# How does reciprocal teaching scaffold reading comprehension of non-fiction text? 

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# HOW DOES RECIPROCAL TEACHING SCAFFOLD READING COMPREHENSION IN NON-FICTION TEXT? 

by<br>Mary Delaney-Beane

A Thesis<br>Submitted to the Department of Language, Literacy, and Sociocultural Education<br>College of Education<br>In partial fulfillment of the requirement<br>For the degree of<br>Master of Arts in Reading Education<br>at<br>Rowan University<br>December 19, 2016

Thesis Chair: Dr. Susan Browne
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## Dedications

I would like to dedicate this thesis to my dear friend and former colleague, Jodi Gellman, without whom I would never have been able to accomplish this, or my graduate program. I would also like to dedicate this to my three boys, Sean, Matthew, and Christopher, and my husband, Chris. You have been patient and encouraging throughout my entire graduate program. Thank you.

## Acknowledgments

I would like to thank the school principal for permitting me to work with the students in this study, as well as the families who allowed me to work with their child.

I would also like to thank my classmates. Working together and supporting each other was a positive experience.

Abstract<br>Mary Delaney-Beane<br>HOW DOES RECIPROCAL TEACHING SCAFFOLD READING COMPREHENSION? 2016-2017<br>Dr. Susan Browne<br>Master of Arts in Reading Education

This study was conducted in a suburban fourth grade class in New Jersey. Its purpose was to examine how Reciprocal Teaching scaffolds comprehension when reading non-fiction text. Students were evaluated prior to the study. Teacher modeling preceded students' application of the strategies. Throughout the study, students were evaluated on whether they were using the four strategies, predicting, questioning, clarifying, summarizing, in a manner that made sense and was related to the text. Rubrics were used to evaluate each of the four strategies. Additional data came from the discussions among students while reading text together. Data analysis showed the use of groups provided unplanned discussions through questions among the students as well as when making text connections.

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## Chapter 1

## Introduction

As I reflected upon my years in teaching elementary students between 1993 and 2003, I examined how instruction has changed. I recall the Language Arts block of time each morning was dedicated to literature and units of study surrounding fiction books chosen by the district. Non-fiction reading happened during Social Studies and Science. I recall giving my students strategies for comprehension. For example, the students used post it notes to write down what needed clarification. However, there was not a strong non-fiction emphasis at that time, and the texts were not motivating. Content area reading came from the district text books and occasionally, from magazine articles. Currently, the Common Core State Standards require reading strategies to focus on nonfiction in a way that has changed from thirteen years ago, when I was a classroom teacher. My shifts as a teacher with students I work with during my graduate work and the emphasis of non-fiction contributed to my focus for this study.

Some of my reading for my graduate classes has connections to my own children and my focus as well. For example, as I read and learned in Content Area Literacy class, I wondered how my twins would do as they were about to enter Middle School. Had I ever paid attention to whether they understood non-fiction? I realized that the answer to that question is "No". I don't think I paid much attention to non-fiction with them. When we read together, we chose fiction books and enjoyed reading aesthetically. I knew they were being taught valuable strategies at school, but I wondered if they would struggle in their classes in middle school. I was reminded of the overwhelming task they would have in the higher grades. They both read fluently, but I wondered how would they perform in
middle school Social Studies and Science. Reading to learn is a consistent part of school and life. The children need the strategies I am learning through my course work and my research. For my twins, my younger son, and the students I work with and those I will teach in the future, I am motivated to provide opportunities for practical application of strategies to comprehend.

Since I am not currently a classroom teacher, I arranged to work with fourth graders in the school where I previously worked. I discussed possible ideas for my study with the classroom teacher. I shared my thoughts and questions with her and she shared various areas of focus in the curriculum. We discussed what I had been learning in my graduate courses as well as how the requirements in fourth grade had become an increased concern for her. I also shared how I had been enlightened during my graduate work and how my concerns for my own children have filtered into my brainstorming of possible research questions. After our conversations, I began narrowing down my thoughts. It became clear that my study would best be focused on benefitting the students in the class in conjunction with the high demands of the curriculum. There was a need for the classroom teacher to remain focused on what she needed to accomplish. Another need was for consistency. Focusing on a practical way to work with non-fiction led to the determination that Reciprocal Teaching would be a meaningful choice. This method of using strategies for comprehension provides several elements from which students benefit. For example, collaboration among students with various reading levels, a way to engage students with various comfort levels, practical strategies for non-fiction text and metacognition all can scaffold comprehension. Reciprocal Teaching would also benefit the class with plans the teacher had for later in the school year.

When I chose to do my study on Reciprocal Teaching, I pondered the research question. I developed several possible questions which incorporated the group aspect of the method as well as the modeling aspect which is important to the process. I considered the notion of scaffolding as it relates to Vygotsky's Zone of Proximal Development Theory. From there the question "How does reciprocal teaching scaffold comprehension?" emerged. Further focus, led to sub questions, "How does teacher modeling empower student participation in predicting, questioning, clarifying and summarizing?" and "How does it encourage students to predict, question, clarify and summarize in a classroom?"

As the school district prepares for testing along with their regular curriculum, the students' classroom teacher is currently working on different areas in the Language Arts. To support the classroom teacher as well as for my purposes, I chose a Science text among some options she gave me, which includes articles about animals. For fourth graders, this topic serves as a good motivator and helps to engage them while they navigate through non-fiction. The text is appropriately geared for fourth graders. I modeled predicting, questioning, clarifying and summarizing using this text and the students applied the strategies afterward. I have collected data which allows me to analyze if the students are comprehending the text with the use of the Reciprocal Teaching method.

## Purpose Statement

This study examines how Reciprocal Teaching helps fourth grade students comprehend non-fiction text. My goal for the study was to collect data while students
work toward independence with predicting, questioning, clarifying and summarizing the non-fiction text they are reading. I believe in the necessity to improve students' comprehension of non-fiction text. It is an area that I believe as a teacher and as a parent has not always had enough emphasis. Good elementary school readers can end up struggling in their content area classes in middle school and high school because a lack of emphasis occurred with non-fiction during the younger years. Students who have learned to read must then read to learn. Observing students to see whether the Reciprocal Teaching strategies have an impact on their comprehension is critical to the findings of the study. Comprehension may take place by way of the metacognition of students as they predict what they might learn, question or wonder about the text, acknowledge when they need clarification about a word or idea in the text, and then retell the key points, or summarize the text in logical order. After teacher modeling, the students gradually take on the responsibility of the four strategies. "The teaching model of reciprocal teaching allows the teacher and students to scaffold and construct meaning in a social setting by using modeling, think-alouds and discussion." (Oczkus, p.2)

The reciprocal teaching method is rooted in constructivism and promotes the gradual release of responsibility. The theme of a construction site in the article, Caution! Hard Hat Area! Comprehension Under Construction, describes the notion of an architect who predicts, a job inspector who clarifies, an electrician who questions and a bricklayer who summarizes. Working through the different jobs allows students to take on more responsibility together as a group and eventually independently. Having the ability to apply the four strategies may allow for better comprehension of the text.

Taking on the role of questioner: Revisiting reciprocal teaching, is an article where the author realized the strategies in reciprocal teaching are conversations between teachers and students where they come to a shared meaning of text. With a concentration of expository texts, Williams worked with small groups first to make reasonable predictions about the text. Through teacher modeling of each strategy, predicting, clarifying, questioning, and summarizing, students gained confidence to then take on the role of teacher. Williams stated, "Part of the power of the reciprocal teaching strategies is the scaffolded instruction is provides."

