# The Relationship between Small Group Reciprocal Teaching and Reading Comprehension

by Jennifer Szymanski

## Submitted in Partial Fulfillment of the Requirements for the

Degree of Master of Education

July 2014

Graduate Programs in Education

Goucher College

# Table of Contents

List of Tables			
List of Figures			
Abstract			
I. Introduction	1		
Overview	1		
Statement of the Problem	2		
Hypothesis	2		
Operational Definitions	3		
II. Review of the Literature			
Reading Comprehension	4		
Strategies of Good Readers	5		
Complications with Comprehension	6		
Intervention Strategies	8		
III. Methods			
Design	11		
Participants	11		
Instrument	12		
Procedure	13		
IV. Results			
V. Discussion			
Implications of Results	17		
Theoretical Consequences	17		

Threats to Validity	18
Connections to Existing Literature	18
Implications for Future Research	19
Conclusion	20
References	21

# List of Tables

1.	Reciprocal	<b>Teaching Alignment</b>	with SQRR Approach	
	1	0 0		

# List of Figures

1. Figure 1: Participants' Mean Scores

#### Abstract

Reading comprehension is a complex process often made increasingly difficult as readers are faced with content oriented reading material. The purpose of this study was to determine whether reciprocal teaching in the small group setting has an effect on reading comprehension. It was predicted that small group reciprocal teaching will have no significant effect on third grade students' reading comprehension. Over the six weeks, students received reciprocal reading instruction designed to help internalize reading strategies that according to research, enhance comprehension. Results suggested small group reciprocal teaching had a positive effect on reading comprehension. When reciprocal teaching was applied in the small group setting, these participants demonstrated an increase in their comprehension.

#### **CHAPTER I**

#### INTRODUCTION

#### **Overview**

Reading comprehension is the development of new learning from what one has read (McLaughlin, 2012). Reading comprehension occurs when meaning is constructed from the interchange of ideas between an interpreter (the reader) and the message presented in a text . The study focuses on increasing reading comprehension in third graders who are being faced with more content-oriented material (nonfiction text). In the study, comprehension is considered successful when the student understands what has been read at his or her instructional level as evidenced by scoring a 75% or higher on comprehension questions.

Historically, students in American schools have been flooded with fictional text. Studies in 2000 revealed drastic discrepancies in student exposure to fiction and nonfiction text (Duke, 2004). According to Duke-, young students interacted with nonfiction text for a total of 3.6 minutes a day. Nonfiction text in classroom libraries totaled less than ten percent and the amount of informational resources on classroom walls was less than three percent-.

Throughout the past decade, research has evidenced that the genre in which students read impacts their comprehension development (Goodwin & Miller, 2012). Goodwin and Miller identified that students need to read and comprehend nonfiction text as often and fluently as they do fiction. The new Common Core Language Arts and Literacy Standards strive to correct this imbalance by placing a significantly higher emphasis on nonfiction reading in the classroom. Since the Baltimore County Public School system has adopted the Common Core Standards, students are receiving high levels of exposure to nonfiction text. Understanding that research has

evidenced reading comprehension is stronger in narrative text than in informational text, effort must be made to provide students with the necessary tools and strategies to approach nonfiction text in a way that ensures success (Best, Floyd, & McNamara, 2008).

Interest was triggered in this problem because of the recent increase in student exposure to nonfiction text. Reading development and the use of reading to learn in the content areas is one of the most critical pedagogical areas for student success (Burke, Fine, Young, & Meyer, 2008). Students today face an increase in nonfiction text designed to educate in all content areas. By enhancing reading comprehension in nonfiction text, students become stronger readers and can be successful in all areas of academia. Ultimately, good readers become good learners who play a critical role in enriching today's culture by becoming good citizens (To Read or Not to Read, 2007).

#### **Statement of Problem**

This study was designed to examine reading comprehension and reciprocal teaching methods. Evidence supports that reciprocal teaching methods enhance reading comprehension with informational texts (Comprehension, 2011). The purpose of this study was to determine the impact of reciprocal teaching methods on reader comprehension when students are faced with more content-oriented material.

#### Hypothesis

Small group reciprocal teaching will have no significant effect on third grade students' reading comprehension.

