placed into pairs and practiced it independently with their group. Sporer, Brunstein, and Kieschke (2009) found:
Students who participated in one of the three intervention conditions showed near transfer in the sense that they reached higher reading comprehension scores as assessed with the experimenter-developed task. However, only students who practiced reciprocal teaching in small groups showed far transfer in the sense that they got higher reading comprehension scores as assessed with the standardized test. (p.284)

These results agree with Baker, Chard, Fien, Park, and Otterstedt (2013) and Hagman, Casey, and Reid (2012) where teaching multiple strategies to children in order for them to be successful at attaining comprehension is a beneficial strategy. The biggest benefit to teaching these multiple strategies is that they fit into one category of reciprocal teaching and can be then implemented in small groups where the children take charge of their learning. This instruction could easily then be set up as a centers activity where the students can practice on their own.

Huang and Yang (2015) did a similar study to Sporer, Brunstein, and Kieschke (2009), Huang and Yang (year) where they implemented reciprocal teaching. The difference in their study is they implemented explicit teaching (ET) before reciprocal teaching (RT) took place. The model is called ET-RT and offers explicit teaching and modeling before teaching the strategies that go along with RT. ET-RT as described by Huang and Yang is the following:

ET-RT is designed to offer explicit teaching, overt instruction, modeling, practice, and feedback through metacognitive self-monitoring and evaluation strategies. The instructor integrated RT into reading strategies by (a) enabling students to acquire and understand the core reading strategies and the processes involved in using them, (b) designing learning sheets to assist students in using reading strategies and documenting their use,
and (c) conducting peer discussion by focusing on the elements and standards in the learning strategies. (p. 387)

Their model of teaching ET-RT is shown to be successful. Huang and Yang found that children had a better grasp on reading strategies that increased their comprehension and that explicit reading strategy instruction is extremely beneficial. This study agrees with Sporer, Brunstein, and Kieschke (2008) where they found that multiple methods, when used in combination with one another, will successfully raise reading comprehension scores. Explicit instruction is also a technique that is beneficial for learners to master the strategies being taught.

A much-overlooked component of texts and reading comprehension is the comprehension of reading poems. Much research has been done on narrative texts and expository texts as seen in Oliver (2009) and Chang and Ku (2015) research using expository texts, but rarely do we see anything on poems. Poems are an important part of literacy that is often times left out and not taught. Lee and Hughes (2012) conducted a study using interpretive strategies in elementary students who have learning disabilities and some who do not. The interpretive strategies that were taught were, prediction and confirmation, use of literary devices, making in text connections, theme, questioning, inferring, and visualizing. Some of these strategies such as prediction, making text connections, questioning, and inferring are strategies that have been used by Hagman, Casey, and Reid (2012) and proved to be successful strategies to use. The use of prediction, making text connections, questioning, and inferring shows us that these types of strategies are of high importance and can be used when teaching the reading comprehension of not so common texts. Lee and Hughes found in their results that:
Students with LD used a broad range of interpretive strategies inclusive of predicting and confirming, identifying and understanding literary devices, making intertextual connections, interpreting theme, questioning, inferring, and visualizing. They performed as well as their AA peers in making sense of two poems with varying levels of complexity. (p. 501)

Using interpretive strategies when analyzing poems has proven to be beneficial in helping children to increase their comprehension of such a complex type of text.

While studies show that having an increase of reading comprehension strategies and even using multiple strategies at once can increase a struggling reader in the area of comprehension, it now comes down to providing the teachers with specific training on how to successfully implement the strategies. Strategies are no good if the educator does not know how to implement them in the correct manner. The use of technology in increasing student’s comprehension should be made more widely available to educators as we live in a society where technology is constantly used and is ever evolving. In order to attain the highest reading comprehension success, implementing multiple strategies and using more explicit instruction is needed to help bring up the skills of the under achieving children.

**Method**

**Context**

This study will take place in an urban public elementary school. This particular school is a pre-school through sixth grade school in upstate New York. There are integrated co-taught classes with a general education teacher and a special education teacher. There are also classes in
the school that are co-taught with a general education teacher and a speech teacher. There are three ESOL teachers that either push into classes or pull out depending on the students’ needs. In the school, there are also behavior specialists from the Center for Youth to help address the many high behaviors the school has. According to the school districts website, the school hosts approximately 612 students and 45 teachers. The school is 100% free and reduced breakfast and lunch. Breakfast is served in the classrooms every morning. The school offers a free after school-tutoring program, but is limited to how many students can attend. Students are let in on a first come first serve basis and not by need. The teaching staff is made up of mostly women. Approximately 66% are African American, 9% white, and 24% of a Spanish background, and 1% of a mixed race or Asian American. All of the administrators are African-American women, there is one principal, and there are two vice principals. The racial make-up of the students in the school is predominantly African-American children.

Participants

Teachers.

Elsa is a Special Education teacher and is currently working in a fourth grade ICOT class. Her role is to work with the students who have IEP’s and to take the regular curriculum and differentiate it for the needs of the students in her class. She has been working as a Special Education teacher for 19 years. She teaches beside Augustina Balsamo.

Amanda is a fourth grade General Education teacher and works in an ICOT classroom her co-teacher is Elizabeth. Augustina has been teaching for 17 years. Her responsibilities in the classroom are to teach the regular curriculum to students without IEP’s. She will also teach the
entire day of the required curriculum and Elizabeth pulls the kids to work further on with her students.

Liz is a fourth grade General Education teacher and has been teaching with the district for ten years. She teaches the general required curriculum to students and does not have any students with an IEP. Liz is also the chair-person for the after school program and works with children after school hours. This program offers students a longer school day and focuses on the skills they need to learn that they are behind on in their classes.

Luis is a third grade teacher and just began teaching in the elementary grades. He was a seventh grade teacher for 21 years but decided for a switch this year. He has been teaching for a total of 22 years. Larry’s position is a General Education teacher and inside of his classroom he does not have any students with an IEP.

Jan is a second grade teacher and teaches General Education. She has been teaching for 20 years. Julie is not only a teacher but she is also our union representative for our school building. Julie’s responsibility in the classroom is to teach the required curriculum to the students.

Jessie is a sixth grade teacher and teaches General Education. She has been teaching for 21 years. She has a resource teacher that pushes in to differentiate the curriculum with the students who have IEP’s. She also has an ESOL teacher that pushes in to assist with the bilingual students in the classroom.

