Comparing Reciprocal Teaching to Collaborative Strategic Reading in Fourth Grade Students

RP
00092
c.1

A Project Presented to the Faculty of

the Education Division

In Partial Fulfillment of the Requirements for the Degree of

Master of Arts in Education

Emphasis: Special Education

By

Amina H. Harastani

Under the supervision of

DR. AHMAD OUEINI

LEBANESE AMERICAN UNIVERSITY

April, 2008

Lebanese American University
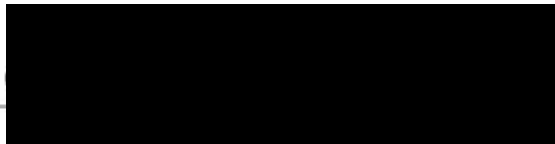
We hereby approve the project of

Amina Haitham Harastani

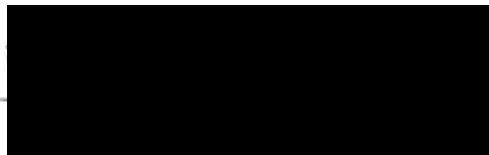Comparing Reciprocal Reading Strategy to Collaborative Strategic Reading in Fourth Grade Students

Date submitted: April, 2008

Division of Education

Dr. Ahmad Oueini, Supervisor: _█████████████████

Dr. Ketty Sarouphim, Second reader: _████████████████

A copy of the project is available for research purposes at the University Library

████████████   ....19/.05/.2008.

Student Signature   Date

To all Teachers who would like to make a difference

Acknowledgment

I would like to express my foremost gratitude to my advisor Dr. Ahmad Oueini for his guidance and support throughout my project. He is such a great model of a hard worker whom anyone would like to emulate. I've learned from him that if I can reach just one student in my class, I will accomplish more than most people do in their lives. My gratitude and appreciation also goes to Dr. Katie Sarufim who made me realize that my dream can come true with hard work and perseverance.

I would like to acknowledge and thank all the great professors who taught me throughout my graduate levels, whom without their guidance and support, I could have never reached my academic goals or have blossomed into the person and teacher I am today.

Finally, I would like to thank my family for their endless love and care.

ABSTRACT

The purpose of this pilot study is to compare the effectiveness of two metacognitive reading comprehension strategies: Reciprocal Teaching and Collaborative Strategic Reading when applied in two fourth grade sections in a private school in Beirut.

Pretest-posttest showed that the Collaborative Strategic Reading method increased students' results more significantly than Reciprocal Teaching. Students and teachers reported an increased sense of responsibility, self-esteem cooperation, and group discussions. Implications for implementing both strategies are discussed.

Key words: reading comprehension, Reciprocal Teaching, and Collaborative Strategic Reading.

Table of Contents

CHAPTER ONE

Introduction

Reading comprehension is a complex cognitive ability and an indispensable school subject that many students struggle with or find frustrating. Reading comprehension involves decoding a text, understanding its content, evaluating its message critically, remembering its details Students are required to understand a text they read, evaluate its message critically, remember the content, and applying the newfound knowledge flexibly (Alfassi, 1998).

Reading comprehension instruction aims at teaching students different strategies that will help them develop a conscious control of their cognitive processes. This requires teachers to motivate students' cognitive abilities through the use of different instructional strategies (Alfassi, 1998).

A major concern of teachers is to promote independent reading comprehenders. Many students continue to be very dependent on adults for help since they are not equipped with tools necessary to become successful reading comprehenders (Clark, 2003).

It is every teacher's job to find ways to "scaffold" learners' cognitive development so that students can use strategies to better read and comprehend a given text (Clark, 2003).

Students' reading comprehension ability continues to be a primary focus in the elementary education programs. Teachers are faced with the challenge of balancing a wide range of student needs and are required to find ways to facilitate the acquisition of reading comprehension skills. For this purpose, several strategies have been developed to improve the understanding, storage, and retrieval of complex, meaningful, and organized information.

Nowadays, many children have difficulty reading proficiently and comprehending a text in the elementary level. If students do not learn strategies at this level, they will not be well equipped to meet the demands of their content area classes in the intermediate and secondary cycle.

Regardless of their confidence, skills, and teaching experience, colleagues in the school where I work at continuously search   for new strategies to enhance all their students' learning outcomes, specially students with low academic abilities.

A few months ago, in a general meeting with the principal, the English teachers and I discussed our   struggles with students' comprehension. Here I felt the challenge to move students beyond decoding to increased comprehension and to mesh the teaching of reading with content to ensure the success for all students in our heterogeneous classes.

For this reason, I set out to explore the effectiveness of two reading comprehension strategies and explored the prospect of using them in the regular curriculum and adopting the more effective one for English classes.

The trend in our school often includes very little focus on innovative or metacognitive reading comprehension. Teachers and students usually read a text and answer related comprehension questions with little or no guidance in how to apply strategies for comprehension. This lack of explicit comprehension instruction is a significant problem that needs to be addressed, especially for those students who are behind their peers in reading and comprehending a text.

Weaknesses in reading comprehension are often attributed to students' lack of both metacognitive skills and fix-up strategies to repair understanding (Mason, 2004). Hence it is every teacher's responsibility to equip students with the necessary skills and strategies to improve their comprehension.

CHAPTER TWO

Literature Review

Definition of Reading Comprehension

Reading comprehension can be described as "a function of decoding skills and language comprehension skills" (Takala, 2006, p.559). Reading comprehension is the core of reading that is essential not only to in-school academic learning but also to life-long learning. According to Mason (2004), reading comprehension, which involves construction of meaning from text, is considered the most essential academic skill learned in school.

Reading comprehension is a multifaceted process. To understand a text, students need, in addition of being good decoders and fluent readers, they need vocabulary knowledge and metacognitive skills so that they can monitor their comprehension and reflect on what has been read (Boulware-Gooden et al., 2007).

Reading comprehension instruction aims at teaching students different strategies that will allow them to develop a conscious control of their cognitive processes. This requires teachers to stimulate students' cognitive abilities through the use of different instructional strategies (Alfassi, 1998). Reading comprehension depends on using metacognitive strategies that can be practiced in class (Takala, 2006).

Definition of Metacognitive Strategies

One of the differences between what poor readers and good readers do while reading seems to be strategic behavior. Good readers use more strategies than poor readers. If this is the case, it can be stipulated that good readers have control over the reading material. This control is referred to as metacognition (Clark, 2003).

Kuhn defined metacognition as "enhancing (a) metacognitive awareness of what one believes and how one knows and (b) metastrategic control in application of the strategies that process new information" (Boulware- Gooden et al., 2007, p. 178).

Metacognitive strategies are strategies students use when planning, monitoring, and evaluating learning or strategy performance, and are often referred to as 'self-regulatory' strategies (Vaidya, 1999).

According to Clark (2003), metacognition is defined as the knowledge learners have about reading strategies and the ability to take advantage of such knowledge to monitor their own reading.

In light of this, it must be every teacher's responsibility to make students strategic readers using scaffolding. Clark (2003) defined scaffolding as student's ability to complete a certain task beyond his/her ability level with an adult's help. Keeping in mind that teachers or adults can scaffold learners' cognitive development, educational researchers started focusing on ways to infuse this information with traditional reading comprehension instruction.

Metacognitive skills start developing between the ages of 5 and 7 and improve with age. Most students, however, will not be able to apply a given strategy unless reminded to do so at a certain age. Hence, it is the teachers' responsibility to enforce these skills to foster independence in their students (Clark, 2003).

Metacognitive skills seem to be largely absent in very young children. This does not mean that these children make no use of cognitive strategies. However, they are not aware of them and do not apply them consciously (Camahalan, 2006)

Educators are increasingly recognizing the importance of instruction that focuses on developing metacognitive strategies. Some metacognitive strategies that distinguish between

competent and less competent readers include "activating prior knowledge, identifying important ideas, self-questioning, self-monitoring, seeking to understand relationships among ideas, drawing inferences, and clarifying confusing statements" (Gourgey, 1999, p. 85).

Importance of teaching reading comprehension strategies.

One of the primary concerns of educational psychology is improving reading comprehension skills at the elementary level. The acquisition of these skills at an early level provides a considerable amount of learning that takes place later on at the intermediate and secondary levels (Fahkreddine, 2006).

The general education classroom has become a setting for instructing diverse groups of students. This diversity requires that teachers have knowledge and skills for teaching students who are English language learners and students with disabilities (Vaughn, 2001).