#### **Operational Definitions**

The dependent variable of the study was reading comprehension. The Qualitative Reading Inventory-4 (QRI-4) was used to measure the instructional reading level of the participants. After reading a passage, a combination of eight implicit and explicit comprehension questions were used to calculate reading comprehension. Implicit questions require the participant to use clues from the text to make inferences to answer correctly (Leslie & Caldwell, 2006). Explicit questions have answers direct stated in the text. QRI-4 establishes that reading comprehension is successful at the instructional level when students correctly answer six or more comprehension questions-.

The independent variable in the study is the instructional strategy being implemented, reciprocal teaching. Reciprocal teaching is an interactive teaching practice designed to enhance reading comprehension by teaching students specific strategies used to develop meaning from a text (Reciprocal Teaching, 2010). These strategies include generating questions, summarizing, clarifying, and predicting.

#### **CHAPTER II**

#### **Review of the Literature**

The ultimate goal of reading is the development of new learning, commonly understood in the field of education as reading comprehension (Comprehension, 2011). The proceeding sections establish the meaning of reading comprehension and the strategies employed by good readers. Often times, readers struggle to develop comprehension. Factors contributing to comprehension are identified and research-based intervention strategies designed to improve reading comprehension are discussed.

#### **Reading Comprehension**

Comprehension occurs when meaning is constructed from the interchange of ideas between an interpreter and the message presented in either a written or spoken form of communication (McLaughlin, 2012). When reading, comprehension occurs as a reader interacts and makes meaning with the words in a text (Comprehension, 2011). As a result, a reader develops new learning from what he or she has read.

There are numerous internal and external factors linked to the complex process of developing reading comprehension. Although these factors will be identified separately, the development of reading comprehension relies on the interaction of all of the factors combined (Comprehension, 2011). Internal factors include knowledge, experience, the ability to employ various methods of thinking, and motivation. A reader's knowledge of both the world at large, as well as the elements of language and print, impacts the development of new learning while reading (Fielding & Pearson, 1994). Reading abilities grow as one develops an understanding of language and print. Possessing well developed and refined reading abilities is linked to higher levels of reading comprehension (Comprehension, 2011). One's experience is connected to his

or her prior knowledge. While reading, comprehension and learning occur as a result of new information merging with one's prior knowledge and experiences (McLaughlin, 2012). Thinking methods impact reading comprehension in that a reader must be able to think beyond the literal meaning of a text. A reader must also be able to think inferentially and in an evaluative manner (Fielding & Pearson, 1994). When a reader limits himself or herself to the literal interpretation of a text, he or she is creating a reproduction of the author's words rather than making meaningful connections with the text. Over time, motivation to read enhances reading comprehension (Comprehension, 2011). A motivated reader will read more frequently, which in turn will help develop his or her knowledge base.

External factors key to reading comprehension include text, educational-context, and teacher variables. When reading a text, variables such as the genre, format, and text features impact the development of comprehension (Comprehension, 2011). Educational-context variables, such as the environment and purpose for which one is reading, affect comprehension levels. Lastly, are the variables linked to the way in which a person learns how to read. These variables are connected to reading teachers. The experience, attitude, and pedagogical approach of a teacher have an innate impact on a developing reader.

#### **Strategies of Good Readers**

Educational research and studies have concluded that readers who comprehend while reading have developed a set of cognitive processes known as strategies. These strategies include asking questions, utilizing context clues, making connections, and collaboration (Comprehension, 2011). Good readers deploy these strategies subconsciously and automatically. Good readers regularly ask questions to clarify confusion and guide their thinking while reading. A well-developed question has the ability to focus a reader and clarify misconceptions. While

reading, one continually reviews and rereads to revise his or her thinking. Good readers also utilize context clues to help make meaning of unknown words, phrases, and concepts. Comprehension is developed as readers make connections. Readers must actively make connections between the new information being read and their prior knowledge (McLaughlin, 2012). Such connections allow for new learning to be internalized. Good readers make connections in the form of text to self, text to previously read text, and text to real world. Successful readers also acknowledge that reading is not an independent process; instead they refine their thinking and understanding by discussing meaning with other people. Discussions and collaboration foster open-mindedness, which allows readers to develop, express, and defend their opinions of a text (Fielding & Pearson, 1994). Over time, readers who collaborate with others learn to accept and value the existence of multiple interpretations of a text.