Sarah is a Special Education teacher/Consultant teacher. Her responsibilities are to push into various classes and aid with the students who have IEP’s. She also pulls out small groups and gives them additional help in specific skills that they have needs in.
**Students.** The students are in a general education fourth grade class and range in abilities. The students specifically being used for this study are going to be the lowest achieving group of readers (there are three in this group) and the highest group of readers (there are four in this group). In the low group, which I call the blue group, one student is an African American female, age nine, and currently reading at level E. A second student in the group is an African American female, age nine, also reading at a level E. The second female student has just been diagnosed as Learning Disabled (LD) and an IEP is in the works. The third student in the group is an African American male, age nine, who reads at a level H. In the high group, which I call the red group, all of the students are males. Student one is an African American male, age nine, and currently reads at a level P. Student two is Hispanic American, age ten, and reads at a level S. Student three is Hispanic American and African American, age nine, and reads at a level S. The fourth student in the study is African American, age nine, and reads at a level S. All of the students are reading below grade level but are very different in abilities when compared in their groups. The students in the higher group are just below grade level but reading more complex texts than the lower reading group.

**Researcher Stance**

I am currently enrolled in the Master’s program at St. John Fisher College and am earning a degree in Literacy Education Birth-12th grade. I currently hold two certifications that I earned while receiving my Bachelor’s Degree at St. John Fisher College. While collecting data for this study, I was an active participant observer. Mills (2014) states that teachers “are active participant observers of their own teaching practice” (p. 85). I worked with students in my own classroom and observed the students as I taught them reading comprehension strategies to use. Mills (2014) states: “when they are actively engaged in teaching, teachers observe the outcomes
of their teaching” (p. 85). I worked in small groups with the students to implement the comprehension strategies. Implementing a variety of comprehension strategies helped me to see how the students look at a text and comprehend it. The implementation of the different strategies also helped to gain knowledge in which strategy was most successful for the students or if all three strategies were needed when working toward the goal of improving reading comprehension.

**Method**

In this study, I observed students in their reading groups. Each group met with me at different times during the day. First, I gave each student in the study a pre-test using the Qualitative Inventory (QRI). The QRI assessed them in reading fluency as well as comprehension. I also gave a post-test using the QRI after the study has been completed to see if there was any growth in the students. The strategies I used were the strategies of prediction, story maps, and pre-teaching vocabulary to the students. Direct instruction was used for all three strategies with a gradual release of responsibility with the story maps. This process took place over three weeks, as I met with the students once a week to work on the strategies. The students were also be given story maps to use while they are in their independent reading group. The use of story maps in which students use on their own gave me more data on the use and implementation of the story map strategy. Each observation was for 30 minutes at a time. More time was used during lunchtime to finish work that was not completed.

In part of this study I sent out a staff questionnaire to a variety of teachers in the school to find out if they had used any of the three strategies I used and if they had any other strategies that they used to help increase the reading comprehension in their students. In the questionnaire, I left
open spots for the teachers to write what strategies they used as well as their thoughts and opinions on the strategies. The questionnaire can be seen in appendix A.

To help aid in my research I also gave my students a questionnaire asking them if they had ever used the comprehension strategies we were going to use. The student questionnaire can be seen in appendix B. My goal was to see their familiarity with the strategies that were used. The questionnaire was a simplified version of what the staff around the school participated in.

Quality and Credibility of Research

In order to make sure that this research is done properly, it is important to make sure that the research has sound credibility, transferability, dependability, and confirmability. Mills (2014) defines credibility as “The credibility of the study refers to the researcher’s ability to take into account the complexities that present themselves in a study and to deal with patterns that are not easily explained” (p. 115). In order to assure that I had enough data, I collected data through multiple sources. I used field notes, student artifacts, audio recordings, and questionnaires to collect data and to help guide my research and explain things that are not necessarily present in just one form of data alone.

Transferability is the second means to ensure that there is quality and credibility to the study. Mills (2014) states: The transferability of an action research account depends largely on whether the consumer of the research can identify with the setting”(p. 116). In being able to identify with the setting I will see more clearly the actions that are really taking place rather than what I think should take place. Transferability will take place when I compare my field notes to audio recordings of the students. Comparing field notes to the audio recordings will help to make sure that the data collected is accurate.
In order to assure that the research is dependable, the use of multiple means of data collection is required. Dependability as defined by Guba (1981) is “the stability of the data” (Mills, 2014, p. 116). Using field notes, audio recordings, pre and post-tests, and questionnaires will help to ensure that the research is dependable.

Lastly, the multiple methods used helped to ensure triangulation as well as establish confirmability in the study. Guba (1981) describes confirmability as “the neutrality or objectivity of the data that has been collected” (Mills, 2014, p. 116). The use of multiple means of data and the different methods used and then compared to one another helps to create the triangulation in the study.

**Informed Consent and Protecting the Rights of the Participants**

In order to protect the rights of all people involved in this study, pseudonyms were used. Any and all artifacts that were collected were marked free of any type of identification of the people involved (i.e student names were blacked out with a marker). Each student that took place in the study will has a signed permission slips by the parent and they themselves signed an assent form. The participating teachers also signed a consent form to participate and have their data used. The use of these forms ensures that all participants are made aware of the aspects of the study, including risks and benefits. A detailed explanation of the study will be given to every participant as well as my contact information should they wish to be withdrawn from the study.

**Data Collection**

Data collection was done using field notes, student work, audio recordings, and questionnaires for both the students and staff. The field notes consisted of observations on what the students did while practicing the strategies taught and how they implemented them. The field notes were
taken during guided reading and accountable independent reading (GRAIR) time. Sessions were audio recorded to ensure the data I collected was accurate.

Student data including pre and post-tests from the QRI was used at the beginning and the end of the study. During each session, any student work such as the story maps are included. Students were provided story maps to use during their independent reading time and those were used as well to cross examine their use of the strategy.

Questionnaires were provided to the students using open-ended questions to what strategies they currently use when reading a text. This questionnaire was given before and after the study took place. The questions focused on the three strategies that were taught and what they know about them and whether or not they use them. At the end of the study the questionnaire was the same but focused on what they learned about the strategies and whether or not they helped them in the area of comprehension.