Although many reports advocated the importance of teaching reading comprehension instruction, many teachers are still unsure about how to teach reading comprehension. They often ask questions such as "What is the best way to teach comprehension?" and "Where can I find a research-based comprehension program?" (Liang, 2006).

Many teachers feel overwhelmed when faced with the pressure of meeting the educational needs of students with learning disabilities (LD) and of culturally and linguistically diverse students (Klingner & Vaughn, 1998).

The purpose of this study is to compare two metacognitive reading comprehension strategies: the Reciprocal Teaching and Collaborative Strategic Reading, which are mostly used by teachers, and to check which leads to better results when applied in the general educational classroom.

Reciprocal Teaching

In this section, the two reading comprehension strategies which are Reciprocal Teaching and Collaborative Strategic Reading will be extensively reviewed. The definition, application, purpose of usage, effectiveness, and limitations of each strategy will be provided.

Reciprocal Teaching is defined as an "interactive scaffolded instruction in which the teacher leads a group of students as they dialogue their way through a text to understand it" (Clark, 2003, p.10). According to Takala (2006), Reciprocal Teaching refers to a method of instruction that is designed to teach pupils cognitive strategies that will help them to improve their reading comprehension skills.

According to Alfassi (1998), Reciprocal Teaching is "an instructional technique in which reading comprehension is viewed as a problem-solving activity in which thinking is promoted while reading" (p.72).

Reciprocal method is designed to improve the reading comprehension of students who can decode but experience difficulty understanding text (Takala, 2006).

According to Palincsar, David, and Brown, the term "reciprocal" refers to the interactions in which one person acts in response to others. This dialogue is structured by using the four strategies: predicting, questioning, clarifying, and summarizing (Hashey, 2003).

Through predicting, students recall what they know about a topic and hypothesize about what might happen next. After this, they read to confirm, disprove, or revise their hypotheses (Hashey, 2003). Predicting occurs when using prior knowledge and discussing what will happen next in the text (Todd, 2006).

Questioning, the second strategy in Reciprocal Teaching, requires students to identify key information in a paragraph or text and formulate questions about it that increase others'

understanding (Clark, 2003). King and Johnson described the questioning strategy as one that allows students to identify the main ideas in a text or paragraph and remember important information by asking relevant questions about a text or paragraph (Todd, 2006). Questioning requires students to create and ask questions about a text at many levels (Hashey, 2003).

When a failure in comprehension occurs while reading, students identify the source of breakdown and refer to several steps to resolve meaning. For example, students may reread, read ahead, or ask for assistance. This is referred to as clarification (Clark, 2003). Clarification requires students to identify words or concepts that don't make sense to them to seek answers (Hashey, 2003). When using clarification, students use their metacognitive processes while comprehension is being monitored (Todd, 2006).

The final strategy in Reciprocal Teaching is summarizing in which students identify the most important information in a text or the 'gist of a text' (Hashey, 2003). Summarizing shows whether a student understood a text or not (Todd, 2006). According to Clark (2003), summarizing is defined as the process of paying attention to important information while reading sentences, paragraphs, and passages of a text.

The four comprehension strategies described above help students who can pronounce words in a text but have difficulty giving evidence of their comprehension. Hence, the purpose of Reciprocal Teaching is to facilitate the comprehension of a text in a group effort between teacher and students and among students (Takala, 2006).

The idea behind Reciprocal Teaching is having the teacher instruct students using the four strategies through a dialogue form until students master them and gradually the dialogue shifts to student to student. According to Clark (2003), at first, the teacher guides learning while students participate by commenting on each others' summaries, asking each other questions,

commenting on each others' predictions, and asking for help when something is not understood. Then the teacher's role changes from a leader to a supporter while students' dialogue among themselves becomes more cooperative. Students now can summarize, comment, ask questions, identify difficult words, and make predictions among themselves.

Predicting, to most teachers, is the strategy that seems the logical place to begin with. Predicting, according to Hashey (2003), is used to reinforce the value of picture and word clues, to allow students of varying abilities to participate, to provide a reason for reading, and to promote equity in discussion. Teachers may introduce predicting by asking students how they choose a movie to watch and further extend this idea by asking students to confirm whether their predictions changed as the movie progressed. This can be compared to reading a book. Predicting is not simply to tell things that happen at the beginning but is an ongoing process of conforming, revising, and understanding (Hashey, 2003).

Questioning is known to engage students, challenge them to think at upper and deeper levels, and check their comprehension. According to Hashey (2003), to help students generate questions at different levels, teachers may draw a question continuum on the board and introduce the idea of questions by using the terms "fat" and "skinny", "shallow" and "deep", or " big" and "little."After reading a certain paragraph, a teacher calls on each student to ask a question and record it on a strip of paper. In groups, students work to answer these questions. Students conclude that some questions were answered easily and briefly; hence they were referred to as "skinny" while others were not; hence, they were termed "fat." "Skinny" questions ask for "yes" or "no" responses or other short answers based on a text while "fat" questions are open-ended and ask much more thoughtful and complete answers.

Students react in various ways to difficult or unfamiliar material. While competent readers seek clarification when needed, weaker ones do not. A variety of clarification strategies may be taught to students such as "rereading, using context clues, visualizing, activating prior knowledge, or referring to reference material" (Hashey, 2003, p. 228).

To challenge students to use this strategy, teachers may ask students a question such as, "What would you do if you were lost in a forest or in a city?" Students work in small groups to list possible solutions and share them with the class. Together, then, they may brainstorm how each possibility could be related to finding meaning when lost in literature (Hashey, 2003).

Summarizing, the most difficult strategy for students, requires students to focus on important points without restating everything. Students here must be taught the difference between retelling and summarizing. This can be done when the teacher gives his/ her students several situations and asks them to tell whether a summary or retelling was required. Examples could be a woman who had flu and couldn't attend a wedding, so she asked her cousin to report back to her on the wedding. Another example could be a surgeon who couldn't go to an important workshop, so he/she asked a colleague who attended to report back to him/her (Hashey, 2003).

According to Hashey (2003), summarizing acts as a challenge to students to decide what is important in a paragraph or text and what is not. It requires them to identify the big idea, to help them better comprehend and remember what they read, and to teach a critical life skill.

Through explicit metacognitive strategy instruction, teachers transfer good reading habits onto students by emphasizing the application of the four reading comprehension strategies. This is accomplished by deliberately releasing control of the dialogue onto the students, who take turn playing the role of the teacher (Clark, 2003).

The basis of Reciprocal Teaching is guided learning which in turn is based on three theories. According to Rosenshine and Meister, Reciprocal Teaching is based on Vygotsky's zone of proximal development. This means that a student is able to learn with the help of another despite development, and that the student can be instructed to learn by scaffolding beyond his/her developmental level. The second theory is proleptic teaching. This refers to procedures most often found during instruction in which adults "shape" a learner until he or she is ready to do the job independently (Clark, 2003).

The final theory is referred to as expert scaffolding. Through expert scaffolding, teachers act as guides, shape the learning efforts to students, and provide support until it is no longer needed. According to Clark (2003), scaffolding procedures include limiting tasks to make them convenient, motivating students to remain interested, pointing out significant features, and representing solutions to problems and explaining them to the student.

Teachers are often faced with the problem that some students are good decoders yet have poor comprehension skills. These teachers need to train students to use metacognitive strategies otherwise students will continue to reads texts with emphasis on words, not meaning. According to Clark (2003), students using Reciprocal Teaching are given the opportunity to disclose their independently-generated coping strategies, thus ensuring internalization of the strategies, as well as sharing those strategies with other readers.

According to Brown and Palincsar, students are exposed to different points of view and to ways of supporting these viewpoints when using Reciprocal Teaching. Clark (2003) emphasized that Reciprocal Teaching is needed nowadays due to the lack of using scaffolded instructions in schools since it promotes metacognitive strategy internalization by conveying intentional learning, in contrast to incidental teaching.

According to Todd (2006), Reciprocal Teaching in the listening setting does not only benefit those who comprehend poorly but also those who decode poorly. In a study done by Palincsar, Brown and Martin, it was reported that peer instruction, during which students modeled Reciprocal Teaching, promoted learning from text, improved comprehension and increased students' engagement through reciprocal teaching (Todd 2006).