My research about Reciprocal Teaching using non-fiction text is important to the field. The emphasis on non-fiction or content area reading is across lower and upper grade levels. Comprehending non-fiction can be challenging. Content area reading is where students must read for information. Efferent reading may not always be engaging and non-fiction texts are frequently difficult to comprehend in upper grades. The research about the use of reciprocal teaching shows how the four comprehension strategies and collaboration engage the students and can build students' confidence. Having a framework in which to apply strategies is useful to scaffold comprehension of text of any kind. In this thesis, the focus is on non-fiction text. Since the Reciprocal Teaching method allows students to think about the text and what they are reading, my question emerged into "How does Reciprocal Teaching scaffold reading comprehension of non-fiction text?" Reciprocal Teaching provides students with an opportunity to think about what they are reading. Through this process, which includes dialogue among classmates, the potential for better comprehension increases.

## Overview of chapters

Following this chapter, the reader will see my Literature Review in chapter two. Within chapter two, there are multiple references associated with reciprocal teaching, scaffolding comprehension, efferent reading, and engagement. Summaries of articles and parts of books I read on the subject are included. The four areas of review highlighted in the Literature Review provide a framework for the thesis and the interwoven areas provide pertinent information toward answering the question, "How does Reciprocal Teaching scaffold comprehension of non-fiction text"? Chapter three reveals the context of my study, the research design, and the methodology. The demographics of the classroom and the district give readers insight into the students with whom I am working. Explanation of the methodology of this qualitative study focuses the reader to understand the type of research involved. Chapter four is the analysis of the data I collected and chapter five concludes and summarizes my study. It also includes the implications of the study and any limitations or needs for further study.

## Chapter 2

## Literature Review

Comprehension of non-fiction or content area text can be a difficult task for any reader. Over time, teachers have utilized various strategies to help students comprehend text. Having experience with multiple strategies is useful for students as they navigate through text that may be difficult. Applying strategies can be challenging so teachers must model them and gradually release responsibility onto students. Reciprocal Teaching provides four strategies which can be used when reading. Per the developers of Reciprocal Teaching, Palincsar, David and Brown, "Reciprocal Teaching is an instructional procedure originally designed to enhance students' reading comprehension. The procedure is best characterized as a dialogue between teacher and students. The term "reciprocal" describes the nature of the interactions: Each person acts in response to the other (s). This dialogue is structured using four strategies." (Oczkus, 2010) Predicting, Questioning, Clarifying and Summarizing can help with comprehension of text and the focus of my research is with non-fiction and how Reciprocal Teaching scaffolds comprehension. This chapter outlines four areas of review including Reciprocal Teaching as well Scaffolding Comprehension, Efferent Reading, and Engagement.

## Reciprocal Teaching

Per Lori Oczkus, "Reciprocal Teaching is a scaffold discussion technique that is built on four strategies that good readers use to comprehend text: predicting, questioning, clarifying and summarizing (Palincsar \& Brown, 1984)." With predicting, students are prompted to preview the text, including text features to anticipate what the text will be
about, and during reading, students may anticipate what may happen next. Modeling questions helps students then share their questions or wonderings and "be the teacher". Clarifying helps students monitor their comprehension as they identify problems they are having with difficult words, for example. Summarizing often happens at the end of a text, however, prompting students to summarize during a text provides them with additional opportunity.

Ruth McAllum highlights how reciprocal teaching is an inclusive instructional strategy that has shown to improve reading comprehension, in her article "Reciprocal teaching: Critical reflection on practice". Reciprocal teaching as an evidence-based practice is examined. Palincsar, Brown and Klenk developed the concept between 1984 and 1991 as a teaching strategy for students who decoded well but had weak comprehension skills. Over time, reciprocal teaching has been shown to be effective with diverse groups of learners.

Reciprocal teaching is aligned with Social Constructivism and with developmental learning theories described by Vygotsky. His belief is the process of learning involves moving into a zone of proximal development which is supported by dialogue between learners, and includes teachers. By sharing schema, construction of new ideas and understanding can occur. Because reciprocal teaching is done in a cooperative learning fashion, a sense of community exists. In addition, as dialogue takes place, students share their own backgrounds which in turn validates them. Through this process, the notion of cultural responsiveness happens. Furthermore, Oczkus (2010) attributes the sense of community to being listened to and the development of valuing growth through experimentation and enquiry. Oczkus adds, "Reciprocal Teaching makes
it okay for students not to understand text." Difficulties in understanding are attributed to challenges in the text rather than student inadequacy. Rituals such as turn taking and reflecting occur which promotes connectedness, shared responsibility, and leadership. Mixed ability groups allow students to learn from each other as well. Reciprocal teaching embraces students' experiences and builds on the knowledge and understanding they bring to the text. Westera (2000) identified reciprocal teaching as an example of metacognitive strategy instruction with an emphasis on thinking about thinking and skills for self-regulated learning during reading. Hattie's (2009) meta-analysis studies ranked reciprocal teaching as the third highest-impact strategy out of 49 teaching strategies. Other studies included those by Westera, Rosenshine and Meister and Palincsar and Brown. These studies also found improvements in comprehension after implementation of reciprocal teaching was used over time.

Furthermore, McCallum's article also discusses implementation. Westera (2013) suggested that to see significant results, twelve sessions were needed. Across the studies, the constant was that a conversational routine following text introduction and prompting prior knowledge, predicting, clarifying, questioning, summarizing and further predicting is best.

A study was conducted to investigate the effects of the four strategies used in 210 elementary-school students' reading comprehension. Students taught the four reading strategies of reciprocal teaching in small groups, pairs, or instructor-guided small groups. Sporer, Brunstein and Kieschke, who wrote "Improving students' reading comprehension skills: Effects of strategy instruction and reciprocal teaching", applied three criteria to evaluate the four conditions: (a) the effectiveness of the conditions, (b) the maintenance
of strategies across time, (c) the transfer of the learned strategies to experimenterdeveloped task and standardized reading comprehension test. Therefore, experimenterdeveloped task and standardized comprehension test measured outcomes. There were 210 third to sixth graders from a medium sized German town who participated, of different abilities. The main objectives of the study were to investigate the effects of explicit instruction of reading strategies on third to sixth graders' strategy acquisition and reading comprehension achievement and to study the impact of practicing the strategies in reciprocal small groups, pairs, and instructor-guided groups. The major results consisted of three things. First, students in the intervention conditions were better able to use the strategies compared with the control students. Second, students in the three intervention conditions scored higher on the near transfer test of reading comprehension both on the posttest and the follow-up test. Finally, there was improvement with the Reciprocal Teaching students when compared with the control students.

In "The Effects of Reciprocal Teaching on Reading Comprehension in Mainstream and Special Education" by Takala, the goal was to find out if reciprocal teaching was superior to traditional methods when teaching fourth and sixth graders with typically developing students and when teaching children who had specific language impairment (SLI). Reciprocal teaching has been used with children with learning, behavioral and mild disabilities in elementary groups. Decoding skills were also studied because of the link to reading comprehension. The study took place in Finland and interventions were planned for 5 weeks each, 2 lessons per week, in two parallel classes, one in fourth grade, one in sixth grade. The four strategies were practiced in several different ways which kept the students engaged. Pre-tests and post-tests were used.