Questionnaires for the staff focused on the three strategies being used and whether or not they found them to be successful in their teaching. The questionnaire also included a section for the staff to fill in any additional strategies that they currently use or have used and found to be successful.

Data Analysis

During the course of this study, I collected multiple sources of data. I collected questionnaires from staff around the school and students, as well as student work and audio recordings of the sessions. In order to discuss the data, I needed to conduct an in depth analysis of the data I collected. The first set of data that I analyzed was the teacher questionnaires, which
came from seven different teachers around the school building who teach a variety of different
grades. While analyzing and organizing the data, I created a chart and made tally marks for the
teachers who both used and found the strategy to be successful or used and found the strategy to
be somewhat successful. I also noted when teachers found a particular strategy to be
unsuccessful. I used different color highlighters to note the differences or similarities in the
comments on each particular strategy. The use of the chart and highlighting helped me to see
which strategies were most successful and commonly used in classrooms to support the reading
comprehension of the students.

The second set of data I analyzed was the student questionnaires. This questionnaire was
a simplified version of the staff questionnaires so the students could write whether they used and
liked the strategies I was going to implement with them. While analyzing this set of data I used a
chart and tally marks like I did with the staff questionnaires and a highlighter to see any
differences or similarities in the responses. I then compared the strategies the students found
useful and compared them to the staff’s responses. I also looked at what the students found to be
unsuccessful and compared them to what the staff found to be unsuccessful and noted the
differences or similarities between the two.

The third set of data that I analyzed was the pre-test and post-test scores from the three
different strategies that I used with the students. I created a chart with a place for the score
before the strategy was implemented and a score for after the strategy was implemented. I made
sure that the students from both groups were separated so it is easier to see which group was the
lower reading group and which was the higher. I did this because both of the groups are at
dramatically different reading levels and I wanted to be sure that the data was separate so I could
see the difference in each group and then compare them to one another. In doing this, it helped
me to see which strategy was able to successfully increase the child’s reading comprehension score.

The final set of data that I analyzed was my field notes and the audio recordings taken while teaching each strategy. I transcribed the audio recordings so that I had a hard copy of what was said and so that I could quote the children when necessary. The transcribing helped me to be sure that my field notes were written down accurately and that I did not miss anything important. The field notes and recordings also helped me to analyze the children’s thinking process and why or why not the taught strategy was successful for them.

Analyzing the data was a time consuming process but a very important one. Using the data from the staff and student questionnaires, the pre-tests and post-tests, as well as the audio recordings and field notes, I was able to see which strategies were successful and which ones were successful for only a particular group of readers. By using the multiple methods of data collection and then coding each, I was able to come up with the three main themes, which will be discussed in the findings section of this paper.

**Findings and Discussion**

Throughout the course of this research, quantitative and qualitative data was collected. The data that was collected can be broken up into three categories, which consist of field notes and audio recordings, student and staff questionnaires, and student work. After analyzing the three categories of data, three themes emerged from the data. The three themes consist of lack of knowledge in vocabulary, lack of schematic understanding, and impact of referencing a text appropriately. These themes were commonly seen in both groups of readers and had the most
impact on their ability to comprehend what they read. The first theme, in the instances where the students did not have the vocabulary knowledge, their ability to comprehend the text was severely impacted. The second theme where the students did not have the background knowledge that related to the texts that were read, had a significant impact on their ability to understand what they were reading due to the fact that they did not have anything to relate it to. The final theme in which the students were required to look back in the text in order to successfully use a story map had a large impact on their ability to complete the task and do so in the correct manner.

Before teaching any of the literacy strategies, I gave each student a Qualitative Reading Inventory (QRI) assessment to see what his or her reading level was. I started with the examiner word list to see what level passage I should start at, and from there I gave the QRI. The QRI in its entirety contains a running reading record, how many ideas can be recalled from the text, and comprehension questions that are both explicit and implicit. The results of this assessment can be seen below in Table one.
Table 1

*Qualitative Reading Inventory*

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Pre-Test Score</th>
<th>Post-Test Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desmond</td>
<td>Level 1- Instructional</td>
<td>Level 1-Instructional</td>
</tr>
<tr>
<td>Yolanda</td>
<td>Level 1- Instructional</td>
<td>Level 1- Instructional</td>
</tr>
<tr>
<td>Maria</td>
<td>Primer - Independent</td>
<td>Primer- Independent</td>
</tr>
<tr>
<td>Quin</td>
<td>Level 3- Independent</td>
<td>Level 3- Independent</td>
</tr>
<tr>
<td>Kevin</td>
<td>Level 3- Instructional</td>
<td>Level 3- Instructional</td>
</tr>
<tr>
<td>Michael</td>
<td>Level 3- Independent</td>
<td>Level 3- Independent</td>
</tr>
<tr>
<td>Doug</td>
<td>Level 3- Independent</td>
<td>Level 3- Independent</td>
</tr>
</tbody>
</table>

Each level is marked with a number that indicates what grade level passage the assessment was at. The students could score either at a frustration level, instructional level, or independent level. If the students scored at a frustration level then the text was too hard for them to read and should be brought down at least one reading level. If they scored at the instructional level then the text is at a perfect level to teach the students with the passage not being too hard or too easy. If the students scored at an independent level then that is the level in which the students can read a text on their own. For the purpose of this study, I took the results of each
QRI and placed the students in a group and gave them all the same level reading passage. The groups are reflected as the blue group and the red group as they are two different levels of readers. From this I went into teaching the strategy with the appropriate level book for each group.

Lack of Knowledge in Vocabulary

Data was collected from the staff by way of a questionnaire (Appendix A). The questionnaire asked questions about the literacy strategies that I was implementing in my study, specifically whether or not they had used the strategies before and if they found them to be successful. The teachers also had an additional question asking them to provide any additional literacy strategies that they found to be successful. This was an open-ended question and the responses from the teachers varied. The results of the survey can be seen below in table two.
Table 2

**Teacher Questionnaire**

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Pre-Teaching Vocabulary</th>
<th>Story Maps</th>
<th>Prediction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elsa</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Amanda</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Liz</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Luis</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Jan</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Jessie</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Sarah</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

✓ Used Strategy  ★ Strategy was successful

According to the results of the survey, 100% of teachers found that using the pre-teaching vocabulary and prediction strategy to be one that they used as well as one that is successful for them in their teaching. The data also shows that 100% of teachers have used story maps in their teaching but only 50% of them have found it to be successful. In the open-ended question asking teachers what they found to be a successful literacy strategy, teachers listed strategies such as underlining or highlighting evidence and facts in a passage. Teachers also stated that think-alouds, using KWL (what you know, what you want to know, what you learned) charts, and compare and contrast using venn-diagrams are successful strategies. The results of the teacher
questionnaire and the open-ended question tell me that there are many literacy strategies that are available to use to raise comprehension levels and that are successful.