In another study by Kelley, Moore, and Tuck, it was shown that Reciprocal Teaching does not only improve reading comprehension but also it assists students' abilities to recall information. The study pointed out that this procedure was effective as an instructional procedure for students who experienced problems with reading comprehension (Todd, 2006).

Western and Moore assessed high school students in New Zealand before and after the implementation of Reciprocal Teaching. After five weeks of intervention, the students receiving 12-16 sessions showed the most improvement in reading comprehension when compared to students who received 6-8 sessions (Todd, 2006).

Reciprocal Teaching was effective according to a study conducted by Kettmann-Klingner and Vaughn on students taking English as a second language and identified with learning disabilities (Clark, 2003).

According to researchers, Reciprocal Teaching supports the comprehension of learning disabled students. It has been noticed that comprehension levels are increased when scaffolded instruction was used with learning disabled students and it is recommended for inclusive classroom settings (Todd, 2006).

Alfassi (1998) conducted a study with high school students in remedial reading classes and proved the effectiveness of Reciprocal Teaching as opposed to traditional methods. The author found out that when ninth-grade students discussed how they were thinking about a text,

this exposed them to different viewpoints and provided struggling readers with coaching from other students.

Another area in which researchers agree is the effect of strong teacher modeling when using Reciprocal Teaching. Todd (2006) reported that Reciprocal Teaching allows students to mimic their teachers and is crucial when using strategies for comprehension purposes. In a study comparing reciprocal teaching and guided reading, key findings indicated that students gained the most benefits when the Reciprocal Teaching method was used (Todd, 2006).

In a study replicated by Palincsar and Brown's experiment, Lysynchuck, Pressley, and Vye found results similar to those found in the original experiment. Reciprocal Teaching improved reading comprehension in fourth and seventh grade students who were identified as adequate decoders, but poor comprehenders (Clark, 2003).

According to Todd (2006), researchers found some limitations to Reciprocal Teaching. First, concerning time frame, reciprocal teaching occurs only for longer time interval such as a whole school year. According to Palincsar and Brown, strategies employed in Reciprocal Teaching are effective however the strategy tends to be time consuming to be implemented by teachers and modifications are necessary for implementation (Boulware- Gooden et al., 2007). Second, in some cases, teachers spend too much time talking and experience difficulties when transferring roles from teachers to students. A third problem, was students having difficulties mastering Reciprocal Teaching and applying it especially with challenging texts. A final problem was that Reciprocal Teaching is used as post-reading discussion rather than strategy instruction during reading (Todd, 2006).

Other limitations to Reciprocal Teaching were reported by Rosenshine and Meister who reviewed 16 different studies of Reciprocal Teaching and found the following problems: First,

little evidence of the quality of Reciprocal Teaching dialogue was found. This promoted Palincsar to find a measure to evaluate the dialogue. Second, Pressley reported another problem which relates to the difficulty of monitoring students' comprehension, as well as their use of too many literal questions. Third, Rosenshine and Meister emphasized the importance of more studies to be conducted on how Reciprocal Teaching is implemented into classrooms. Finally, according to Palincsar and Brown, Reciprocal Teaching taught students strategies to comprehend a text rather than provided them with worksheets for instruction and assessment (Clark, 2003).

Collaborative Strategic Reading.

Collaborative Strategic Reading (CSR) is an instructional framework originally designed to help students who are at risk and with learning disabilities to understand texts used in the content area (Liang & Dole, 2006). CSR is a strategy that adapts reciprocal teaching, incorporates cooperative learning, and uses four strategies; preview, click and clunk, get the gist, and wrap up. In the preview phase, students brainstorm about a certain topic and make predictions of what might be learned or might occur before reading. In click and clunk phase, students try to understand difficult words or parts by using four "fix-up" strategies. These "fix-up" strategies are rereading the sentence without the word and thinking about what would make sense, looking for a prefix or suffix in the word that might help, rereading the sentence with the clunk with the sentences before or after the clunk, looking for clues, and finally breaking the word into parts and looking for smaller words that might make sense. In the third phase, get the gist, students have to identify the most important information in a certain passage and finally, in the wrap up phase, students ask and answer questions that reflect understanding and review what has been taught (Clapper, 2002).

CSR is a very efficient technique for teaching students reading comprehension and building vocabulary in addition to working cooperatively (Klingner & Vaughn, 1998). CSR was designed to address three educational issues which are: meeting the learning needs of diverse students especially English-language learners and students with learning disabilities, providing an instructional framework that facilitates comprehension of a text and skills needed to learn from a text, and providing procedures that help peer-mediated instruction (Vaughn et al., 2001).

CSR is first introduced to the class as a whole in which the teacher presents the four strategies, models the way they are used, and displays text that is visible to the whole class using an overhead projector. Through think-aloud, the teacher demonstrates on subsequent days how each strategy is applied and provides students with opportunities to demonstrate too. After each strategy is fully explained, the teacher asks several students to come to the front of the class and model the strategy for their friends. The teacher also models the use of the four strategies while being integrated in a text. Students practice and model the use of the four strategies using a text till they develop proficiency in applying them through teacher-facilitated activities. Then students will be divided into small and heterogeneous groups of four or pairs in which each student performs a specific role. Students' roles and responsibilities are clearly defined in CSR and require interdependence among the members of a group (Vaughn et al., 2001).

The four CSR strategies are based on previous research and are designed to activate prior knowledge and make predictions prior to reading (the preview strategy); monitor reading and enhance vocabulary development during reading (the click and clunk strategy); identify main ideas while reading (the get the gist strategy) and summarize key ideas following reading (the wrap up strategy) (Vaughn et al., 2001).

Previewing consists of two activities, which are brainstorming and making predictions, and is introduced to students by asking them to skim information in a text such as headings, pictures, and bolded or underlined words to determine what they already know about a topic and what they think they will learn by reading a text (Bremer et al., 2002).

When introducing 'click and clunk' strategy, the teacher describes a click as something that the students really know or just 'clicks' while a clunk as something that they do not understand, then models this strategy by reading a short paragraph and asking students to identify clunks. Students are required to write their clunks down and use specific 'fix-up' strategies to figure them out (Bremer et al., 2002).

Get the gist is taught by referring to one paragraph at a time by which students are supposed to read the paragraph then identify the main idea by answering the question "Who or what is it about?" and "What is important about the who or what?" (Bremer et al., 2002).

In wrapping up, the teacher asks students to pretend they are teachers and think of questions they would ask on a test. Higher-level thinking questions are encouraged to be used (Bremer et al., 2002).

After the four strategies are fully explained and students are divided into heterogeneous groups, each student is given a specific role to perform. Roles also rotate so that students experience different roles. According to Klingner and Vaughn (1999), in CSR the roles include the leader, clunk expert, gist expert, announcer, and encourager. The leader's role is to lead the group in implementing the strategy and to ask for the teacher's help when necessary. The clunk expert is to use clunk cards to remind the group of steps to be used to find out the meaning of a difficult word or concept. The gist expert guides the group to form the gist by determining that the gist contains the most important idea(s) without unnecessary details. The role of the

announcer is to make sure each member participates and talks at a time and to call on different members to read or share an idea. Finally, the encourager watches the group members and gives feedback such as praising, and encourages each member to participate in the discussion. Moreover, the encourager evaluates how well the group has worked and gives suggestions for improvement.

The teacher's role when students are implementing CSR is to rotate among the groups, clarify chunks if needed, model strategy use and cooperative learning, and finally redirect the students to remain on-task and provide help (Bremer et al., 2002).

Because of the fact that teachers are required to teach increasingly different learners, there is a growing research base that emphasizes the benefits of peer-mediated instruction as a way to improve on-task academic learning time, model correct-answers, provide ongoing feedback, monitor progress, and increase the quality of students' verbal interaction (Vaughn et al., 2001).

CSR takes advantage of the growing research on the benefits of teaching students strategies in reading comprehension. According to Pikulski, reading comprehension instruction requires four or five strategies and CSR teaches students four critical strategies with examples of how to apply them independently. It is also implemented in small groups whereby students with disabilities and with learning problems can interact without any reluctance as in whole class situations (Vaughn et al., 2001).

CSR has been used as an instructional framework designed to promote content-area reading and reading comprehension and as a part of a multi-component approach to improve reading outcomes. According to Vaughn et al. (2001), overall findings suggest that students

benefit from using specific strategies that help read and understand a text. Besides, teachers do not have to worry about large groups of students since CSR provides them with the opportunity to organize their classes in ways that would reduce group size without the need of requiring a second teacher. Moreover, students are more confident working in small groups versus working in whole-class situations.