Feedback from the teachers and students were also included in the study. The students in special education benefitted from this way of learning, which was modified. The mainstream students achieved results during the lessons. The feedback was positive overall. However, some changes could have improved the strategy use. For example, use of small groups in this study would have been beneficial because small groups would allow for better, more active dialogue.

## Scaffolding Comprehension

"The teaching model of reciprocal teaching allows the teacher and students to scaffold and construct meaning in a social setting by using modeling, think-alouds and discussion." (Oczkus, p.2) Scaffolding refers to a variety of instructional techniques used to guide students toward better understanding and eventually greater independence with their learning. As the metaphor suggests, teachers provide support that helps students reach higher levels of comprehension and skill acquisition that they would not be able to achieve without assistance. Like physical scaffolding, the learning strategies are gradually removed as they are no longer needed, and the teacher gradually shifts more responsibility over to the student.

By revisiting Palincsar's and Brown's research on reciprocal teaching, the author of the article, "Taking on the role of questioner: Revisiting reciprocal teaching", realized the strategies in reciprocal teaching are conversations between teachers and students to come to a shared meaning of text. With a concentration of expository texts, Williams worked with small groups first to make reasonable predictions about the text. Through teacher modeling of each strategy, predicting, clarifying, questioning, and summarizing,
students gained confidence to then take on the role of teacher. In time, discussions of text ensued in a more conversational tone. The focus of the article was on the role of questioner. From gaining confidence in the role, students could also take on the role of clarifier more naturally. As Harvey and Goudvis (2000) asserted, the questioning strategy pushes readers forward in understanding text. Williams stated, "Part of the power of the reciprocal teaching strategies is the scaffolded instruction it provides."

Providing students with strategies to help with comprehension is critical. In the article by Marcell and Juettner, "Caution! Hard Hat Area!" some problems are described. A problem that may arise is that students may not know how to apply the skills they learn to their independent reading. For example, if a student is reading to learn something on their own, he/she should be able to apply the comprehension skills to that text. The author revisited the use of Reciprocal Teaching. Comprehension skills are not useful to simply know, but to apply. Having the ability to use the tools to construct meaning of what one reads is crucial. Researchers, Dewitz, Jones, and Leahy (2009) made an insightful, ironic observation: "The asking of an inference or main-idea question by the teacher may undermine the very metacognitive process that students need to acquire, the decision to invoke a strategy when the reader needs it." Since Reciprocal Teaching encompasses multiple strategies, it allows for better opportunity to apply skills to reading. Also, having students "be teachers" gives them an increased opportunity to use metacognition. Both factors lead students to independence of strategy use as opposed to relying on the teacher excessively for guidance. This is an instance when "less is more". In other words, the students can learn more from less guidance once the strategies have been taught and modeled for the students. The reciprocal teaching method is rooted
in constructivism and promotes the gradual release of responsibility. The theme of a construction site in this article gives the notion of an architect who predicts, a job inspector who clarifies, an electrician who questions and a bricklayer who summarizes. This surrounds the group of students who are building collective comprehension. By using each strategy, students can apply the strategies to independent reading for meaning.

## Efferent Reading

Efferent reading is primarily for readers to gain information. Louise Rosenblatt has written about the difference between Efferent and Aesthetic reading. Non-fiction or Content area reading is associated with Efferent reading, which is to "take away" bits of information. In an article called, Bringing Louise Rosenblatt into the Content Areas, I read that Rosenblatt (1980) enthusiastically conveys, "There is no question that the efferent stance is essential" (p. 390). Per Frager (1993), teachers are encouraged to balance the use of text book reading with trade books. This balance of text gives readers a different way to read for information. Furthermore, Rosenblatt underscores the social, emotional, and cognitive benefits of incorporating novel and related works across the curriculum because they allow the reader "...to participate in another's vision to reap knowledge of the world, to fathom the resources of the human spirit, to gain insights that will make his life more comprehensible." (Morowski, p. 7)

In her work on expanding the understanding of fiction and nonfiction literature, Colman (2007) states, "Non-fiction and fiction can have many similar and overlapping characteristics, that nonfiction can have an intense author's voice, that fiction can have informational and expository text" (p. 267).

The Reading, Engaging, and Learning project (REAL) that is the focus of the article, Children's comprehension of informational text: Reading, engaging, and learning, was designed to respond to the national goals of raising reading achievement and closing the achievement gap. The Spencer Foundation funded the intervention study in 2000. During this time, national experts had begun to recommend that children be given more exposure to informational text in the early years of schooling (Snow, Burns, \& Griffin, 1998). The REAL project was a multicomponent intervention study that yielded information about a variety of facets of children's experiences with informational text, including comprehension of text as assessed on a standardized multiple-choice instrument and on a performance assessment, ability to use the features of informational text that enhance comprehension, reading motivation, out-of-school reading activity, instructional practices of the classroom teachers, preferences for reading, and gender differences.

In a study conducted by Bell and Caspari called Strategies for Improving NonFiction Reading Comprehension, a systematic process developed by Vaughn and Klingner was used for improving non-fiction reading comprehension. This Collaborative Strategic Reading (CSR) has similarities to Reciprocal Teaching. It is an instructional approach designed for use in content area reading which can be used with any type of informational text. The four strategies used are: Preview (previewing and predicting); Click and Clunk (self-monitoring for understanding and vocabulary knowledge); Get the Gist (identifying main idea); and Wrap-up (self-questioning and summarizing). CSR is first presented by teacher modeling, role playing and teacher think-alouds. Once the students are comfortable, the teacher facilitates while the students perform specific roles.

## Engagement

Due to the nature of Reciprocal Teaching, students can be active in responding to text. In Vacca and Vacca's text, Content Area Reading, I read, "Students' motivation for reading and learning with texts increases when they perceive that text is relevant to their own lives and when they believe that they are capable of generating credible responses to their reading of the text." (Knickerbocker \& Rycik, 2002).

In a study by DeNaeghel and Van Keer, Vansteenkiste and Maarten, the research indicates that there is a need for further examination of the dimensions of reading motivation and how it relates to comprehension. The study clarified the relation among reading motivation, reading self-concept, reading behavior (i.e. Engagement and frequency), and reading comprehension. It confirmed that recreational autonomous reading motivation is associated with more positive reading behavior and performance, or comprehension. In this study, there were 1,260 fifth graders and their 67 teachers. The analysis of the study indicated that recreational and academic reading motivation comprised of autonomous and controlled motivation.

Oszkus (2005) coined the term "Fab Four" which is for the four strategies created by Palincsar and Brown in 1986. In the introduction of the article by Stricklin, "Handson reciprocal teaching: A comprehension technique", there is an explanation of how teachers show students how to use the four strategies but they do not use the strategies directly. For example, rather than questioning students about a text, a teacher charges a student to create his/her own questions. The responsibilities listed of the teachers are: Activate prior knowledge of words or ideas students will encounter during reading; Monitor, guide and encourage students during reading; Encourage student reflection after
reading, which is crucial to the overall success of reciprocal teaching. An example might be to share which strategy helped them the most and why. Use of props to introduce the Fab Four is suggested. For example, the predictor may wear a scarf and have a crystal ball. The clarifier may have glasses on or have a magnifying glass. The questioner may hold a microphone like a game show host. The summarizer may hold a lasso and speak in a cowboy accent, and oversees lassoing the information in a "to the point" manner. Another hands-on approach can be using puppets. Either method keeps students engaged. The use of charts, bookmarks, dials, sentence starters can all help keep students engaged and help those students who are more shy to take on their role. These and other methods to help implement were included in this article.