The students were given a similar survey to that of the staff (Appendix B). They were asked if they used the strategies that were going to be taught and whether they found them to be successful. The students were also given the same open-ended question as the staff on what additional strategies they found to be successful. None of the students wrote down any strategies. For the purpose of the analysis of the data and the questionnaires, the first three students, Yolanda, Maria, and Desmond are the blue group. The following four students, Kevin, Doug, Quin, and Michael are in the red group. The blue group is placed together because they are far below grade level in reading. The red group is placed together because they are significantly higher than the blue group and are reading just below grade level.
Table 3

**Student Questionnaire**

<table>
<thead>
<tr>
<th>Student</th>
<th>Pre-Teaching Vocabulary</th>
<th>Story Maps</th>
<th>Prediction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yolanda</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Maria</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Desmond</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Kevin</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Doug</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Quin</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Michael</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

✓ Used Strategy  ★ Strategy was successful

According to the data, 100% of the students found that using the strategy of pre-teaching the vocabulary was something that they had used as well as something that they found to be successful. 100% of students stated that they had used story maps but only 42% of them had found it to be successful. When looking at the strategy of prediction, only 85% of student stated that they had used it and 71% had found it to be successful for them. The teachers and students surveys both state that they have used the pre-teaching of vocabulary strategy and have found it to be successful. The teachers and students survey both agree that they have all used the story maps but only approximately 50% of both staff and students have found them to be successful. In the area of using prediction as a strategy the staff and student questionnaires vary differently
the most. 100% of teachers stated that they do use it and it is successful whereas not all of the students have used it and even less found it to be successful.

The questionnaires show that both students and staff like the pre-teaching of vocabulary strategy, when beginning to implement this strategy I gave the students a pre and test using the vocabulary words for the books they would be reading. The students are separated into groups according to their ability level. Both groups were given an oral pre-test (Appendix C and D). The scores are based on a percentage out of seven questions. Each question was asked to the students in isolation of one another in order to have accurate knowledge of what each child knew and did not know.
Table 3

*Student Work: Pre-Teaching Vocabulary Strategy*

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Pre-Test Score</th>
<th>Post-Test Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maria</td>
<td>14%</td>
<td>57%</td>
</tr>
<tr>
<td>Desmond</td>
<td>28%</td>
<td>88%</td>
</tr>
<tr>
<td>Yolanda</td>
<td>14%</td>
<td>71%</td>
</tr>
<tr>
<td>Quin</td>
<td>67%</td>
<td>100%</td>
</tr>
<tr>
<td>Michael</td>
<td>67%</td>
<td>100%</td>
</tr>
<tr>
<td>Doug</td>
<td>83%</td>
<td>100%</td>
</tr>
<tr>
<td>Kevin</td>
<td>67%</td>
<td>100%</td>
</tr>
</tbody>
</table>

During the oral exam, Maria, who answered one out of the seven questions correctly, had some interesting answers when it came to answering questions about what some of the animals were when she was given her oral pre-test. When asked “What is a camel?”, she responded with “It is something like an animal and it has horns” (Pre-test, 2016). The results of Maria’s response immediately told me that she did not have much exposure to animals that can often times be seen in a zoo. In another answer given by Yolanda to the same question, she responded with “it is an animal” and could not tell me where it could live (Pre-test, 2016). Both Yolanda and Maria attempted to answer all of the questions and had a response for each question asked.
Desmond was able to answer two out of the seven questions correctly, in the incorrect answers he responded with “I don’t know” (Pre-test, 2016). Desmond was aware of the fact that he did not know what some of the animals were and was open about acknowledging that fact whereas Yolanda and Maria were unaware that they did not know what each animal was. These words were used as part of the assessment as they matched the vocabulary words in the book they had to read. In the red group, Kevin, Doug, Quin, and Michael were given an oral pre-test to see what if any knowledge on the vocabulary words that would be in the book we were going to read together. There words were different as they are in a higher-level reading group. Each child was given the oral pre-test in isolation as to ensure accuracy of what each child either knew or did not know regarding the vocabulary words that would be seen in the upcoming text. This group of students did moderately well when asked the six vocabulary questions. The students may have done better than normal due to the reasoning that some of the vocabulary word questions were also vocabulary words from the science unit we had just ended. In each of the questions that pertained to our science unit, all of the students had the correct answer and were also able to give examples of which animals were connected to the vocabulary words.

While teaching the blue group about each word, I had a picture of what each animal was and we discussed what they were and where they lived as well as where we could find each animal had we wanted to see one in real life. I then had the blue group read their book silently to themselves, after we had a discussion on what the book was about and the animals they had seen in it. Once we were finished with the discussion, I gave them a post-test to see if they were able to correctly answer the vocabulary questions given prior to the reading. Bellinger and DiPerna state “comprehension is an essential component of increasing knowledge, learning, and
communicating information one has read” (p. 416). In order to determine whether or not the students raised their comprehension on the text, which is essential in order to gain knowledge, the post-test was given. The post-test consisted of each word written down and required them to write the answer out. The responses were open-ended questions so that the students could write what they were thinking and not have to choose from a list.

In the post-test on vocabulary, the blue group was able to raise their scores but only by a little bit. Most of their answers were still the same as they were prior to the teaching of the vocabulary. The intervention used was teaching each student what the words meant prior to reading. Teaching the words was done with flash cards that had a picture of each particular animal on it as well as where it lived written underneath the picture. Maria still believed that a camel had horns but this time in her response to what a camel is she responded with “Camels are things that have stuff in the horns” (Post-test, 2016). This response tells me that Maria was still relying on her background knowledge as opposed to the pre-taught vocabulary and did not take anything away from the lesson or the book. She was however able to increase her score a little bit by answering four out of the seven questions correctly. Klinger et al. (2010) found that most teachers would only ask one comprehension question to follow up on what the text had to say. If Maria were only given one question to test her ability to increase her comprehension using the strategy of pre-teaching the vocabulary, then she would have failed in this area. Because she was given multiple questions, she showed improvement. Allowing students to answer only one question is not a true test on whether or not they have learned anything. In all, all of the students in this group raised their score in vocabulary after the teaching and reading of the book.