CSR's effectiveness has yielded positive findings in the investigation. Klingner and Vaughn (1999) found, in one study that the reading comprehension, content learning, and vocabulary acquisition of 10-and 11- year- old bilingual (Spanish) English language learners improved when CSR was implemented with their science textbook.

In a study comparing a traditional decoding-based feedback and CSR, Crowe (2005) found that CSR was more effective in facilitating oral reading comprehension measured by formal and informal assessment procedures. Students in this study showed significant greater gains on a formal measure of reading comprehension and recalled significantly more story details, with better recall over a long period of time when using CSR rather than a traditional decoding-based feedback.

In another study, 9-and-10-year-old students in three culturally and linguistically diverse classrooms that included struggling readers, English language learners, and average and high-achieving students, CSR has been implemented with their social studies text and those students' reading comprehension scores on a standard reading test showed higher levels than their peers who did not use CSR (Klingner & Vaughn 1999).

Moreover, Chinese-speaking English language learners with learning disabilities improved in content learning, English acquisition, and reading comprehension when CSR was implemented. In addition to this, teachers emphasized that CSR provides an environment in

which students become more proficient at applying comprehension strategies and constructing knowledge when reading texts and that their participation in group discussion increased (Klingner & Vaughn, 1999).

Vaughn, Klingner, and their colleagues examined a series of intervention studies on secondary students with learning disabilities which demonstrated that CSR was correlated with improved reading comprehension. In one study conducted on 26 seventh and eighth-graders with learning disabilities who used English as a second language, CSR improved their reading comprehension. In another study of sixty sixth-graders with varied reading levels in an inclusive setting, results revealed that students with learning disabilities significantly improved their word identification and fluency but not their reading comprehension (Bremer et al., 2002).

Studies of CSR effectiveness found gains in the reading comprehension of students with disabilities as well as with English Language Learners (ELL) (Clapper, 2002).

The effectiveness of CSR with elementary students with learning disabilities has been supported. Klingner, Vaughn, and Schumm implemented CSR with fourth graders with different reading levels. Students in the CSR outperformed those in the control group on comprehension. In another study on fifth-grade students taking English as a second language in science classes, those students showed significant increase in their vocabulary from pre-to post-testing (Bremer et al., 2002)

Some limitations about the application of CSR have been mentioned. CSR strategies require much time to be taught to students (Bremer et al., 2002) and much time might be wasted in negotiations about who would perform a specific role. Moreover, to implement CSR, teachers need to be given an intensive collaborative professional development program (Vaughn et al., 2001).

CHAPTER THREE

Research Design and Methodology

Participants and Setting

Thirty-four students who were instructed in two fourth-grade general education classrooms in a school in the greater Beirut area that caters for middle class families served as participants in this study. Each section was assigned randomly to one of the two conditions: Reciprocal Teaching or Collaborative Strategic Reading. Section A was assigned the Reciprocal Teaching whereas section B the Collaborative Strategic Reading. All students speak English as a second language except one student who is a native speaker of English in section A. Moreover, section A includes three students with learning disabilities.

The same teacher, Ms. Nayla, taught both sections in grade four. She has more than four years of teaching experience. She graduated from the Lebanese University, Faculty of Education, Beirut Campus. She was enthusiastic about implementing two different reading comprehension strategies in her classrooms because she wanted to energize her reading comprehension classes and motivate her students to learn better.

Material

All instructional materials used in the study were extracted from students' reading comprehension textbooks. Students used the MacMillan- McGraw-Hill textbooks of the fourth grade level. Four reading passages were used by the students for assessment, instruction, and student practice. Students in both sections read the same passages. The teacher was given laminated cardboards describing the steps of each strategy to be posted in class. Students in both sections were also given laminated tags specifying the roles they were supposed to be following

(Section A: clarifier, predictor, summarizer, and questioner). Section B: (gist expert, clunck expert, leader, and announcer). Moreover, section B students were given specific charts, related to CSR, to refer to while applying the strategy (see appendix A).

Procedure.

The study consisted of the following three phases:

Phase 1: Pretesting

Prior to the initiation of the study, students in both sections were given the same diagnostic test (Sample of diagnostic test provided in Appendix B). It consisted of multiple-choice questions, short answer questions about finding details and analyzing information in a text, and a vocabulary part in which students have to find the meaning of a word referring to the text. Results of the diagnostic test are found in Appendix C. For the first two months of the school year, the teacher used a traditional teaching strategy. The teacher usually activated students' prior knowledge, used the illustrations to preview and predict, asked questions about vocabulary words and reviewed words and their meanings.

After the two month-period and before implementing the study, the teacher made a test on a scientific article taken from students' textbooks. A sample of the pretest is found in Appendix B. The pretest included true and false questions and short answer questions. Results are reported in Appendix C.

Phase 2: Training

a.   Teacher Training

Before implementing the study, the teacher was trained in using the two reading comprehension strategies. Each strategy was extensively introduced by the class teacher. She was provided with summaries of the two strategies containing the procedure of

application and follow up. Moreover, the teacher was given all the materials needed to be used in class such as cardboards to be posted in class, tags, laminated cards, photocopies of charts, and other material that she might refer to and use while applying the strategies.

b. Implementation:

i. Direct implementation of the two strategies

Each of the two reading comprehension strategies was introduced at the same time in a section. In section A, in which Reciprocal Teaching was implemented, the method was modeled by the teacher as she made predictions, asked questions, clarified confusing ideas and words, and summarized a text read in class. Students were encouraged to ask questions and clarify misconceptions about the implementation of the strategy. After the teacher modeled the strategy for one week, students were divided into heterogeneous groups of four in the second week. Students were each assigned a role; predictor, clarifier, questioner, and summarizer, and together practiced and took turns making their own predictions, clarifications, questions, and summaries on a scientific article taken from their textbooks.

In section B, in which CSR was applied, the teacher also modeled for the students how to (a) "preview" (before reading a passage, to read the title, predict what the passage might be about, and recall what they already know about a topic; (b) "click and clunk" (to identify difficult words and concepts while reading a passage and use fix-up strategies); (c) "get the gist" (to tell the most important idea in a passage); and (d) "wrap up" (to summarize what has been learned and ask question 'the teacher might ask on a test').

Students were then divided into heterogeneous groups of four and each student was assigned a role; the leader, the clunk expert, the gist expert, and the announcer. The teacher modeled for one week the roles students were to apply. In the second week, the teacher presented

students with the same scientific article given in section A, assigned each student a role, and asked them to apply what they have been trained for.

ii.   Guided Practice

During this phase, the teacher continued to scaffold students and intervene in section A in which reciprocal teaching was applied and gave the floor to students to work independently in section B in which CSR was applied. This phase continued for two more weeks and was also applied on a scientific article extracted from students' textbook. The teacher in both sections gave students a test, identified later as during intervention test, at the end of the selection they were working on. Grades of each student in both sections were collected for later use (referred to as "during intervention" test) (See Appendix C).

Phase 3: Intervention

In this phase, students in both sections were provided with an unfamiliar text from their reading comprehension textbooks and were asked to work in groups reading the text and applying the steps they have been trained to follow. The posttest was related to a scientific article the students read and discussed in class each according to the strategy specified. The posttest included multiple-choice questions, fill-in-the blanks questions, and short answer questions. A sample of posttest is found in Appendix B. The results were collected for later use (see Appendix C).

Methodology

For data analysis, a pretest-posttest model design was used to determine student's progress in each of the two sections. In this study, the scheme involved two groups of students in grade four: section A using the Reciprocal Teaching and section B using the CSR.

The sample in this study is not representative of the whole population of fourth graders. Further study replication on fourth graders will increase the likelihood that the results be generalized to the population of fourth graders where Reciprocal Teaching and CSR were applied. To check whether the two sections were equivalent in level, a diagnostic test and pretest were implemented before intervention. Results showed that no significant difference exists between the two sections.

Ethics

Before implementing this research study, permission was secured from the school principal who was interested in and enthusiastic about applying two reading comprehension strategies known to be effective. However, no written agreement was provided. Moreover, the school principal was against sending any kind of questionnaires and surveys to parents or even telling the students that they were under any kind of a study. The students in both sections passed the pretests, during intervention tests, and the post-tests without being informed that they were taking part in the study because the prospect of participating in a study would have made the students more anxious and would have inevitably affected the reliability and validity of the results. For ethical reasons, students in both sections were using two reading comprehension strategies mostly researched in literature and considered to be effective. According to Bell (2005), any promise given during "the informed consent" should be totally respected for ethical reasons.