Using task cards during reciprocal teaching can enhance the effects of the comprehension strategies. This was described in Iserbyt's and Byra's article, "Design and use of task cards in the reciprocal style of teaching". The task cards hold students accountable which is a key element in cooperative learning. Modeling the use of task cards is important to avoid potential issues such as misuse of cards and misuse of strategies. Clearly instructing students will provide optimal use of the task cards. This can lead to easier facilitating by the teacher while the students work.

## Conclusion

Together Reciprocal Teaching, Scaffolding Comprehension, Efferent Reading, and Engagement all provide ideas to answer the research question How Does Reciprocal Teaching scaffold comprehension of non-fiction text? Considering the strategies, the release of support toward independence, the notion of reading to learn, and student
engagement and motivation, are all important factors. I have found in the literature that the common threads of multiple strategies for comprehension of text, the idea of incorporating students' schema prior to and during the reading of texts, along with dialogue allows for the method of Reciprocal Teaching to be implemented most effectively. Modeling the four strategies is very important so that eventually teachers can take on a facilitator role to allow the students to make meaning of text together. Some further research that may be valuable is the impact of the strategies on younger students. There was reference in an article to "cognitive overload" for younger students. The notion of active dialogue appears to be a critical component to Reciprocal Teaching so further research in that area would be effective. Similarly, Westera felt more explicit fostering of connections through choice of reading material and inclusion of cultural practices and language would be beneficial. An area of weakness with Reciprocal Teaching may be that not all teachers are comfortable being facilitators. Another possible weakness is that this technique may not be as effective with the whole class, as opposed to small groups.

## Chapter 3

## Context

## Community

The study took place in a southern New Jersey suburban school. Its mission is to provide a quality education program that ensures that all students are proficient in the Common Core State Standards \& New Jersey Core Curriculum Content Standards. This program will be delivered in a positive environment, preparing our students to be knowledgeable, responsible, caring, and confident citizens in an ever-changing world. The goals include the following:

- Continue to improve student achievement at all grade levels for all students and close the achievement gaps where they exist.
- Create a cost-effective budget that provides for educational resources as well as preventive maintenance and ongoing facilities improvement in all schools.
- Enhance communication with and outreach to internal and external stakeholders.
- Enhance relationships with internal stakeholders through effective hiring and retention practices and staff training programs.

The district has a total of nineteen schools. There are twelve elementary schools, three middle schools and two high schools. In addition, there is an early childhood school and an alternative high school.

## Table 1

## Schools in District

| Square feet of <br> building space | District grounds | Year oldest school <br> was built | Year youngest <br> school was built |
| :--- | :--- | :--- | :--- |
| 1.7 million | 354 acres | 1955 | 1970 |

The district is one of the largest employers in the region, with a total of $1,651.40$ employees.

Table 2

Teachers in District

| Teachers and <br> other certified <br> staff | Administrators | CHASA | Non-affiliated <br> administration | Non-certified <br> administration | Educational <br> Assistants |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $1,009.3$ | 47 | 41 | 6 | 5 | 331 |

The beginning teacher salary is $\$ 48,377$ and the median teacher salary is $\$ 72,383$. The district is the $13^{\text {th }}$ largest school district in the state. The total enrollment in May 2014 was 11,419 students, from approximately 7,000 families.


Figure 1. Number of Students

The district demonstrates ethnic diversity. There are 59 native languages spoken by the district's students. 2,132 students are bilingual and 237 are English Language Learners.


Figure 2. Ethnic Distribution of Students

Socioeconomically, there are $29 \%$ of students eligible for free or reduced lunch.
Eighteen percent of students are eligible for special education services.
The success indicators of the district are listed below.

Percent (\%) of 2013 grads continuing their education: 94\%
2014 Average SAT Score:
District: Critical Reading, 543; Math, 571; Writing, 551
State: Critical Reading, 501; Math, 517; Writing, 502
Class of 2014 Student dropout rate: 1\%
School. Thomas Paine Elementary School has 380 students ranging in grades kindergarten through fifth grade. The student-teacher ratio is $13: 1$. Thomas Paine received a "Great Schools" rating of 6 out of 10 based on academic quality. There are $57 \%$ of students who are Caucasian, $16.8 \%$ of the students are Asian, $13.5 \%$ are Hispanic, $8.1 \%$ are Black, and $4.1 \%$ have two races. Socio-economically, Thomas Paine
has $21.1 \%$ of students who are eligible for school lunch and $5.7 \%$ of students are eligible for reduced lunch. $73.2 \%$ of students are not eligible for school lunch.

Classroom. Ms. Gilmore's fourth grade class has 19 students. There are 11 boys and 8 girls in the class. The ethnic make-up of the students is 11 are Caucasian, 1 is black, 5 are Asian, and 2 are Hispanic.

Students. There are 8 students who receive Title I support in this class. Of the 8 students, 2 receive Reading support and 6 receive Writing support. There is also a student who receives Speech Therapy. No students are classified with IEPs.

## Research Design/Methodology

The framework of this study is qualitative research. This is used for teachers to investigate and collect data in academic settings. "Emphasis of the qualitative research is upon process and meanings which are not necessarily exposed as functions of quantity amount, intensity or frequency. Further, research grounded in the qualitative paradigm may not be conducted in a controlled value-free environment (Geroy, G., Wright, P. p.27). "The need to gain rich description and perspective for purposes of defining phenomena (theory/knowledge development) suggests a need for qualitative research tools and processes". (Geroy, G. Wright, P. p. 28) Qualitative research aligns with the methods in which my teacher research will collect data from the students as they use comprehension strategies through "Reciprocal Teaching" with non-fiction text. The students will predict, question, clarify and summarize while reading non-fiction text. "Qualitative is an inquiry process of understanding a social or human problem, based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and conducted in a natural setting." (Creswell, 1994. "How does research
work?", 2016, slide 5). Quantitative research is not ideal for this study as it is "An inquiry into a social or human problem, based on testing a theory composed of variables, measured with numbers, and analyzed with statistical procedures, to determine whether the predictive generalizations of the theory are true". (Creswell, 1994)

This qualitative study is taking place in a suburban school district known for its high standards and for its diversity. It encompasses a range of socioeconomics across this large district. The school in which the study takes place is also diverse in its culture and socioeconomics. The classroom in which the study specifically takes place consists of nineteen children of various reading levels. There are three families who speak a language other than English at home. The nature of this study is qualitative as it centers around a comprehension strategy that encourages dialogue and four types of strategies within it. The study focuses on the Reciprocal Teaching method for comprehension of non-fiction text. It is aligned with the qualitative research design due to the goal of improving student learning as the teacher practices comprehension strategies with the students in the classroom.