As these strategies become routine, one becomes a metacognitive reader. One who uses metacognition when reading is consciously thinking about and monitoring their own thinking as they read (McLaughlin, 2012). Through metacognition, a reader becomes highly aware of two aspects when reading. First, he or she is actively aware when they are developing meaning. Second, one can easily identify when he or she is experiencing a disconnect or breakdown in comprehension.

#### **Complications with Comprehension**

Comprehension becomes compromised when a breakdown occurs in one or more of the required variables mentioned above (Comprehension, 2011). The factors contributing to the

development of reading comprehension are interwoven. Comprehension breakdown is commonly attributed to a reader's fluency, motivation, and text type.

As a reader develops his or her reading abilities, fluency becomes an important factor. Fluency is defined as the combined measurement of one's oral reading speed and accuracy. A positive correlation between reading fluency and comprehension has identified fluency as a prerequisite skill for comprehension (Barnes & Rehfeldt, 2012). When a person is unable to read a text fluently, comprehension breaks down as a result of continuous interruptions that cause confusion. As a result, readers are unable to make meaning of what they have read, which prevents them from forming connections and adding to their background knowledge. In essence, no new learning is able to occur. Fluency can pose another potential comprehension problem for readers. There can be confusion between the ability to pronounce a word and the ability to understand the meaning of a word. A fluent reader without the ability to recognize that pronunciation does not imply or guarantee knowledge of word meaning will fail to develop comprehension (Palumbo & Loiacono, 2009).

Motivation to read is directly related to the amount of time and frequency with which a person will read. As a person spends more time reading, he or she is developing a variety of the factors that affect comprehension, such as the development of their background knowledge, knowledge of language and text, and reading strategies. A person lacking motivation to read will spend less time practicing his or her reading skills and developing other key strategies. Therefore, those individuals who are more highly motivated to read will have increased reading comprehension (De Naeghel, Van Keer, Vansteenkiste, & Rosseel, 2012).

Type of text refers to informational versus narrative text. When reading informational text, vocabulary and lack of background knowledge can contribute to the breakdown of

comprehension (Palumbo & Loiacono, 2009). As beginning readers, primary grade students are introduced to reading mainly through the use of narrative text. Vocabulary instruction is received as a separate entity. In the intermediate grades, students are exposed to informational text, which does not allow for reading skills and vocabulary to be decontextualized. As a result, readers have greater difficulty comprehending informational text. Vocabulary in informational text is referred to as technical vocabulary. Readers struggle to understand this vocabulary due to lack of background knowledge (Comprehension, 2011). This creates a disconnect between the context of the text and the reader's schema (Palumbo & Loiacono, 2009).

#### **Intervention Strategies**

Research has shown several intervention strategies to be successful in improving reading comprehension. Intervention strategies include reciprocal teaching, gradual release of responsibility, schema-based instruction, and cooperative learning.

Reciprocal teaching is an interactive teaching practice designed to enhance reading comprehension by teaching readers strategies to help make meaning from a text (Reciprocal Teaching, 2010). These strategies include asking questions, summarizing, clarifying, and predicting. There is a gradual progression in the shift of responsibility as students become more fluent in applying the strategies. Teachers utilizing reciprocal teaching adhere to three responsibilities, acting as both instructors and facilitators (Stricklin, 2011). First, the teacher helps students activate their prior knowledge before reading. During reading, the teacher monitors, guides, and encourages students. After reading, the teacher encourages students to reflect and share with others. A teacher using this method of instruction views discussion as an essential component of reading comprehension.

Gradual release of responsibility is a systematic approach to teaching reading comprehension. Throughout a reading lesson, the responsibility for reading comprehension is gradually shifted from the teacher to the students over a span of five stages (Comprehension, 2011). In the first stage, the teacher establishes a purpose for reading. In this stage, the objective is clearly communicated and the expectations are made clear. Next, the teacher models to show how comprehension occurs in his or her mind. The third stage, guided instruction, evenly distributes responsibility between the teacher and students as the students are given an opportunity to follow the teacher's model. The next stage is productive group work when the teacher provides direct modeling to selected students who demonstrated the need for further instruction during the previous stage, while other students are engaged in small group work. Lastly, the students assume full responsibility during a period of independent practice.