Instruments

The instruments used in this study were a diagnostic test consisting of multiple-choice and short answer questions and pretests, during intervention tests, and post-tests (scientific articles consisting of true/false questions, short answer questions).

The questions of all the tests were developed by the English teacher and approved by the English coordinator.

For data analysis, the experimental design method was used to compare data between the two sections and a 2-tailed t-test for comparison of group means to identify significance in results.

First, validity in this study was based on the content-related evidence. The content-related evidence of validity according to Fraenkel and Wallen (2006) concerns the adequacy of the sampling. This includes the comprehensiveness of the context, the appropriateness of the language, the size of the print, and the clarity of the directions. The content and format of the instruments were consistent with the definition of the variables.

In addition to the first instrument, testing, two observational sessions were carried out to check fidelity of treatment and the way the two reading comprehension strategies were applied. The first observational session for both sections was held during the time the teacher modeled using the strategy to the students while the second session was held at the time students became familiar with the strategy and were working independently. The four points taken into consideration while observing were: the classroom physical environment, description of the lesson, teacher's behavior, and students' behavior. The observation forms are available in Appendix D.

In addition to observing the two sections, a third instrument was used. Both sections were videotaped at the time they were applying the strategy The teacher reminded the students of the strategy they were using at the beginning of the session then students were left alone to work independently. Students in both sections worked cooperatively in groups of four implementing

what they have been trained to. Yet, although the students were informed that the session was going to be videotaped ahead of time to show them how wonderfully they worked in groups, the students felt shy and that was clear from the way they lowered their voices and felt confused while being videotaped. The DVD is submitted with the study.

A fourth instrument used in the study was an interview with the teacher. The teacher was asked several questions about implementing both strategies and her opinion toward them. The sample of questions is provided in Appendix E and is followed by the teacher's responses.

Finally, three students from each section, selected upon teacher's recommendation, were selected to answer four questions about the strategy that was applied in their section. The sample of questions and students' answers are provided in Appendix F.

Data were collected from three different sources, that is, observing triangulation. This increased the internal validity of the study.

A pretest and an equivalent posttest conducted after a period of three weeks was adopted. The equivalent-form retests ensure reliability of the study. Both sections, where Reciprocal Teaching and Collaborative Strategic Reading were applied, received the same tests at the same day, and were proctored by their English teacher. According to Frankel and Wallen (2006), equal performances with regard to stability over time are measured by the two-forms-tests. The reliability coefficient is calculated between the two sets of scores obtained from the two groups. If the reliability coefficient is high, this means that there is an evidence of strong reliability.

CHAPTER FOUR

Findings

This chapter reports the results of the study using the instruments discussed before.

All statistical data were analyzed using the Statistical Package for Social Sciences (SPSS). Pre and post descriptive statistics on students' achievement in the tests are reported.

Table 1 presents the descriptive statistics of the "before intervention" tests of both sections A and B. Students in Section A (M = 74.46, SD = 13.87) and students in Section B (M = 85.44, SD = 8.57) revealed close results. This shows that both sections were almost of the same academic level before implementing the study when completing a diagnostic test. Table 2 shows that there was no significant difference between the two sections when a t-test was done (t = - 0.707, p = 0.485 ns).

Tables 3 presents the descriptive statistics of the "after intervention" tests of both sections A and B. Section A (M = 74.46, SD = 13.87) in which reciprocal teaching was applied showed lower results than section B (M = 85.44, SD = 8.57) in which CSR was applied. By looking at table 5 shows that the differences between the two sections were statistically different when a t-test was done (t = - 2.75, p < 0.01).

In addition to the quantitative results, qualitative data were reported. First, each section was observed twice; once while the teacher introduced the strategy and another during the time the students were implementing what they had learned. The observations showed that students in section B, in which CSR was implemented, were more self-confident and excited. All students were participating in the discussion and the teacher put less effort since students asked fewer questions.

Second, in an interview done with the teacher, the teacher considered CSR as motivating for students since it is a group activity in which everyone expressed their ideas. Moreover, she felt excited about implementing the strategy and considered it as having a lot of advantages such as responsibility, shared interest, and a sense of collaboration. One disadvantage of CSR according to her was that it is time consuming. When asked about which strategy she prefers to use, the teacher insisted on CSR because of clarity of roles and compatibility of objectives with curriculum objectives. Upon asking her about her opinion of why CSR yielded better results, she suggested that the roles students played were more effective, hence helped students understand better, in addition to the papers and charts that students had to fill out. As for Reciprocal Teaching, the teacher considered it encouraging too for students and takes into consideration all students' different needs. When applying the strategy, the students reportedly were excited since everything was clear about it especially after her students had become familiar with the terms after several practices. According to the teacher advantages of Reciprocal Teaching involves clarity of objectives and collaboration. One disadvantage of the strategy reportedly was that it is time consuming. The teacher felt motivated about implementing this strategy and was ready to implement it in the future.

Third, three students from each section were chosen upon the teacher's recommendation to answer questions about the strategy they applied in class. In section A where Reciprocal Teaching was applied, the three students liked the way the teacher put them in groups because it "was nice" and "we worked together" and "when someone didn't understand something, the other members of the group were there to provide help." The three students preferred to ask their friends rather than the teacher when coming to something that they don't understand. They all liked working in groups since they felt freer to participate and ask questions. When asked

upon their preference for applying the strategy throughout the year, they all agreed and expressed that they liked the way they worked in groups.

On the other hand, students in section B, where CSR was implemented, all liked the way the teacher put them in groups because they worked together and understood better when putting their ideas together. Two students out of three preferred to ask their friends first when coming to something that they do not understand rather than ask the teacher. One student however preferred to ask the teacher because the teacher is more knowledgeable. The three students felt freer to participate and ask questions when working in groups and all wanted to keep applying the strategy because they liked to work in groups and felt that they can ask questions without feeling shy.

The DVD showed that students were interested in working in groups in both sections. Most students knew their roles very well and were ready to apply what they learned while reading a text. In section A, in which Reciprocal Teaching was applied, the teacher reminded students of their roles at the beginning of the period. Some students didn't know what to do when it was time to work in groups. Some students looked shy; whispered rather than talked aloud. Students used a piece of white paper to write their predictions and difficult vocabulary words they came to. The support and class teachers were intervening most of the time helping and guiding the groups. By the end of the given time for group work, some groups were not ready yet. When answering the teacher's questions discussing the story aloud, not all students were listening. Some were stalling; others were still writing. One student was sleeping on the desk; others looked tired or bored, and another student was resting his head on the wall.

In the other section, where CSR was implemented, the DVD showed that all students were attentive, everyone was actively participating, and all were confidently working in groups.

CHAPTER FIVE

Discussion

The purpose of this study was to provide students with metacognitive strategies necessary to understand a text by comparing two reading comprehension strategies as facilitating the comprehension of fourth-grade students.

Results of this study were in favor of CSR rather than Reciprocal Teaching as measured by formal assessment procedures. Although both groups showed better results after the intervention confirming that both groups benefited from the metacognitive strategies introduced, yet students using the CSR showed significantly better results than students using Reciprocal Teaching.

Metacognition based on CSR and Reciprocal Teaching is beneficial specially when compared to control groups. The results of this study are compatible with research done on the topic and confirm that using metacognitive strategies is effective. For example, the following three studies show that implementing metacognitive strategies improved the academic achievement of students.

In a study conducted on third- grade students, the results showed that metacognitive reading comprehension instruction significantly improved academic achievement in terms of reading comprehension and vocabulary (Boulware- Gooden et al., 2007).

In another study conducted on first-grade students, the findings revealed that students in primary grades may benefit from explicit instruction in reading comprehension strategies at the same time they are learning to read words (Eilers & Pinkley, 2006). The results of this study further suggested that instructing a whole group of students including teacher modeling with the

opportunity for students to use the strategies independently was appropriate to develop reading comprehension in young children.