Per Shagoury and Power, teacher research is research that is initiated and carried out by teachers in their classrooms and schools. Teacher-researchers use their inquiries to study everything from the best way to teach reading and most useful methods for organizing group activities, to the different ways girls and boys respond to a science curriculum. (Shagoury \& Power, p.2) Much teacher research is rich in classroom anecdotes and personal stories. (Shagoury \& Power, p.2)

Per Shagoury and Power, teacher research is a natural extension of good teaching. Observing and analyzing students' needs and adjusting curriculum to fit the needs of all
students for me to come into the classroom to conduct the study. She would provide the groups of students for me based on their schedules.

The students completed a survey I gave them about reading. This allowed me to see their perspective about reading and what good readers do when they have difficulty. When I first met with a small group, I gave them an "interview" to determine their understanding of non-fiction text compared to fiction, and to determine how they perceive non-fiction text. I also asked the students if they knew what "Fab Four" was because Ms. Gilmore told me that the school uses that term for Reciprocal Teaching.

Following this discussion, I modeled the prediction strategy of Reciprocal Teaching. I thought aloud my process of previewing a story, and then making a prediction. This led us to discussing the text features. Students then made their own predictions about the article "Elderly Sea Otter Becomes Basketball Sensation: Behavioral Enrichment at the Oregon Zoo". I explained that we could see while we read, if our predictions made sense. Either new predictions can occur or changed predictions can occur. While the students talked about their predictions, I took anecdotal notes and audiotaped them.

In the following weeks of my study, when I met with more groups of students, I began the sessions in a similar fashion, where I conducted the short interview first and then modeled a strategy before giving them the opportunity to use the strategy while they read. I worked on predicting with another group slightly differently than the first group because upon reflecting in my notebook, I wanted to introduce the concept of "book look" which changed my modeling and students' application of the predicting strategy.

With the "book look", the students could make more developed predictions because they scanned the pages of the article first.

Upon further reflection, I also wanted to share scoring rubrics with the students for each of the four strategies. Therefore, we previewed rubrics for predicting, clarifying, questioning, and summarizing before I modeled each one.

Continuing with the study, I modeled clarifying for a group of students and they applied the strategy as they read the article, "Baby Panda Goes on Exhibit: One More Zoo-Breeding Success Story". During this time, I took notes and audiotaped. I then modeled questioning for a group of students and they applied the strategy when I stopped their reading in the middle of the article and then again when they finished reading the article. That article was the same panda article used with a previous group of students. I took notes and audiotaped them during this process. Finally, I modeled summarizing for a group of students and they retold or summarized the article they read, called "A Brief History of Zoos". Again, I took notes and audiotaped. Each of the articles the students read were from the Modern Zoos text I mentioned earlier.

After each group's session, I read my notes and listened to the audiotapes to organize the data.

## Data Sources

The Burke Reading Inventory and the teacher made interview questions gave me insight about the students' perspectives about what good readers do and their attitudes about non-fiction among other student ideas.

Throughout the study, I used audio-recordings to document group conversations and discussions about the text they read. In addition, I kept my research journal to record my own thoughts and reflections about the study.

The students' predictions, questions, clarifications, and summaries were documented and served as artifacts. I also used rubrics to assess their comprehension strategy use within the Reciprocal Teaching method.

## Data Analysis

The collection of data during this study provided me with information to draw conclusions about how the strategies used in Reciprocal Teaching support student comprehension of non-fiction text. Taking the audio-recordings and my note taking including students' predictions, questions, clarifications, summaries, and their dialogue throughout the study helped me to recognize patterns or themes. The collection of this data helped to determine that Reciprocal Teaching serves as scaffolding for comprehension of non-fiction text.

Chapter four will discuss the results of the student questionnaire and interviews, as well as audio-recordings, student responses, group discussions and my teacher research journal. Chapter five then gives conclusions and implications of the study and possible recommendations.

## Chapter 4

## Data Analysis

## Introduction


#### Abstract

Chapter four is an analysis of the data to answer the research question, "How does Reciprocal Teaching Scaffold Reading Comprehension of Non-Fiction Text?" I collected data from the students' predictions, questions, clarifications, and summaries of a non-fiction text consisting of articles about animals.


The classroom teacher provided me with the students' reading levels, which are listed below. The levels provided me with background information and points of interest as I observed various students interacting together.
$L, M-2^{\text {nd }}$ grade level $N, O, P-3^{\text {rd }}$ grade level $Q, R, S-4^{\text {th }}$ grade level $T, U, V-5^{\text {th }}$ grade level

| Evan - T | Amanda - M/N |
| :--- | :--- |
| Sara - O | Aaron - Q |
| Dan - Q | Samantha - T |
| Lilly - Q | Alyssa - R |
| Joe - Q | Hillary - R |
| John - P | Susan- T |
| Kate - N | Billy - R/S |
| Tim - T | Darren - R/S |
| Len - P | Mac - Q |
| Juan - Q |  |

From the above list, I saw that ten students were on grade level for Reading, five were below grade level and four were above grade level. I worked with a mix of readers
during the study. I found that using Reciprocal Teaching allowed for students on various levels to participate.

The four strategies in Reciprocal Teaching are used to organize my data. In analyzing the data, I noticed positive outcomes of students' strategy-use, indicating comprehension. My assertions are included within the descriptions of the outcomes.

I collected data from the fourth graders over the course of five weeks. Due to the schedules and time constraints of the classroom teacher, I worked with the students who were available during the time allotted to me. In each reading session, I worked with a small group of either four, three or two students. I modeled each of the four strategies, and a variety of students applied the strategies. For example, one small group only used the prediction strategy or the clarifying strategy. However, another group may have used both questioning and summarizing strategies. Each strategy, though, was instructed by me, applied by fourth grade students, and assessed using rubrics and anecdotal notes. The chart below organizes which students worked on which strategy.

## Table 3

Students'Strategies

| Predicting |  | Clarifying | Questioning | Summarizing |
| :--- | :--- | :--- | :--- | :--- |
| Joey Darren | Aaron | Sara | Juan |  |
| Sara | Dan | Samantha | Juan | Amanda |
| Mac | Tim | Alyssa | Samantha |  |
|  |  | Hillary |  |  |

Students observed my modeling of each of the four strategies and used them with the texts provided to them. I took notes in my teacher research journal and audiotaped them while they applied the strategies. The audio tapes provided me clarification of my notes and allowed me to listen again to the dialogue among the students. The rubrics I used provided the organization as well as assessment needed for determining student comprehension. This helped me answer my research question along with the anecdotal notes.

## Participation

Reciprocal Teaching allowed students to participate, whether they were weak or strong readers, or shy or outgoing. I found value in the student participation in small groups. Some students who normally sit quietly in class, became active and responded to their classmates and me. Therefore, I could consider their comprehension of the text. For example, one day when I was working with only Amanda and Juan, I was pleased when the weaker reader, Amanda, contributed to the conversation. Juan was highly motivated to talk about the subject, as was Amanda. Normally, Amanda tends to let Juan, or a student like him, dominate discussions. I was pleased with her participation and it showed me that she was engaged in the text. Through her participation, I saw that she understood the story.

Reciprocal Teaching enabled students to have meaningful dialogue about the text, and to make text connections. The dialogue and discussions among the students was a source for determining comprehension throughout the study. Making text connections contributed to comprehending the text, as well. For example, when Joey first made a
text-to-world connection, it promoted a conversation with his group which helped to scaffold comprehension. Also, students wanted to clarify some concepts in the text which helped the group understand what was happening with the animals at the zoo in that article. Oczkus (2010) attributes the sense of community to being listened to and the development of valuing growth through experimentation and enquiry. Furthermore, Oczkus adds, "Reciprocal Teaching makes it okay for students not to understand text." Difficulties in understanding are attributed to challenges in the text rather than student inadequacy.