Schema-based instruction is a learning theory that views knowledge as a network, similar to that of a storage system, of mental structures (Little & Box, 2011). These structures represent an individual's understanding of various concepts linked to his or her personal experiences and knowledge. This form of instruction follows the belief that comprehension difficulties are linked to lack of prior knowledge of the concepts at hand, and therefore generic concepts must be directly taught in order to help students comprehend. Teachers employing this theory of learning will use graphic organizers and concept maps as a tool to help students develop background knowledge prior to reading.

Cooperative learning is defined as learning that occurs as students work in groups to accomplish a shared goal. In this learning environment, students are faced with the responsibilities of maximizing their own learning, as well as the learning of others (Johnson & Johnson, 1999). Cooperative learning is designed to create a supportive classroom environment

which maximizes opportunities for meaningful classroom interactions and discussions (Shaaban, 2006). Reading comprehension is believed to increase as a result of such meaningful forms of communication. There are five requirements for cooperative learning to be effective. First, students must have a clear understanding of the teacher's goals and expectations (Fielding & Pearson, 1994). Second, the selected goals must be group oriented and attainable. Next, the expectation is that all group members achieve the goal at a satisfactory level. Fourth, students have been previously taught how to explain their thinking to each other and communicate in an amicable fashion. Lastly, group activities are designed to be supplemental to instruction.

Reading comprehension is at the heart of reading. Various factors influence whether or not a reader will successfully make meaning of what he or she has read. When comprehension breaks down, various research-based intervention strategies can be applied to help struggling readers.

#### **CHAPTER III**

#### **METHODS**

#### Design

A quasi-experimental design with a pretest and posttest was used to collect data. The experiment included an independent and dependent variable. The use of reciprocal teaching was the independent variable. Reading comprehension was the dependent variable. Students completed a pretest to assess reading comprehension. They then received six weeks of reciprocal teaching instruction. After six weeks, participants took a posttest to assess gains made in their comprehension.

#### **Participants**

Participants for the study included eight third grade students, ranging from eight to nine years in age, from an elementary school in Baltimore County. The sample consisted of four female and four male students. The participants were primarily Caucasian (46%) and African American (37%). Other ethnicities represented included students identified with two or more races (9%), Hispanic/Latino (7%), and American Indian (1%).

Participants were conveniently selected from a class of 21 students. All participants were selected due to their low performance in reading language arts. These eight participants had previously received scaffolded, small group instruction throughout the school year to provide extra support with respect to reading comprehension.

The school used in this study is located in southeast Baltimore County. The school maintains a Title I rating with 80% of families receiving Free and Reduced Meal services. There is also a high mobility rate of 29%. The student population consists primarily of Caucasian (46%) and African American (37%). Other ethnicities represented (less than 10%) include

students affiliated with two or more races, Hispanic/Latino, and American Indian or Alaskan Native (Maryland State Department of Education, 2014).

#### Instrument

The Qualitative Reading Inventory- 4 (QRI-4) was the instrument used in the study. The QRI-4 is an informal reading inventory used to help estimate a student's instructional reading level and related needs (McCabe, 1999). It is individually administered and designed to provide diagnostic information about various components to reading. The QRI-4 is designed to allow examiners the option to select individual components to meet the needs of various testing objectives. The QRI-4 is not norm-referenced or standardized; however, it provides comparative data that can be evaluated based upon an established norm (Leslie & Caldwell, 2006).

Issues concerning reliability and validity are addressed by creators Leslie and Caldwell (2006). Since the inventory's design allows the examiner to use the tool in various ways to meet his or her desired needs, Leslie and Caldwell urge the examiner to determine the relevant reliability and validity with respect to the intended purpose. With this in mind, reliability and validity will be discussed for the QRI-4 when used to assess reading comprehension of nonfiction text. Inter-rater reliability was assessed when two independent examiners scored over 300 participants. Results yielded 98% inter-rater reliability for prior knowledge (Concept-Questions Task) and comprehension questions (Leslie & Caldwell, 2006). Internal consistency reliability for the chosen passage, "Wool: From Sheep to You," yielded a mean of .67 with a standard deviation of .19.