In order to teach the red group the vocabulary words that pertained to their reading, I created flash cards and had a set for each student so they could practice independently after the
lesson. With these flash cards we discussed the meaning of each word and then the students took five minutes to quiz each other on them and give examples of what each word meant. The students then read the book assigned to them independently. When they finished the book, we discussed it and what it was about. I then gave them a comprehension check that had them answer open-ended questions on the vocabulary words that were pre-taught and in the book. The vocabulary test was hand written by me. The reason I gave open-ended questions for the vocabulary is because I wanted to give the students the opportunity to explain what they thought each word meant as I did prior to the teaching of the vocabulary. I wanted to see overall how their comprehension of the text was with the vocabulary words. In the red group all students scored a 100% for their vocabulary portion of the post-test.

When looking at the teacher questionnaires, the student questionnaires, and the results from the pre and post-tests, it shows that having prior knowledge of vocabulary is successful in raising a student’s comprehension score. The staff and students both acknowledged that they found it to be helpful and successful in their reading with knowing what the words meant before reading a text. The results also match these answers given by both staff and students. The comprehension and vocabulary scores were raised in both groups and both groups showed to have a deeper understanding of their particular vocabulary words.

**Lack of Schematic Understanding**

The second theme emerged regarding schematic understanding and the ability for my students to make predictions on a story came about from the data that I collected. The reason this theme came about was due to the difficulties both the blue group and the red group had when it came to making predictions on what they were going to read. The students had to be taught
what a prediction was and given examples on how to make a prediction. According to table two, 85% of students stated that they had used the prediction strategy and 71% had found it to be successful for them. Having to teach the students what prediction meant and how to accurately make a prediction came as a surprise considering the majority stated they have used it prior to this research and found it to be successful. The theme emerged when it came to the students having to make a prediction on their own. The blue group struggled the most, specifically with using their background knowledge, looking at the picture on the front of the book, and reading the title, in order to make a prediction. When I asked Desmond “What does it mean to make a prediction?” he responded with “uhmmm I don’t know” (Audio, 2016). Yolanda answered the same question and her response was “like a story” (Audio, 2016). Maria just shrugged her shoulders and did not give a response. These responses tell me that they have never been introduced to this type of a strategy and that I needed to start from the beginning with this group. Making a prediction is much more than just predicting what the story is going to be about or what will happen next. It is important to follow up with the students and have them check if their responses were correct or not. Klinger et al. (2010) found that “teachers rarely followed up with students to check if their predictions were accurate” (p. 69). Students need to follow up with their predictions in order to see if they were correct, the follow up part of the strategy is what helps aid the comprehension and gives meaning for using the strategy.

When looking at the staff questionnaire’s 100% of the staff have said to have used the strategy and found it to be successful (Table two). Jessie stated “Prediction works with children who are beginning a new book” (Staff Questionnaire, 2016). Staff found it to be successful in their teaching because it helps them to focus on what they are reading and to anticipate what will come next. Liz states “having students utilize the prediction strategy helps them to activate their
background knowledge. When students activate their background knowledge, they are better able to make connections while they are reading” (Staff Questionnaire, 2016). With this statement alone, it shows the importance of having background knowledge in order to make predictions that relate to the text. Klinger et al. (2010) state: “Helping students activate and connect with background knowledge is an important aspect of reading comprehension” (p.69). If a child is lacking in background knowledge then it is going to be difficult for them to accurately make a prediction on a text that is in front of them leading them to not to fully comprehend the text. It is going to be difficult for them to take a picture or a title of a story and relate it to what they know about the topic at hand.

Before reading the new text, I introduced the prediction strategy, explained that to make a prediction it means to take a guess. In making a prediction on what a story will be about it needs to be based on the picture that is seen or use the title of the story to guide in making a prediction. I then provided explicit instruction through modeling. I took a book, looked at its picture and title and thought out loud what I predicted and gave reasoning for my prediction. I then read the book, stopping frequently to make more predictions as well as check to see if my prior prediction was correct. I used this same explicit instruction for teaching prediction to both the blue and red groups.

After teaching the prediction strategy I presented the students in the blue group with a short story. On the cover of the story was a crow, turtle, and raccoon that were all huddled together talking and there was a lake in the background. The title of the story was Crows Plan. I asked the students to each come up with a prediction on what they thought the book was going to be about. Desmond’s prediction was “this is going to be about animals that eat plants” (Audio recordings, 2016). This struck me as odd as there were no pictures of plants on the cover of the
story. Yolanda’s prediction was “the story is going to be about producers and consumers” (Audio recording, 2016). Yolanda’s prediction told me she was activating background knowledge but was referring to the science unit we just completed and was not taking into account the title of the story or the picture she was looking at. Maria’s prediction was “this story is going to be about frogs” (Audio recordings, 2016). This answer, just like Desmond’s struck me as odd as there were no frogs pictured in the story. With the initial predictions, I realized that the students struggled taking the picture they were looking at, connecting it to the title, and activating background knowledge in order to make a successful prediction. I implemented some explicit teaching and modeling which matches what Hollenbeck (2013) said when she conducted her study on comprehension strategies. Hollenbeck (2013) states:

   It is also essential to understand what is meant by “explicit” comprehension instruction, which must involve techniques such as teacher modeling via think-alouds, articulation of strategy cues, and the integration of guided and collaborative practice using a gradual release of responsibility model (p. 123).