Reviews of several studies have concluded that students' comprehension improved when students received appropriate training in how to generate their own questions while interacting with others (Alfassi, 1998). Results of this study support these findings and show that when teachers model the reading process and then guide students to generate questions and connect ideas within a text to their prior knowledge, students perform better on comprehension tests. This is also clear when comparing the "before intervention" results with the "after intervention" results in which both sections A and B showed higher results after introducing the two strategies.

Moreover, all studies done on CSR and Reciprocal Teaching yielded positive results. In a study comparing the implementation of CSR to a control group, results revealed that students in the CSR condition showed significantly better gains than control students especially for students with learning disabilities and low achieving students (Klingner et al., 2004). Similar findings have been reported by all studies in which CSR was compared to traditional reading feedback interventions (Crowe, 2003).

In a study analyzing 16 quantitative studies of Reciprocal Teaching revealed that this teaching was better than control treatment (Rosenshine & Meister, 1994).

According to Gourgey (1999), developing metacognitive reading skills is not a single-strategy process. These skills necessitate much repeated practice, and have to be repeated with different texts so that they become more habitual and comfortable.

Although no studies were done comparing CSR to Reciprocal Teaching, this study is considered second to none. The reasons behind CSR yielding better results than Reciprocal

Teaching are speculative. CSR may have been more effective for the following possible reasons.

First, the strategy was student led. Each student was given a specific role, was responsible for one part of the reading comprehension process in front of the group members, and had to explain to others in the group and later to present in front of the class his/ her ideas.

Second, the teacher attributed the success of CSR over Reciprocal Teaching to the roles the students played. Moreover, the strategy increased a sense of responsibility since students had to fill out charts and papers while working in groups and the responsibility of each role was assigned on a separate card.

A third reason for CSR leading to better results might be cultural. Students in our schools are not trained well enough to express themselves and their opinion out loud. A lot of students tend to feel anxious asking questions fearing being ridiculed by their peers. CSR provided students with the chance to express themselves in front of the group members and then to the whole class.

A final reason for CSR's effectiveness might be that CSR is fun to use and implement. There is an inherent pleasure derived students work in groups and share their ideas and opinion with their friends and classmates.

Reciprocal Teaching and CSR are two reading comprehension strategies that are based on group discussions. The discussions that took place during the implementation of both strategies seemed to benefit shy students who found a comfortable environment to express themselves (Clark, 2003). Based on the classroom observation sessions, students were passive learners before implementing the study.. They talked only when the teacher gave them permission. They sat quietly and passively listening to the teacher does all the work. Some students did not

participate at all, some were not paying attention, and some continued to ask for clarification most of the time. After the strategies were introduced, students became more active, developed better communication skills, expressed their ideas in small groups versus a whole class, and became more motivated to meet with others to share their beliefs and personal experiences as they related to the text.

In conclusion, one worthy goal of reading instruction is to help students become skillful and thoughtful readers. Although research established the importance of teaching students strategies to become self-reliant, yet strategy instruction is rarely incorporated into the curriculum (Alfassi, 1998).

To remediate learning difficulties, students need to be taught to become strategic readers. The diversity of students' needs in classrooms require teachers to use various teaching strategies rather than traditional teaching methods. Although teaching strategies is often more time-consuming, yet when students learn to use them, they become equipped to understand what they read in different situations (Takala, 2006). Students in both sections were able to learn the strategies specified for their sections in a remarkable short time and used it correctly. Yet, it is worth to mention that students using CSR showed more self-confidence using the strategy than students using Reciprocal Teaching. This was noticed in the observational sessions that were conducted after the implementation of the strategies and the DVD session.

Limitations of the Study

There were various uncontrolled factors that might have influenced the results of this study. One limitation was the inability to check for teacher's bias towards the strategies and proper implementation of all steps. All these factors may have influenced strategy presentation and student performance.

A second limitation was the sample and time considered. The study was applied to 34 students who belong to the same socioeconomic background and for a short period of time only. A study is considered valid when a greater sample is studied and over a longer period of time.

Implications for Future Research.

Several issues need to be taken into consideration in future research. First, both strategies need to be applied on different age groups. Results are not generalized to all four graders across Lebanon; only to schools that are compatible geographically, demographically, and academically.

A second consideration is the teacher's internalization of the strategies. According to a study by Anderson and Roit (1993), interview with teachers revealed that only teachers who have implemented the instruction for two years use it flexibly. Therefore introducing 2 new strategies for one teacher to apply in 2 different sections at the same time was really a challenge.

A third consideration, students need to have several opportunities to practice applying the strategies in order for each strategy to be effective. That is; these strategies implications need longer periods of time to be fully discussed, practiced, and then applied.

Conclusion

The purpose of this study was to compare CSR to Reciprocal Teaching and check which strategy was more effective when applied in the general educational classroom. Based on the statistical results, CSR had a significant effect in increasing fourth-graders' reading comprehension.

The results of the study indicated that implementing CSR method in grade four increased students' reading comprehension scores more significantly than Reciprocal Teaching. Other

benefits include: a sense of collaboration was established, and the group work experience seemed to have increased students' self-confidence and improved their social skills.

Since CSR proved to be more effective, it is recommended that English teachers in all the Elementary level become familiar with CSR and implement it with their students.

The belief that teaching practices change students' reading comprehension must be changed into identifying the most appropriate strategies and practice that ensure students' development in the reading skills that determine their success through their school year (Fahkreddine, 2006).

References

Alfassi, M. (1998). Reading to learn: Effects of combined strategy instruction on high school students. *The Journal of Educational Research*, 97, 171-184.

Anderson, A. and Roit, M. (1993). Planning and implementing collaborative strategy instruction for delayed readers in grades 6-10. *The Elementary School Journal*, 94(*2*), 121-137.

Bell, J. (2005). *Doing your research project*. Berkshire: OPA University Press.

Boulware- Gooden, R., Carreker, S., Thornhill, A., & Joshi, R. (2007). Instruction of metacognitive strategies enhances reading comprehension and vocabulary achievement of third- grade students: the use of metacognitive strategies helps students to "think about their thinking" before, during, and after they read. *The Reading Teacher*. 61, (*1*), 70 – 78.

Bremer, C., Vaughn, S., Clapper, A., & Kim, A. (2002). Collaborative strategic reading (CSR): improving secondary students' reading comprehension skills. *Research to practice brief: improving secondary education and transition services through research, 1, 2 - 8.*

Camahalan, F. (2006). Effects of metacognitive reading program on the reading achievement and metacognitive strategies of students with cases of dyslexia. *Reading Improvement.* 43 (*2*), 77- 94

Clapper, A., Bremer, C., & Kachgal, M. (2002). Never too late approaches to reading instruction for secondary students with disabilities. *Research to practice brief: improving secondary education and transition services through research, 1, 3 -8.*

Clark, L (2003). Reciprocal teaching strategy and adult high school students. Unpublished

    master's thesis, Kean University.

Crowe, L. (2005). Comparison of two reading feedback strategies in improving reading

    comprehension of school-age children with low reading ability. *Remedial and Special*

    Education, 26, 34-42.

Eilers, L and Pinkley C. (2006). Metacognitive strategies help students to comprehend all text.

    Reading Improvement. 43 (*1*), 13- 30.

Fahkreddine, J. (2006). Instructional practices and reading comprehension: frameworks that

    work. Unpublished master's thesis, Lebanese American University, Beirut, Lebanon

Fraenkel, G.R. and Wallen, N. E.(2006). How to design and evaluate research in education.

    Boston: Mac-Graw-Hill.

Gourgey, A. (1999). Teaching reading from a metacognitive perspective: theory and classroom

    experiences. *Journal of College Reading and Learning.* 30 (*1*).

Hashey, J. and Connors, D. (2003). Learn from our journey: reciprocal teaching action research.

    The Reading Teacher, 57 (*3*), 224-232.

Klinger, J. and Vaughn, S. (1998). Using collaborative strategic reading. *Teaching Exceptional*

    Children, 32-37.

Klinger, J. and Vaughn, S. (1999). Promoting collaborative reading comprehension, content learning, and English acquisition through collaborative strategic reading (CSR). *The Reading Teacher*, 52 (*7*), 738-747.

Klinger, J. K., Vaughn, S., et al. (2004). Collaborative strategic reading: "real-world" lessons from classroom teachers. *Remedial and Special Education, 25*, 291-302.

Liang, L., and Dole, J. (2006). Help with teaching reading comprehension: comprehension instructional frameworks. *Reading Teacher,* 59 (*8*), 742-753.