A positive and statistically significant correlation was identified with respect to concurrent validity (Leslie & Caldwell, 2006). With respect to construct validity, patterns of inter-correlations between word-recognition ability and comprehension were identified

depending on the stage of reading development. This correlation was statistically significant at all levels except prekindergarten. The correlation between prior knowledge and comprehension ranged from .30 to .35 for the targeted grade level.

During the pretest and posttest, a scoring tool and sample responses provided by the QRI-4 were utilized. Since the test was not administered in its entirety, experimental manipulations included the selected use of components in the QRI-4 to assess reading comprehension in nonfiction text.

#### Procedure

The Qualitative Reading Inventory 4 (QRI-4) was used to assess participant performance individually during the pretest and posttest. Prior to the pretest, individual participants were asked to complete the QRI-4 word list assessment to determine their instructional reading level based on accuracy, speed, and automaticity of word identification (Leslie & Caldwell, 2006). Analysis of the QRI-4 word list assessments determined that the instructional reading level for all participants was grade three. A level three expository text, "Wool: From Sheep to You," was then selected from the resources provided by QRI-4 as the assessment reading passage to be used for the pretest and posttest. Each participant was given the pretest individually. Immediately preceding the pretest, each student was given the Concept-Questions Task. The purpose in this task was twofold: determine the level of familiarity with the topic and activate background knowledge. According to research presented by the QRI-4, students who receive at least 55% of the points on the concept task score above 70% on comprehension questions. Instructions to the students for the Concept-Questions Task were taken from the guide verbatim. Each participant was instructed as follows, "Before you read, I want to know what you already know about some

of the ideas in the text. I will ask you a few questions to find out" (Leslie & Caldwell, 2006). Participants' Concept-Questions scores ranged from 45%-57%.

Immediately following the Concept-Questions Task, participants were asked to read the passage silently. After reading the passage, students were asked eight questions to determine comprehension. During the administration of the comprehension questions, participants were instructed to utilize the text if necessary. Responses to the questions determined each participant's pretest score to indicate their initial comprehension level.

All participants were then exposed to six weeks of small group reciprocal teaching instruction in order to help them apply the strategies of generating questions, summarizing, clarifying, and predicting. During the study, these strategies were taught using the SQRR method: survey (predict), question (generate questions), read and respond (summarize and clarify). The group met once a week during their regularly scheduled lunch time. Instruction was centered on three responsibilities: help students activate prior knowledge before they read, monitor, guide, and encourage students as they read, and encourage students to reflect on their reading after reading is complete. The reciprocal teaching followed a gradual progression in shift of responsibility. In the beginning of the study sessions, responsibility lay with the teacher and then slowly shifted toward the students as they became comfortable with the application of the strategies (Reciprocal Teaching, 2010).

During the first session, the teacher modeled how to use SQRR method to apply the strategies and ensure comprehension when reading. The teacher modeled with a short passage, then invited students to help perform the strategies on a second text. Session two followed the same procedure. Sessions three and four began with the teacher and students applying the SQRR strategies together, followed by the participants working in partners to apply the strategies. The

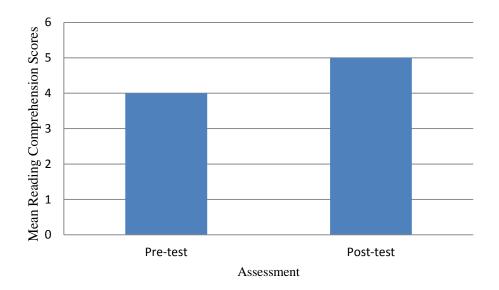
final two sessions began with students working in partners, and concluded with students applying the strategies on their own.

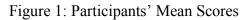
After the six weeks of intervention, students were given the posttest individually. The posttest consisted of each participant rereading the initial passage selected from the QRI-4 and responding to the comprehension questions. Each participant's scores was totaled to provide their posttest score.