In order to help my students it was necessary for me to explicitly help them in order for them to be successful in their comprehension of the prediction strategy. In order to do this I needed to model my thinking to help get them going with their text. After some guidance and an explicit example, I stated;

   I am going to help you, I am going to look at the title and see that it says Crows Plan, I am now looking at the picture and see that it has a crow in it and he seems to be talking to his friends, I am going to predict that the crow is making a plan with his friends maybe to go play in the park that is behind them. (Audio, 2016)
Once I modeled my thinking to get the students going the students started to slowly pick up on what to do and come up with ideas. Maria chimed with her own prediction using the title and the picture and stated “Maybe they are going to play hide and seek or spy on people” (Audio recording, 2016). My initial model of a prediction successfully helped the students in this group to start making predictions that accurately reflected the story. After reading to them and checking to see if their predictions came true or not the students were showing progress. One page of the story told about how the lake used to flow clean and now it was littered with trash, Desmond made a prediction that “they are going to clean up after all the people who threw their trash” (Audio, 2016). My initial model of thinking out loud and showing how I used the title and the picture was able to successfully help the students to create their own predictions based on the words in the story and the picture they seen. They still required a lot of modeling throughout the story I then gave them a post-test that came from Reading A-Z to check their comprehension. These results can be seen in table four.

Table 4

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Student Percentage Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desmond</td>
<td>50%</td>
</tr>
<tr>
<td>Yolanda</td>
<td>60%</td>
</tr>
<tr>
<td>Maria</td>
<td>40%</td>
</tr>
</tbody>
</table>

Desmond was able to answer half (50%) of the questions correctly; telling me that using the prediction strategy was somewhat useful for him. Yolanda answered 60% of the questions
correctly and Maria answered 40% of the questions correctly. Although there was no pre-test for this strategy, the results tell me that thinking out loud and using explicit instruction and having the children constantly make predictions on what would happen next and then checking to see if their responses were correct, somewhat helped the students. Modeling for this group helped them more than if they were to just be left alone to make the predictions after the initial teaching of the strategy. Dewitz, Jones, and Leahy (2009) state; “Because comprehension is a cognitive process, teachers must think aloud to verbalize the thought process taking place for each step of strategy application” (p. 104). Making predictions is a process that requires teacher modeling and explicit instruction. These results show that the students still struggled with the comprehension of the story read.

The red group had very different results. This group also was given the same lesson as the blue group prior to reading their book. The children in this group were able to tell me what it meant to make a prediction and were able to do so by looking at the cover of the book and reading the title. When asked what prediction meant Kevin stated; “It means to take a guess, like look into the future” (Audio recording, 2016). The book that this group was assigned was Barak Obama by R. K. Burrice. I asked for the students to make an initial prediction and Quin stated “this book is about Barack Obama, he was the first black president” (Audio recording, 2016). In doing this Quin was able to successfully use the title and the picture on the front of the book to make his initial prediction as to what the story would be about. As we read the book together, the students could not make any predictions about what was going to happen next. Doug stated; “We cant predict what will happen next because we don’t know anything about him, we just know he is our president” (Audio recording, 2016). With Doug’s statement, it proved to me that having appropriate schematic understanding when it comes to reading is highly important in
order to be able to comprehend the text. For this group I gave them a reading comprehension quiz that came along with the Reading A-Z story. In this quiz the students did moderately ok, they had a hard time answering the comprehension questions, which tells me that they did not fully understand what it was that they had read. Their results can be seen in table five.

Table 5

*Comprehension Scores*

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Student Percentage Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quin</td>
<td>60%</td>
</tr>
<tr>
<td>Doug</td>
<td>50%</td>
</tr>
<tr>
<td>Michael</td>
<td>60%</td>
</tr>
<tr>
<td>Kevin</td>
<td>60%</td>
</tr>
</tbody>
</table>

Kevin, Michael, and Quin scored a 60% on the comprehension test, and Doug scored a 50%. These scores on the post-test show that the students struggled to gain the complete meaning of the text. This particular group was able to successfully define what it meant to make a prediction, but was unable to successfully make predictions with meaning. They also could not make any predictions on what they thought would happen next. The results of this matched with the results from the comprehension scores show that in order for students to successfully comprehend what it is that they read and use the prediction strategy that they need to have sufficient background knowledge.
Both groups of students proved that having a lack of background knowledge would make reading comprehension more difficult. The blue group had similar results on their post-test as the red group, but also had a lot of teacher guidance and help when it came to making their predictions. This tells me that without the explicit instruction and modeling throughout the story they would not have been as successful as they were. The red group struggled significantly, but was able to verbally relay that they did not know what to say because they did not know anything about the subject. In all, if students have a strong schematic understanding in all areas it will help to enhance their ability to accurately make predictions as well as comprehend what they read.

**Impact of Referencing a Text Appropriately**

Through the course of this research it came about that students have a difficult time referencing a text appropriately in order to complete a story map. According to the staff and students questionnaires both the students and staff had said that they have used them as seen in table one. The staff questionnaires, as seen in table two above, show that they have used it but three out of the seven staff members state that it was an unsuccessful tool to use. As Jessie states “Children have a difficult time connecting or completing the writing for the map” (Staff Survey, 2016). Jessie is explaining that children sometimes struggle with the writing aspect that the story map has and even comprehending what they story map is asking for. Jessie’s statement proves Mason et al. (2012) findings that “The development of good foundational skills in reading comprehension, writing, and language is necessary for students’ content literacy success” (p. 123). If students were to have a solid grasp on comprehending what the story map was asking as well as a strong ability to write, perhaps story maps would be easier for the students to use. Her statement has proved to be true in my research. Students in the blue group had a very difficult
time completing the story map to its entirety. The students’ questionnaires, as seen in table three above, also show that they have used the tool but have a hard time with it. In the red group, Kevin states, “This is just too hard” (Student Survey, 2016). Kevin’s statement agrees with the results of the questionnaire (table three) where he indicated that he has used the story map strategy but did not find it to be successful. Which has proven to be apparent in the outcomes of this portion of the research using the story map strategy.

For this portion of the research, I met with both groups individually and went over what a story map is and how to complete one. I first read a book aloud to them and modeled out loud how I was filling out my story map. The students helped me to fill it in as well. I asked them questions that pertained to the topics on the story map and explained my thinking as I was completing it. I then told them that they were going to read a story and fill one out on their own. For the blue group I had a simplified version of a story map (Figure one) that met their ability level and one for the red group that was a bit more intricate so that it matched their ability level (Figure two). I gave the students books to read that also coordinated to their reading levels and had them read the story independently and then fill out the story map. Once they filled out the story map I asked each student a series of questions to see if they comprehended what they read.
Figure 1. Simplified story map to aid in the comprehension of reading a text.