Showing scoring rubrics prior to using a strategy helped comprehension too. For example, after modeling how to summarize, I showed students the rubric which gave expectations for using the summarizing strategy. This helped the group of students to realize what was expected of them before they read and then summarized. Having an awareness of what would be evaluated, gave a different purpose for reading. Summarizing, or retelling a text can be difficult and having clear expectations set the students up for success.

## Preparing to Read

To get to know the students as readers, I gave them the Burke Reading Inventory. The answers to the questions in the inventory indicated that most (15 out of 19) students reread text when they don't know something while reading. The students answered that they think their teacher is a good reader. The most common reason (8 responses) for why they thought the teacher was a good reader had to do with how she sounds when she reads. For example, the responses had to do with fluency or expression. Fourteen
students indicated that good readers go back and reread when they come across something they don't understand. When answering the question, "What would you like to do better as a reader?" six students' answers were about fluency, three responses were about expanding vocabulary, two responded to read more, two said they have nothing to improve upon and the remainder of the students left that blank.

In addition, I gave them an interview about their feelings and knowledge regarding non-fiction text. All students except one knew the difference between fiction and non-fiction. Except for two students, they said they enjoyed reading fiction over non-fiction. When I asked about text features in a small group of four students, two students named eight text features and the other two students knew that bold print was a text feature. Finally, I asked what they knew about the "Fab Four", which is the phrase the school uses for the Reciprocal Teaching method. In the same small group, the students said they were introduced to the four strategies in their school with puppets called "Polly the Predictor", "Clara the Clarifier", "Quincy the Questioner" and "Sammy the Summarizer". The classroom teacher had previously spoke with me about the use of puppets the school instituted from the Reciprocal Teaching at Work text.

The non-fiction text I used was Modern Zoos by Louise Carroll, which is a book consisting of several articles about zoos. This book was provided to me by the classroom teacher and the subject matter was motivating for fourth grade children. Having the children engaged with a high interest text motivates them which helps them comprehend. The articles I used while working with small groups were "Elderly Sea Otter Becomes Basketball Sensation: Behavioral Enrichment at the Oregon Zoo", "Baby Panda Goes on Exhibit: One More Zoo-Breeding Success Story" and "A Brief History of Zoos".

I asked the students to tell me what the difference between fiction and non-fiction was. Using individual white boards, they wrote answers without their classmates seeing. Their answers are in the chart below.

Table 4

Fiction/Non-Fiction

| Name | Fiction | Non-fiction |
| :--- | :--- | :--- |
| Joey | Fake | Real |
| Mac | Fake | Real |
| Sara | Made up | Real |
| John | Make Believe | Real |

Joey shared that fiction was easier because "It doesn't jump around to stuff".
Mac shared that non-fiction is easier because, "There are facts".

The students and I had a conversation about "Fab Four" being a nick name for Reciprocal Teaching. The students had learned that there are hand signals for each of the four strategies in the "Fab Four". Sara showed the hand signal for a crystal ball for predicting. (Oczkus, L. 2010).

The first text I used with the students was "Elderly Sea Otter Becomes Basketball Sensation: Behavioral Enrichment at the Oregon Zoo". I modeled predicting by showing
how I look at parts of a story. I shared my thoughts aloud so they knew that I preview first, see words or pictures that may help me predict, before predicting. "The teaching model of reciprocal teaching allows the teacher and students to scaffold and construct meaning in a social setting by using modeling, think alouds and discussion." (Oczkus, p.2) Mac talked about how predicting can happen during reading; not just before.

The students then made predictions. They are recorded in the chart below.

Table 5

## Predictions

| Name | Prediction |
| :--- | :--- |
| Joey | It's going to be about cool things animals <br> do, or interesting things. |
| John | It's going to be about an otter that is a <br> beast at basketball. |
| Sara | I'm not sure but the word elderly, in the <br> title, means old. |
| Mac | It's going to be about the otter playing <br> basketball but also other animals. |

We then had a conversation about text features. Subsequently, in a think-aloud I used text features and asked the students if they used any text features for their predictions. They all responded, "No". However, they knew about captions and bold print words. We began taking turns reading and I hoped that they would use text features to make another prediction. I was looking to see if any of the student's
predictions were confirmed. I intervened with a few questions to clarify what physical therapy is. Joey made a connection as we read how the otter was receiving physical therapy. He excitedly called out, "Oh! My dad goes to Physical Therapy for his back." Per Knickerbocker \& Rycik, (2002) Students motivation for reading and learning with texts increases when they perceive that text is relevant to their own lives and when they believe they can generate credible responses to their reading of the text. (Vacca, Vacca, Content Area Reading. 2014)

Mac had a turn to read and he made a new prediction. He said, "The otter had bad arms". Eventually, as he continued to read, he learned that the otter had bad elbows. I shared that my prediction was not confirmed. Mac wanted to talk about how his prediction was not confirmed either. He was then able to give information from the text, that demonstrated comprehension of the article.

In my reflections that day I was reminded of Shagoury \& Power Living the Questions p. 14. "As teacher-researchers we know that the truth is often in the unexpected, not the planned." What I had planned went off course but the value in the dialogue that happened among the students was worth it because I felt they were engaged in the reading, Joey was comprehending as he made a connection and Sara shared her vocabulary knowledge. The session prompted me to use Bottomley's and Osborn's scoring keys, or rubrics for predicting, questioning, clarifying and summarizing, from Implementing Reciprocal Teaching with Fourth and Fifth Grade Students in Content Area Reading. 1993. I also found a rubric for comprehending non-fiction material which is used by the Ashwaubenon School District in Wisconsin. These rubrics can be found throughout this paper and in the Appendix.

## Predicting

Making predictions using text features can strengthen comprehension. The use of text features provided the students with predictions that were more closely related to the text. I revisited making predictions with a different group of students, using "Baby Panda Goes on Exhibit: One More Zoo -Breeding Success Story". I modeled making a prediction for the students. Then students made predictions. A conversation about text features occurred and I asked them what text features they knew. Upon identifying several text features, I gave the students time for a minute "Book Look", which is simply scanning the pages. Afterward, their predictions changed to more specific predictions. Two of the four students also made additional predictions during reading. The chart below shows the responses.

Table 6

Predictions

| Prediction from reading the title of | Prediction after One minute "Book |
| :--- | :--- |
| Look" |  |$\quad$| A baby panda making an exhibit (Darren) | Different animals coming to the zoo |
| :--- | :--- |
| A panda (Len) | Elephant Extinction |
| Baby panda makes an exhibit (Mac) | Different animals like elephants and tigers |
| Pandas (Dan) | Amazing animals |

Using a rubric, I scored the predictions in terms of their relevance to the text.

Table 7

Prediction Rubric

| 0 | Repetition of title; unrelated |
| :---: | :---: |
| 0.5 | Some relation to topic/content; but vague |
| 1 | Acceptable; related; general or specific |

After the "Book Look" the students received the following scores:
Darren - 1
Mac - 0.5
Len -0.5
Dan - 0.5

With the predictions, students could focus on the text. The predictions encouraged students to think more deeply about the text while determining if the predictions were confirmed.