## **CHAPTER IV**

### RESULTS

The purpose of this study was to determine whether or not reciprocal teaching in the small group setting has an effect on reading comprehension. Participants' mean score on the pretest was 4.12. After six weeks of the intervention, participants' mean score significantly improved to 5.12 on the post-test, t(7) = -3.74, p < .05 (Figure 1).





#### **CHAPTER V**

#### DISCUSSION

#### **Implications of Results**

The purpose of this study was to determine whether or not reciprocal teaching in the small group setting has an effect on reading comprehension. The null hypothesis predicted reciprocal teaching would have no significant effect on third grade students' reading comprehension. This hypothesis was not supported. Results suggested that reciprocal teaching in the small group setting does enhance reading comprehension. Analysis of participants' results from the pre and posttest indicated five students' reading comprehension increased one point or more. In conclusion, the overall mean score of participants increased from 4.12 to 5.12 after receiving intervention.

This study provides educators with valuable information for enhancing reading comprehension. The results indicate that using reciprocal teaching in the small group setting will help improve students' comprehension levels. The majority of students increased their comprehension score after the intervention was applied. Teachers could implement reciprocal teaching to help enhance reading comprehension of nonfiction text. This strategy could be utilized in various content areas, including science, social studies, health, and mathematics.

#### **Theoretical Consequences**

Educational research and studies have shown that those who comprehend while reading have developed a set of cognitive processes known as strategies (Comprehension, 2011). Research also suggests that students can be directly taught to internalize such strategies. Over time, as students develop automaticity and mastery of these strategies, scaffolded supports are removed (Reciprocal Teaching, 2010). Based on this research, reciprocal teaching was used to teach students to internalize four reading strategies. Findings in this study suggest that reciprocal teaching is effective at improving reading comprehension when implemented in the small group setting.

#### **Threats to Validity**

Validity is threatened due to the small group size. The use of differential selection also poses a threat to validity. Students were not randomly selected because a convenience sample was used to select participants. Participants were selected from a specific homeroom based on low comprehension. As a result of the convenience sample, the results cannot be generalized beyond the eight participants. The data is only reflective of students involved in the study. A confounding variable exists in the amount of support students receive outside of the small group setting. Participants who received at-home support may have made greater gains in their comprehension.

#### **Connections to Existing Literature**

Existing literature suggests that children can be taught to internalize rules to aid in comprehension of text (Comprehension, 2011). For this purpose, reciprocal teaching was selected as the intervention strategy in this study. Reciprocal teaching teaches readers to apply four strategies when reading: asking questions, summarizing, clarifying, and predicting (Reciprocal Teaching, 2010). During the study, these strategies were taught to students using the SQRR approach: survey, question, read, and respond. The four components of SQRR aligned with the strategies taught in reciprocal teaching (Table 1). Rather than using the terms outlined in reciprocal teaching, those of the SQRR approach were taught to students.

<b>Reciprocal Teaching Strategies</b>	SQRR Approach
Predicting	Survey
Asking questions	Question
Summarizing	Read and respond
Clarifying	Read and respond

Table 1. Reciprocal Teaching Alignment with SQRR Approach

The study followed the gradual progression in shift of responsibility outlined in reciprocal teaching (Reciprocal Teaching, 2010). Responsibility was gradually shifted from the teacher to the participants over the six weeks. Results of the study supported previous research that reciprocal teaching will have an effect on reading comprehension.

#### **Implications for Future Research**

Suggestions for future research include larger sample size and home support. Future research could be expanded to include a wider sample of students. Participants in future studies could include students at various grade levels, as well as students with varying levels of reading comprehension. Studies could determine if reciprocal teaching is more effective when implemented with students of a certain age and ability rage.

Future research could also extend to involve home support. Prior to small group implementation, an initial session could be held to inform parents and guardians of the implications that reciprocal teaching has on reading comprehension. Parents would be taught the same strategies as participants so that they could provide support at home. At home participants could receive one-on-one support while working to internalize the strategies said to improve reading comprehension.