Mason, L. (2004). Explicit self-regulated strategy development versus reciprocal questioning: effects on expository reading comprehension among struggling readers. *Journal of Educational Psychology, 96*, 283-296.

Rosenshine, B and Meister, C. (1994). Reciprocal teaching: A review of the research. *Review of Educational Research*.64 (*4*), 479 – 531.

Takala, M. (2006). The effects of reciprocal teaching on reading comprehension in mainstream and special (SLI) education. *Scandinavian Journal of Education Research, 50,* 559- 576.

Todd, R, B. (2006). Reciprocal teaching and comprehension: a single subject research study. Unpublished master's thesis, Kean University.

Vaidya, S. (1999). Metacognitive learning strategies for students with learning disabilities. *Education.* 120 (*1*).

Vaughn, S., Klingner, J., & Bryant D. (2001). Collective strategic reading as a means to enhance

peer-mediated instruction for reading comprehension and content-area learning. *Remedial

and Special Education, 22*, 55- 76

Table 1:

Group statistics: Before intervention

group		N	Mean	Std.Deviation	Std. Error Mean
Test Before Intervention	reciprocal teaching	13	80.89	9.18	2.45
For class A/B	Collaborative Strategic reading	18	83.78	12.92	3.04

Table 2:

Independent Samples Test: Before Intervention

Test Before Intervention A/B	Levene's Test for Equality of Variances		t-test for equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Differene	STD. Error Differene	95 % Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	2.413	.131	-.707	30	.485	- 2.88492	4.07973	-11.21685	5.44701
Equal variances not assumed			-.738	29.808	.466	- 2.88492	3.91006	- 10. 87249	5.10265

Table 3:

Group statistics: After Intervention

group		N	Mean	Std.Deviation	Std. Error Mean
Test After Intervention	reciprocal teaching	13	74.46	13.87	3.71
For class A/B	Collaborative Strategic reading	18	85.44	8.58	2.02

Table 4:

Independent Samples Test: After Intervention

Test After Intervention A/B	Levene's Test for Equality of Variances		t-test for equality of Means					95 % Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	STD. Error Difference	Lower	Upper
Equal variances assumed	2.784	.106	-.2.755	30	.010	- 10.98016	3.98552	- 19.11967	-2.84065
Equal variances not assumed			-.2.600	20.492	.017	- 10.98016	4.22314	- 19.77594	- 2.18437

Appendix A

Charts of CSR

Before Reading	During Reading	After Reading
Preview Today's topic is _____. Let's brainstorm everything we already know about the topic and write it on your learning logs. Who would like to share their best ideas? Now let's predict. Look at the title, pictures, and headings and think about what you think we will learn today. Write your ideas in your learning logs. Who would like to share their best ideas?	**Read** Who would like to read the next section? **Click and Clunk** Did everyone understand what we read? If you did not, write your clunks in your learning logs. [If someone has a clunk] Clunk Expert, please help us out. **Get the Gist** It's time to Get the Gist. Gist Expert, please help us out. Go back and repeat all of the steps in this column over for each section that is read.	**Wrap up** Now let's generate some questions to check if we really understood what we read. Remember to start your questions with who, when, what, where, why, or how. Everyone, write your questions in your learning logs. Who would like to share their best question? In your learning logs, let's write down as much as we can about what we learned today. Let's go around the group and each share something we learned. **Compliments and Suggestions** The Encourager has been watching carefully and will now tell us two things we did really well as a group today. Is there anything that would help us do even better next time?

Name: _____   Date: _____

Brainstorm: What do you already know about this topic?	Predict: What do you think you will learn by reading this passage?
Clunks: Please list your Clunks.	
The Gist (main idea): Write the Gist of the section you read.	
Make questions: Make questions about main ideas.	**Review:** Write something important they learned.

Appendix B

Diagnostic Test

Before Intervention Test

After Intervention Test

Beirut Modern School

English Diagnostic Test

Name: _____   Date: _____

Grade: <u>4 A/ B</u>   Started at: _____

Number of pages: _____   Finished at: _____

The Animal Hunt

1   Yesterday was my brother Ben's fifth birthday party. As usual, since I'm the older sister, I had to help out. Mom said, "Leslie, five boys need to be watched carefully. You can't let them out of your sight for a minute or you'll lose one." Then she put me in charge of the games.

2   Since I didn't want to lose anybody, I planned for only one game for the boys to play outside. Ben loved animals and looking for hidden things. So, I took ten of his plastic toy animals and hid them in the vacant lot next to our building. By the time I was done, there were three bears, two snakes, three monkeys, one giraffe, and one lion hidden all over the lot.

3   When Ben's four friends arrived for the party, I could hardly believe how noisy and excited they were. Mom said, "Leslie, I'm going to cook the pizza. You can play your game outside with the boys. Then, bring them to eat.

4   "Okay, Ben," I announced. "It's time to go on a safari. The boy who finds the most animals will win a prize. I have hidden ten toy animals in the empty lot. Meet me out front in one minute." The boys raced down the stairs. Then, they lined up on the sidewalk ready to begin.

5   "On your mark, get set, go!" I cried, pointing them all toward the lot next door.

        Ben and his friends tore around the lot looking under the rocks and in the grass. They shrieked and laughed as they discovered eight of the animals. Only the giraffe and a snake were

still hidden. Then I noticed Chris, Ben's best friend. He was waving a snake around calling, "I found the snake!"

6   As I looked more closely, I knew it was not one of the thick black rubber snakes that I had hidden. This snake was long and thin. "Drop it, drop it!" I screamed. I had no idea whether this kind of snake was dangerous or not, but I was not going to take any chances. So, Chris directly threw the snake into the air and the rest of the game passed in a slow motion. The boys dashed around and uncovered the last two animals. I hurried them upstairs before anything else could happen. Everyone agreed that Chris was the winner. He found three toy animals and one living snake!

Comprehension Questions (10 pts):

A- Directions: Based on what you understood from "The Animal Hunt", circle (a, b, or c) to complete each of the following sentences. (0.75 pts)

1- Leslie had to prepare a game for her _____

a- mother   b- brother's birthday party   c- neighbor's birthday party

2- She hid _____.

a- ten animal toys   b- eleven animal toys   c- ten animals

3- Ben's sister can be described as a _____ person.

a- helpful   b- selfish   c- silly

B- Directions: Answer the following questions in complete sentences. (4.25 pts)

1- What would Leslie give to the winner of the game? (Identify details- 1 pt)

_____

_____

2- What happened just after Chris threw the snake into the air? (Identify sequence of events- 1 pt)

_____

_____

3- Why do you think Leslie told Chris to throw the snake? (Infer cause and effect relationship- 1.25 pt)

_____

_____

4- What do you think Leslie might have learned about children by the end of the day? (Draw conclusions-

1 pt)

_____

_____

C- Directions: Rearrange the following events in the order in which they happened in the story and write them in the sequence of events chart. (1.25 pts)

She took Ben's plastic toy animals. Chris was the winner of the game. She hid them in the lot next to their building. Ben's friends arrived and started playing the game. Leslie started to prepare a game for her brother's birthday.

```
┌──────────────────────────────────────────────────────────────┐
│                                                              │
└──────────────────────────────────────────────────────────────┘
                               ↓
┌──────────────────────────────────────────────────────────────┐
│                                                              │
└──────────────────────────────────────────────────────────────┘
                               ↓
┌──────────────────────────────────────────────────────────────┐
│                                                              │
└──────────────────────────────────────────────────────────────┘
                               ↓
┌──────────────────────────────────────────────────────────────┐
│                                                              │
└──────────────────────────────────────────────────────────────┘
                               ↓
┌──────────────────────────────────────────────────────────────┐
│                                                              │
└──────────────────────────────────────────────────────────────┘
```

Vocabulary (2.5):

<u>A- Directions</u>: Find words from the text that match with each definition. Refer to the number of the paragraph between brackets. (2.5 pts)

- empty (par 2): _____

- made known; said (par 3): _____

- made a loud sound; screamed (par 5): _____

- found out (par 5): _____

- hurried around (par 6): _____

Writing (6 pts):

Leslie prepared a birthday party for her little brother and entertained his friends. Think of a birthday party your parents prepared for and write a well unified narrative descriptive paragraph telling about it. When and where was it? Who did they invite? How did they decorate the place? What activities did you have? How did you feel at the end of the birthday party?