In my next reading strategy session. I had a different group of students with whom to work and I had planned a different approach. I was curious to find out what this group of students would respond to the question, "What do you do when you predict?" Their answers are charted below.

Table 8

Student Responses about Predicting

| Name | What do you do when you predict? |
| :--- | :--- |
| Samantha | "Say what you think it will be about." |
| Tim | "Look at pictures and the title and guess <br> based on that." |
| Alyssa | "Use the clues on the cover." |

These students were then given a Reciprocal Teaching Prediction Strategy form to fill out. (teacherspayteachers.com) The form included the title, prediction just from looking at the title page and a final prediction after looking at text features. After reading the article, the students determined if their predictions were accurate, or confirmed. Alyssa thought her prediction was somewhat confirmed. Tim's prediction was not confirmed. Samantha's prediction was somewhat confirmed. By allowing the students to determine if their predictions were confirmed, I could see they were comprehending what they read. They were focused on the text and determining if what they predicted was confirmed or not. This demonstrated comprehension. Reciprocal Teaching is aligned with Social Constructivism, and with developmental learning theories described by Vygotsky. The method embraces students' experiences and builds on the knowledge and understanding they bring to the text (Westera, 2000).

The next group of students gave their predictions about "Elderly Sea Otter Becomes Basketball Sensation: Behavioral Enrichment at the Oregon Zoo", before and after looking at text features. The predictions are shown below.

Table 9

Compared Predictions

| Name | $\mathbf{1}^{\text {st }}$ Prediction | $\mathbf{2}^{\text {nd }}$ Prediction |
| :--- | :--- | :--- |
| Aaron | What the sea otter does | Same prediction |
| Billy | Otter plays basketball | Animals do human things |
| Susan | Old Sea Otter good as <br> basketball | Exercises by animals |
| Hillary | Otter that plays basketball | Animals doing tricks |

This strategy prepared the students for reading non-fiction which allowed them to comprehend the text better. Having the opportunity for dialogue before reading about the text is helpful for understanding what you read. The students in this group agreed that a reader may also predict in the middle of a text, not just before it. This demonstrated how the students were considering what may happen next in the text which can help them understand what they are reading. It also promotes the gradual release of responsibility and is an example of how Reciprocal Teaching is rooted in constructivism.

## Questioning and Clarification

For this same group of students, I modeled the questioning strategy. They applied the strategy with the use of the "While you Read, Question" form (teacherspayteachers.com). The use of questioning while reading requires students to wonder and infer new information from the text. (Oczkus, L.) The chart below shows their questions while they read the article.

Table 10

Students' Questions

| Name | Questions while reading |
| :--- | :--- |
| Susan | How is he good at swimming if he only <br> uses his feet? <br> What is captivity? <br> What is Behavioral enrichment? |
| Hillary | What does diagnose mean? <br> What does foraging mean? |
| Billy | Why does the otter eat fish? |
| Aaron | (He did not complete.) |

From the questions, I saw that the questions were not always those that required inferring, but rather simply clarification. For example, the questions about what words mean are not the type of questions I modeled. Through clarification, the questions about captivity, Behavioral Enrichment, diagnosed and foraging can be answered. The question about
swimming with just feet is an appropriate question. As Harvey and Goudvis asserted, the questioning strategy pushes readers forward in understanding text. (Taking on the role of questioner: Revisiting reciprocal teaching, Williams. 2000)

Based on the following questioning rubric, I scored the students.

## Table 11

Questioning Rubric

| 0 | Nonsense, irrelevant, not text based, incorrect |
| :--- | :--- |
| 1 | Vague, question about the general topic |
| 2 | Detail question based on text information |
| 3 | Main idea question based on text information |

The students received the following scores for their questions:

Susan-2 Billy-1
Hillary - $2 \quad$ Aaron - NA
Upon reflection, I would like to have discussed the types of questions I was looking for better. The questions from the students showed metacognition, however more in-depth questions provide more reflection about what they are reading and in turn better comprehension. As Alyssa shared one day, "You should try to ask questions that are more open-ended, not just yes or no." Her quote is an example of how questioning can
lead to deepening an understanding of text. For example, rather than asking "Why does the otter eat fish?" the student could deepen understanding of the text by asking "How is the behavior of the otter affected when he is given fish?"

For clarifying, I showed the group of students the rubric before we started. The expectations were clear for them. This group previously read "Elderly Sea Otter Becomes Basketball Sensation: Behavioral Enrichment at the Oregon Zoo". This time they read "Baby Panda Goes on Exhibit: One More Zoo-Breeding Success Story". The Clarification rubric is below.

Table 12

## Clarification Rubric

| 0 | Nonsensical, not text based, inappropriate for passage |
| :--- | :--- |
| 1 | Something other than the item, text related |
| 2 | Item in the passage (ex. Meaning of a word) |

Each student needed clarification of the Chinese name of the panda which was difficult to pronounce. Mac needed clarification about what breeding was and why people waited in long lines to see the panda. Based on the rubric his score was a " 2 ". Joey wondered why the Pakistan government contacted the Bronx Zoo about the snow leopard cub. His score
was a "2". John wanted clarification on the types of animals the Bronx Zoo had. His score was a " 1 ".

The use of the clarification strategy causes readers to think about what they are reading. Students need to find out what something means, which can lead to better understanding of the text. Per Oczkus, think alouds and discussions enhance comprehension.

For the questioning strategy, Juan and Sara read "Baby Panda Goes on Exhibit: One more Zoo-Breeding Success Story". The questions they asked while reading were scored using the previously mentioned rubric.

I found the questions the two students asked demonstrated they were comprehending what they were reading. Juan asked, "How can you fit 300 different kinds of animals in the zoo?" The score for that is "2". Sara asked, "Why did they snow leopard abandon her baby?" She expressed a comment, "It's impossible to answer." Juan, however, did not think it was impossible to answer. He gave a reasonable answer to her question. Sara also asked, "Why are snow leopards endangered?" Juan gave a reasonable answer to Sara's question again. We then talked about Juan having a lot of background knowledge about animals. Next Sara tried the strategy where she asked a question as though she were an interviewer. Her question was, "Why is it so hard to breed?" Sara's score for her question was a " 2 ". Juan misunderstood the question and gave an answer thinking she was asking about reading, instead of breeding. When he realized the mistake, the class ran out of time and the teacher was rushing them to a special. Another demonstration of comprehension was with the dialogue between the two students. Sara and Juan spoke together about why a snow leopard would abandon her babies, as well as
why it would be so hard to breed at the zoo. They each shared what they thought and had several minutes of back and forth idea sharing. If they not been comprehending what they were reading, the dialogue would not have been as rich, meaningful and related to the text. They were using metacognition throughout the session and it was encouraging since it was relevant to the text.

Juan and Amanda were the available students the next day and together they took turns reading "A Brief History of Zoos". As per my suggestion, they asked questions about the text while they read. While reading Amanda asked "Why are they called wild animals?" Juan asked several questions, such as "Why would they put animals in cages?" Why didn't they put them in their habitats?" "Why didn't the Egyptians have zoos for public entertainment?" Together, we answered the questions. By answering these questions, the students had to utilize the text. Therefore, using text evidence helped them to understand what they read.

## Summarizing

Summarizing demonstrates students' ability to determine the main points and the details of the text. After reading and questioning, I showed Juan and Amanda the rubric associated with summarizing and I modeled using a picture book.