## Conclusion

Based on the results of this study, reciprocal teaching has an effect on reading comprehension. When reciprocal teaching was applied in the small group setting, these participants demonstrated an increase in their reading comprehension. The study supports existing research that intervention strategies, such as reciprocal teaching, can be used to improve reading comprehension.

#### REFERENCES

- Barnes, C. S., & Rehfeldt, R. A. (2012). Effects of fluency instruction on selection-based and topography-based comprehension measures. *Research in Autism Spectrum Disorders*, 7(6), 639-647. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1007479&site=eh st-live; http://dx.doi.org/10.1016/j.rasd.2013.02.010
- Best, R. M., Floyd, R. G., McNamara, & D. S. (2008). Differential competencies contributing to children's comprehension of narrative and expository texts. *Reading Psychology*, 29: 137-164. Memphis, TN.
- Burke, L., Fine, J., Young, M. J., and Meyer, D. K., (2008). Understanding the "why" behind the "how" in reading instruction. *Educational Forum*, 72(2), 168-176.
- Comprehension (2011). In *Handbook of research on teaching the English language arts*. Retrieved from http://www.credoreference.com/entry/routengart/comprehension
- De Naeghel, J., Van Keer, H., Vansteenkiste, M., & Rosseel, Y. (2012). The Relation between elementary students' recreational and academic reading motivation, reading frequency, engagement, and comprehension: a self-determination perspective. *Journal of Educational Psychology*, *104*(4), 1006-1021. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ994022&site=ehos-live; http://dx.doi.org/10.1037/a0027800
- Duke, N. K. (2004). What research says about reading- the case for informational text. *Educational Leadership*, 61(6), 40-44. Retrieved from http://www.ascd.org/publications/educational-leadership/mar04/vol61/num06/The-Case for-Informational-Text.aspx

Goodwin, B., & Miller, K. (2012). Common core: what now? *Educational Leadership*, (70)4, 80-82.

Fielding, L. G., & Pearson, P. D. (1994). Reading comprehension: what works. *Educational Leadership*, 51(5), 62-68. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ477528&site=ehos -live

- Institute of Education Sciences (2010). Reciprocal teaching. *What Works Clearinghouse*, September 2010. Washington, DC: U.S.
- Johnson, D. W., & Johnson, R. T. (1999). *What makes cooperative learning work*. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED437841&site=eho

t-live

- Leslie, L., & Caldwell, J. S. (2006). Qualitative Reading Inventory-4. Reading, WA: Pearson.
- Little, D. C., & Box, J. A. (2011). The use of a specific schema theory strategy- semantic mapping- to facilitate vocabulary development and comprehension for at-risk readers. *Reading Improvement*, 48(1), 24-31. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ955051&site=ehos -live; http://www.projectinnovation.biz/ri.html
- Maryland State Department of Education (2014). Logan elementary Baltimore county (03:1217). Retrieved from:

http://www.bcps.org/schools/MSDEReportCard/2013/loganes.pdf

McCabe, P. (1999). Qualitative reading inventory II. *Journal of Educational and Psychological Consultation*, *10*(4), 385-393. Retrieved from:

http://www.tandfonline.com/doi/abs/10.1207/s1532768xjepc1004\_5#preview

McLaughlin, M. (2012). Reading comprehension: what every teacher needs to know. *Reading Teacher*, 65(7), 432-440. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ961043&site=ehos -live; http://dx.doi.org/10.1002/TRTR.01064

- National Endowment for the Arts (2007). To read or not to read? <u>A</u>a question of national consequence. Washington, D.C.
- Palumbo, A., & Loiacono, V. (2009). Understanding the causes of intermediate and middle school comprehension problems. *International Journal of Special Education*, 24(1), 75
  81. Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ842121&site=ehost live

Shaaban, K. (2006). An initial study of the effects of cooperative learning on reading comprehension, vocabulary acquisition, and motivation to read. *Reading Psychology*, 27(5-), 377-403. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ753609&site=ehos

-live; http://taylorandfrancis.metapress.com/link.asp?id=J4153441592873X5

Stricklin, K. (2011). Hands-on reciprocal teaching: a comprehension technique. *Reading Teacher*, 64(8), 620-625. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ923581&site=ehos

-live; http://dx.doi.org/10.1598/RT.64.8.8