Figure one is a simplified version of a story map designed to help readers who are in a lower reading group or beginning readers. This story map asks for the basics that will be found
in a story. It is designed to help the reader to map out the main idea and characters that are in the text as well as to find what the problem was and what the solution to the problem was. Story maps are designed to help aid in comprehension with children reading independently. Eason, Goldberg, Young, and Geist (2012) state that “A broad range of tasks requires children to comprehend written text, particularly as children progress in school and are expected to learn more independently” (p.515). Using a story map that fits the needs of the student is aiding in the increase of the child mapping out the details of the text as well as helping them to comprehend and learn while being independent.
Figure 2. Intricate story map to aid in the comprehension of a text for higher leveled students.

Figure two is a more intricate story map. This story map requires the students to identify more than just who the character is but who are the main characters as well as minor characters. This story map also requires the students to come up with details that help support the plot or the
problem. Using a story map for students who are in a higher reading group will help to make the students aware that there are many features in a story and all of them have meaning to help aid in the complete comprehension of the text.

When I met with the blue group after they were completed with their task, I took their story maps and had them explain to me what they wrote. I noticed that Desmond just copied the story into his map and didn’t put the appropriate answers in the correct sections. I asked him why he put what he did in the sections and he responded with “I put it there because I got it from the book because the book said so” (Transcripts, 2016). Desmond’s response told me that he didn’t fully understand what was being asked of him when it came to filling in the story map. Desmond was not thinking about what the story map was asking of him and made me wonder if he fully understood the outcome that the story map was directed at giving. Oliver (2009) states “To foster relational thinking, researchers suggest it may help to give students a specific learning goal as they engage in their reading” (p. 404). Desmond’s response tells me that perhaps I didn’t explain in depth what the story map was intended to do and Desmond took it as a basic sheet to just fill out. In reading Maria’s she did the same thing as Desmond and just copied sentences from the story and placed in into the map. Maria’s work showed me that she too was filling in the story map to fill it in and did not take any real meaning away from the work. The results of the story maps made me think whether or not the students fully understood what to do. When we filled out the story map together they were able to answer the questions on where the story took place, who the characters were that were in it, and the problem and solution of the story. In all, none of the students in the blue group correctly filled in the story map with 100% satisfaction. The results made me realize that they didn’t comprehend what they were reading as well as what
the task at hand was requiring them to do. The students did not understand what the end goal was when using the story map.

In meeting with the red group, which is the higher group, I repeated the same steps as I did for the blue group. This group was able to help me successfully fill in the story map together. When I released them on their own to complete the task, I noticed that they too were copying the words from the story onto the story map. The results are almost the same as the blue group, except in this instance the students were writing in the correct answers just not using their own words. I met with each student individually and looked at his or her map, they were able to put the correct answers into the places but they were not able to put the story into their own words. I asked Quin why he had just copied the story and he replied “because you’re supposed to copy details from the text, that’s how you get points” (Transcripts, 2016). This immediately started to worry me. At this time of the research we as an entire class have been preparing for the state ELA tests, the students have been taught to copy details from the text in order to get points on the NYS test by the people who score them. Examples were shown on how to get one to two points on a short response answer and in order to do so they have to have details from the text. I pulled the red group back together and went over their work with them and explained that a story map is to help them organize the story so they could better comprehend what they were reading. When we went over their work, Kevin said out loud “Ms. Cassata, this is too hard and confusing” (Transcripts, 2016). When I asked what was so hard about it, Kevin stated, “I don’t like the writing, it is too hard” (Audio recording, 2016). With Kevin’s statement I realized that writing was a difficult task and was taking away from the real purpose of the strategy, which is to increase reading comprehension.
I took into account what the students were saying, and decided that if the staff has found it to be too difficult and the students find it too hard then this is not a strategy that should be implemented. These results that I have are different than what Oliver (2009) came up with when having students use concept maps to help increase reading comprehension. Oliver (2009) found that “concept maps are a promising strategy for improving reading comprehension, particularly for helping learners understand relationships used by the authors of expository texts” (p. 404). Concept maps are slightly different from a story map but both require the student to look back to the text and fill in the appropriate areas with the appropriate information under the sub headings. The students in my study group had a hard time referencing the text and writing down appropriate answers to complete the story map. I am unsure if the writing is deemed as too hard because of all of the state exam preparations that we have done or if this is simply just too hard. I know that it has been repeatedly stated to the students that they need to copy from the text in order to earn points and score well on the exams. Unfortunately we are a “teach to the test” school and are trying to raise our scores so that we rise up from being an underachieving school. The “teaching to the test” makes me wonder if all of the test preparations are confusing the students and impeding their ability to learn new strategies to help them better comprehend what they read.

Implications and Conclusions

Based on the findings of my research, several implications can be presented to teachers of students who struggle with reading comprehension. These implications include a variety of strategies that help students increase their reading comprehension score, strategies that help increase their vocabulary, the importance of schematic understanding, and referencing a text
appropriately. Often times students who are low achieving readers need additional assistance in learning reading strategies to help them increase their comprehension of a text, it is important for teachers to know how to connect with their students and help them become successful readers. According to Hagaman, Casey, and Reid (2012) “Recent assessments of the reading skills of students in the United States have found that only about one third of all fourth graders read proficiently at grade level” (p. 110). Knowing that a significant amount of children do not read at grade level is crucial for teachers to be made aware of. Teachers must keep in mind that finding and using successful literacy strategies is critical if we want to improve the reading of all students.