## Table 13

## Summarizing Rubric

| 0 | No response; simple restatement of title; undecipherable |
| :--- | :--- |
| 1 | One of the main points or one correct important idea; general topic alone should not <br> be counted as an idea |
| 2 | More than one of the main points or more than one correct important idea |
| 3 | Synthesis of main points |

I gave them an example of how best to summarize using "first, then, finally" sentence starters. I also showed a Comprehension of Non-Fiction Material rubric.

## Table 14

## Comprehension of Non-Fiction Rubric

| 4 | Identifies main idea \& supporting details |
| :--- | :--- |
| Advanced | Can make inferences \& connections |$|$| 3 |
| :--- | :--- |
| Proficient | Identifies main idea \& supporting details $\quad$| 2 |  |
| :--- | :--- |
| Basic | Identifies main idea \& supporting details with prompting by teacher |
| 1 <br> Minimal |  |

The purpose of providing the students with the second rubric was to give them another point of reference for showing understanding of what they read. Finally, I gave Amanda and Juan a chance to summarize the text together. Their response was:

First, it's about when zoos started in Egypt. (J)
People from other countries came to see the animals. (A)
Then it tells about modern zoos and animals being in cages. (J)
Today zoos have bigger areas for animals to be more free and more like where they came from. (A, with prompting)

Animals are happier. (J)

Using the Summary Rubric, together their score was " 3 ". They shared the main points of the article. I was encouraged with their ability to provide the information about the article. This showed me the use of summarizing scaffolds comprehension. The students utilized the text to determine the main idea and details about what they read. They could provide information from the text in the proper order.

## Dialogue

Students' ability to converse with each other while applying the strategies demonstrated to me that they were comprehending the text. I was reminded each time I worked with the students how valuable their dialogue was. By speaking together about the article, they read, they benefitted from thinking about it, and sharing the information they were learning.

The data from my notes and from the scoring I did suggest Reciprocal Teaching does scaffold comprehension of non-fiction text. When students needed clarification, and when they asked the appropriate questions, it showed they were curious about the text and willing to explore its meaning. Predicting prepared them for reading which helps comprehend. Summarizing allowed the students to share the main points of the texts, along with details from the text. The use of the four strategies, predicting, clarifying,
questioning, and summarizing, provided opportunities for the students to think about what they were reading. Therefore, the strategies led to a better understanding or comprehension of the text.

Chapter five will give conclusions, implications of this study and limitations.

## Chapter 5

## Conclusion

## Conclusions

I conclude the use of Reciprocal Teaching scaffolded comprehension of nonfiction text for fourth grade students using predicting, clarifying, questioning, and summarizing. This was accomplished by working in small groups, teacher modeling, having dialogue among the group members, and opportunities to apply the four strategies. The students expressed thoughtful comments and ideas throughout the study. The dialogue among the students enhanced the strategy application. They had conversations about the connections they were making and it showed they were understanding what they were reading. The metacognition I observed encouraged me as I realized they were not simply reading, but considering the meaning of the text. Working in small groups gave students who may not otherwise participate, the ability to share their ideas comfortably which led them to demonstrating comprehension of the text.

The Reciprocal Teaching method provided students with strategies to comprehend the non-fiction. Without incorporating the four strategies of Reciprocal Teaching, the non-fiction text may have been difficult to understand. When words are difficult to understand, or pronounce, it distracts readers and then decreases their ability to comprehend. Clarification and the other three strategies brought about metacognition and meaningful dialogue which scaffolded comprehension.

The area that I found challenging for the students was working on Questioning. The students seemed to understand the types of questions I was looking for, but they were not always able to ask questions that required more in-depth responses. Often, the
questions were what the clarifying strategy was for, such as asking about a word or a concept. I adjusted my instruction and model differently, but I still found some of the students needed to improve on the types of questions they were asking. Regardless, I found the discussion about this matter, promoted metacognition which can result in comprehension.

## Limitations

The limitation of this study was time. The wait time for approval of the study became longer than expected and that contributed to the time limitation. With more time, I may have been able to engage in deeper analysis of responses. In addition, I may have been able to further my instruction with the Questioning strategy, allowing for the release of responsibility for more students with the strategy. Another factor with the time limitation was that the classroom teacher moved into a different phase with her class. She had to prepare the students and administer mandated testing and writing assessments. She also had to prepare the students for their student-led conferences. Thus, the way the teacher could provide me with small groups of students was adjusted. When I came into the classroom, I did not know which students I would be working with because she would send me students who were available at that time. For example, if students were finished their other required work, or did not have to be with a support teacher, or at a music lesson, they could work with me. Therefore, all the students did not have the opportunity to work on all four of the strategies. However, I was still able to find enough information to complete the study about my research question.

## Implications for the field

Upon completion of this study, I realized there may be areas that could be investigated further. For example, the use of the Reciprocal Teaching method may be used differently depending on different age groups. Teenage students may use the method in a different way than elementary students. In addition, further investigation may be about the different ways to use the method with fiction compared to its use in this study with non-fiction. For example, the predictions may be developed differently without the use of text features readers see in non-fiction.

This study is important to the field because comprehending non-fiction text can be challenging for students. Reading to learn with non-fiction, or content area texts is essential to the field. The Common Core standards and the high stakes assessments demand that students are capable of comprehending non-fiction text. While the mindset of the Content Area teachers, not considering herself a reading teacher, is changing, the demands of curricula require students entering higher grade levels to be more prepared. Students must acquire a set of strategies like Reciprocal Teaching provides, to apply while reading non-fiction. This will help with the content area classes as they work through the grades.

What I found in this study was how valuable the interactions among the members of the small groups were. The ability to comprehend the non-fiction text emerged as the students shared their predictions, asked questions, and worked together to clarify and summarize. The conversations the students and I had about what they were reading led to students understanding the text. Reciprocal Teaching, is an inclusive, social method
which scaffolds comprehension through support gradually released, a sense of community, and students taking on active roles as they become accustomed to applying the strategies, predicting, clarifying, questioning, and summarizing.

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## Appendix A

## Burke Reading Inventory

1. When you are reading and you come to something you don't know, what do you do? Do you ever do anything else?
2. Do you think your teacher is a good reader? Why do you think that?
3. Do you think teachers ever come across something they don't know when they read? What do you think good readers do when they come across something they don't understand?
4. If you knew that someone was having difficulty reading, how would you help that person?
5. What would your teacher do to help that person?
6. How did you learn to read? Who helped you learn how to read? What did that person do to help you learn?
7. Do you think that you are a good reader?
8. What would you like to do better as a reader?

## Appendix B

## Texts



## Appendix C

## Interview Questions

1. What is the difference between fiction and non-fiction?
2. Which do you prefer? Why?
3. Do you know what Text Features are? What can you tell me about them?
4. Your school talks about the "Fab Four"? What can you tell me about that?
5. When you predict, what are you doing?
6. What happens when you summarize?

## Appendix D

## Reciprocal Teaching Reading Strategy

Follow your Reciprocal Teaching bookmark to complete the sections below.

## BEFORE YOU READ

## Predict

The title of the story is $\qquad$
What do you think this story is going to be about? $\qquad$
$\qquad$
$\qquad$

Using the title, pictures (or first sentence) and structure of the text, make a final prediction.