The first implication to teachers that I found during my research, and is successful in teaching students to help improve reading comprehension, is the importance of having sound vocabulary knowledge prior to reading a text. The strategy that was found to be successful was pre-teaching the vocabulary to students prior to reading the text, which is reflected in the students’ pre and post-test scores. According to the staff and students questionnaires, they too found it to be helpful and enjoyed the strategy. Based on the teacher questionnaires having images available that go along with the words is helpful as well as having vocabulary games and centers activities that focus on the words being taught. The more exposure to the words, the more likely a student will fully understand what the word means. The staff questionnaire also pointed out that guided reading is successful in raising comprehension scores. Guided reading gives the teacher the ability to work in small groups with the students and help explain what some words mean as well as clear up any misconceptions that may arise. Guided reading can be easily put into the daily schedule by creating a specific time for it and having other centers activities for the students to participate in when they are not meeting with the teacher.
The second implication for teachers that my research found is the importance for students to have schematic understanding, a solid amount of background knowledge, when it comes to reading a new text. Students in my research struggled tremendously with making connections from the text to the background knowledge they had. With a lot of teacher prompting the students were slowly able to make connections to real life situations to understand what it was they were reading. According to the staff questionnaires this particular knowledge was helpful in teaching reading comprehension. My suggestion for teachers is to be sure that the students have had experience with the topic of the text. Talk to the students, ask questions, and give helpful information to the students so they can build their background knowledge. To help students build their background knowledge, relate all new information to something that they can relate to or may have experienced in their lives. Give explicit instruction to the students so they learn how to think and relate it to something they know or have experienced. Baker, Chard, Fien, Park, and Otterstedt (2013) state “Compelling evidence indicates that explicit instruction has a positive impact on a range of student academic outcomes, particularly for students who are at risk for academic difficulties” (p. 334). Explicitly teach strategies such as using prediction to help the students to raise their comprehension scores. In my research, I taught the prediction strategy to the students and saw their comprehension scores rise but only after they had built a strong schematic understanding for the topic of the text we were reading.

The third implication for teachers is to explicitly teach students how to correctly reference a text and find the answers inside of it. In my research, I used story maps to aid in the comprehension aspect of reading. Story maps proved to be a difficult task for all of my students to do. I noticed in their work that they did a lot of copying complete sentences from the book. Sometimes the sentences would match the appropriate box and other times they were just
copying from the book in hopes that they would get the correct answer. In the staff questionnaires, they too noted that story maps were a difficult task for the students to do. The writing aspect proved to be difficult for the students. According to the staff questionnaires, teaching students how to write is an entire task in itself and does not help raise the reading comprehension of students. My suggestion for teachers is to give constant aid when students are using a story map. I would also give the students story maps that meet their ability level and also allot time for them to practice using a story map independently so they can build up their ability to properly fill it out. Students who are able to complete a story map independently can work on them during independent reading time and then once a week during the guided reading session they can go over their work with the teacher and fix any problems they may have run into. This strategy can be easily implemented into the daily schedule.

The main focus on this study was guided by the research question “What specific literacy strategies can help low achieving fourth grade students who come from an urban setting increase their reading comprehension?” I used a variety of tools in order to collect data to answer the research question. These tools were teacher and student questionnaires, student work, and a transcription of the recorded working sessions. The findings of the research showed that with explicit instruction using the literacy strategies discussed in the research were successful. The strategies helped increase the comprehension in both groups but also revealed that some students struggled when required to write or utilize background knowledge. The research also revealed that using story maps was a difficult strategy for the students to use independently. Students who lack the ability to write their own thoughts have a difficult time completing a story map even when the story map is tailored to fit their ability level while using an appropriate text that meets their reading level. Implications for the teachers include using explicit instruction as well
as pre-teaching vocabulary and making predictions. The implementation of story maps is recommended but requires a lot of teacher assistant and should be closely monitored until the students have a solid grasp on how to use them independently.

The main limitation of this study was the time frame allotted to conduct the research. If I could do my research again, I would like to have more time to implement the strategies as well as spread out the time and the practice given between the pre and post-tests. I also feel that it would be beneficial if I had utilized more literacy strategies to see what was really the best strategy or strategies to use to help increase the reading comprehension of my students. If I had more time, I would have liked to implement some of the studies that I read about in the literature I researched.

After finishing the research I am still left with a few questions regarding raising the comprehension levels in my students. The one question that looms over me is would implementing multiple strategies at once rather than individually have had a better outcome on raising the comprehension in the students? In all of the research I had done the articles discussed the importance of explicit instruction as well as implementing multiple strategies at once. The strategies are methodically thought out and combined together because they have proven to work. If I could do this research again, I would focus more on implementing multiple strategies during one session over the course of a couple of weeks. In looking at the use of multiple literacy strategies, I would like to present this information to the principal of the school and see if we could reconfigure the way that the intervention block is used during the students’ school day. I feel that if the 30-minute block was tailored more to the students needs rather than using the programs the school sets up we would better meet the students needs and help to increase their reading comprehension levels.
In conclusion, students who are in an urban setting have lower reading comprehension skills compared to their suburban peers. It is not that these students do not possess the ability to learn and do well, it is that they are just viewed as behind. With the information available on what literacy strategies to use to increase reading comprehension we could easily bring these students up to par. When teaching students who live in an urban setting, it is important to be informed about which strategies can be used in the classroom in order to support their reading comprehension skills.
References


Appendix A

Faculty/Staff Questionnaire

Name: ________________________     Position: ______________________     Number of years teaching:

Please circle Yes or No to indicate if you have used the comprehension strategies listed below and Yes or No to indicate if it was successful with your students. Below each strategy, please explain why it was or was not successful.

1. Pre-Teach Vocabulary: Yes     No     Successful: Yes     No
   Why or Why not?
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

2. Story Maps       Yes     No     Successful: Yes     No
   Why or Why not?
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

4. Prediction       Yes     No     Successful: Yes     No
   Why or Why not?
   __________________________________________________________
Fill in any strategies successfully used with students that are not listed above.
Appendix B

Student Questionnaire

Name: ____________________________
Grade: __________________________

Please put a check mark in the box next to the reading comprehension strategies you have used from the list below. If you think a strategy has helped you understand what you read, put a star in the second box.

1. Pre-Teaching Vocabulary. Knowing what the word means before reading.

Why or why didn’t this strategy work for you? ☐ ☐
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

2. Story Maps

Why or why didn’t this strategy work for you? ☐ ☐
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

3. Prediction- Making a prediction on what the story will be about and what will happen next.

Why or why didn’t this strategy work for you? ☐ ☐
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
List any other strategies you have used that helped you understand what you were reading and explain why you think it helped.
Appendix C

Blue group vocabulary questions

1) What is a camel?
2) What is an elephant?
3) What is an elk?
4) What are foxes?
5) What is a giraffe?
6) What is a mountain?
7) What are polar bears?
8) What is a zebra?
Appendix D

Red group vocabulary questions

1) What is a biologist?
2) What does carnivore mean?
3) What does extinction mean?
4) What does hibernating mean?
5) What is a muzzle?
6) What does omnivore mean?