Brainstorm and write your ideas in a story map before you begin writing your paragraph. The grade will be divided as such: 0.5 pts for the story map, 0.5 for the title, 2 points for the content, 1.5 pts for Language and structure, 1 pt for organization and mechanics, 0.5 for spelling and punctuation.

(+ 0.75pt for overall spelling and structure, and + 0.75 pts for legible handwriting)

Work Well!!

Reading Comprehension Quiz

Selection Assessment

Name: _____   Date: _____

Grade: 4 A/ B   Duration: 15 minutes

I- Directions: Based on what you've understood from the selection "Seal Journey", fill in the bubble according to the best answer. (4 pts)

1- Seal do very well in certain conditions.

One detail about these conditions is that the _____.

   O season is spring
   O temperature is 5 degrees below zero.
   O sunlight causes a cool breeze

2- People have protected baby harp seals by _____.

   O making laws to stop hunting seals
   O building sheds for them to hide in
   O feeding them shrimp

3- To keep warm and survive in the world, baby seals need _____.

- O swimming lessons
- O lots of cold water
- O milk and a layer of fat

4- This story is mostly about _____.

- O a mother nurses her baby
- O newborn seals learn to swim
- O seals survive in the ice and cold

II- Directions: Decide whether each statement is true or false. Write T if it is true and F if it is false. Correct the false statements. (3 pts)

1- Seals travel from the south to the north to give birth to pups.

_____

_____

2- The mother seal knows her pup by the smell.

_____

_____

3- When a pup is born, it has a skin like its mother.

_____

_____

4- When pups become mature, they depend on their mothers to feed them.

_____

_____

III- Directions: Think about the details and facts that support the main idea of "Seal Journey". Write about three things that most impressed you in the selection, and tell why they impressed you.

_____

_____

_____

_____

_____

_____

_____

_____

_____

(0.5 for spelling and 0.5 for cleanliness and handwriting)

Work Well☺

Beirut Modern School

Selection Assessment

Open Wide, Don't Bite!

Name: _____   Date: _____

Grade: 4 A/ B   Duration: 15 minutes

Part A: Comprehension Questions.

I- Directions: Based on what you've understood from the article "Open Wide, Don't Bite", circle (a, b, or c) to complete each of the following sentences. (3 pts)

1- In order to clam down gorillas, the dentist _____.

a- tickles them

b- holds their hands

c- talks to them

2- Diseases that start in the mouth _____.

a- can spread in all the body

b- can not be treated

c- can be harmless

3- When a tiger looses one of its teeth, it can become _____

a- dangerous

b- healthy

c- another animal's dinner

II- Directions: Answer the following questions in complete and meaningful sentences. (3 pts)

1- Why do you think animals need the medicine for?

_____

_____

2- Do you think Dr. Kertesz enjoys treating animals? Why or why not?

_____

_____

3- What would you do if you found a sick animal? Explain your answer.

_____

_____

Part B: Vocabulary

I- Directions: Fill in the blanks with the missing vocabulary words from the box. (1.5 pts)

patient
toughest
huge

1- Dr. Kertesz belongs to a _____ of dentists who treat animals.

2- He can treat the elephants' big _____.

3- He is so good at his work because he can even treat the _____

animals.

II- Directions: Use the following word in a meaningful sentence of your own. (1 pt)

Molars: _____

(0.75 pts for overall spelling and 0.75 pts for handwriting and cleanliness)

Work Well ☺

Appendix C

Classroom Observation Sessions

Date: Dec. 18 (Session during introducing the strategy)

Title of Lesson: Seal Journey   **Class Section A : Reciprocal Teaching**

1. The Classroom Physical Environment

Students are sitting on separate desks in rows of 4.

Students are passively listening to the teacher most of the time.

Teacher asks questions and students answer by raising their hands

2. Description of the Lesson

The lesson is a scientific text that talks about the journey the seas take since they are born, their life cycle, the food they eat, the way they learn to swim…

3. Teacher's Behavior

The teacher was enthusiastic and well prepared.

She explained the lesson extensively and answered all questions.

She gave the chance for students to implement what she explained.

She wrapped the lesson before the period was over.

4. Students' Behavior

Students sat quietly when the teacher came in.

Students raised their hands before talking most of the time.

Some students were shy to participate while others were so comfortable.

Some students looked uninterested in what was going on.

Some students were not paying attention.

Students asked lots of questions

Date: Dec. 18 (Session during introducing the strategy)

Title of Lesson: Seal Journey   **Class Section B : Collaborative Strategic Reading**

1. The Classroom Physical Environment

Students are sitting on separate desks in rows of 4.

Students are passively listening to the teacher most of the time.

Teacher asks questions and students answer by raising their hands

2. Description of the Lesson

The lesson is a scientific text that talks about the journey the seas take since they are born, their life cycle, the food they eat, the way they learn to swim…

3. Teacher's Behavior

The teacher was enthusiastic and well prepared.

She explained the lesson extensively and answered all questions.

She gave the chance for students to implement what she explained.

She wrapped the lesson before the period was over.

4. Students' Behavior

Students sat quietly when the teacher came in.

Students raised their hands before talking most of the time.

Some students were shy to participate while others were so comfortable.

Some students looked uninterested in what was going on.

Some students were not paying attention.

Students asked lots of questions

Date: Jan. 6 (after introducing the strategy)

Title of Lesson: Open Wide, Don't Bite   **Class Section A : Reciprocal Teaching**

1. The Classroom Physical Environment

Students are sitting in groups of 4.

Students are interacting within each others in the same group.

Teacher explained for students their job and checked how students were working.

2. Description of the Lesson

The lesson is a scientific text about animals going to dentists and the way dentists deal with different animals to check their teeth.

3. Teacher's Behavior

The teacher was enthusiastic and well prepared.

More effort and talk from the teacher while rotating around the groups and answering the same questions several times.

4. Students' Behavior

Students raised their hands before talking most of the time.

Students asked lots of questions.

All students participated since each had a role to play.

Students were excited to work in groups.

Date: Jan. 6 (after introducing the strategy)

Title of Lesson: Open Wide, Don't Bite   **Class Section B : CSR**

1. The Classroom Physical Environment

Students are sitting in groups of 4.

Students are interacting within each others in the same group.

Teacher explained for students their job and checked how students were working.

2. Description of the Lesson

The lesson is a scientific text about animals going to dentists and the way dentists deal with different animals to check their teeth.

3. Teacher's Behavior

The teacher was enthusiastic and well prepared.

Less effort and talk from the teacher since students asked less questions and depended on their group's members for assistance.

4. Students' Behavior

Students raised their hands before talking most of the time.

Students asked few questions.

All students participated since each had a role to play.

Students were excited to work in groups.

Appendix D

Students' Results

Reciprocal Teaching

Section A	Diagnostic Test	Before Intervention	During Intervention	After Intervention
Student 1	40	80	60	45
Student 2	77.5	85	83	90
Student 3	90	80	63	82.5
Student 4	55	95	85	70
Student 5	80	80	80	62.5
Student 6	52.5	75	95	95
Student 7	50	60	40	70
Student 8	85	90	93	90
Student 9	56.25	75	90	70
Student 10	36.25	75	55	60
Student 11	60	90	83	90
Student 12	75	90	53	72.5
Student 13	72.5	70	70	72.5
Student 14	76.25	80	90	72.5
Student 15	75	82.5	85	70
Student 16	68.75	60	55	60

Collaborative Strategic Reading

Section B	Diagnostic Test	Before Intervention	During Intervention	After Intervention
Student 1	75	60	63	80
Student 2	80	85	100	90
Student 3	50	90	65	80
Student 4	81.25	90	75	100
Student 5	82.5	90	80	83
Student 6	72.5	60	53	90
Student 7	75	95	93	80
Student 8	41.25	60	33	65
Student 9	75	93	83	75
Student 10	80	90	80	90
Student 11	77.5	90	80	95
Student 12	42.5	90	85	85
Student 13	80	95	100	85
Student 14	85	95	90	80
Student 15	80	90	100	90
Student 16	67.5	65	73	80
Student 17	70	80	95	95
Student 18	81.25	90	73	95

Appendix E

Questions to the teacher:

1. What do you think about CSR?

2. What do you think about Reciprocal Teaching?

3. Why do you think CSR yielded better results?

4. How did you feel about implementing CSR and how did your students react toward it?

5. How did you feel about implementing RT and how did your students react toward it?

6. What advantages and disadvantages did you find when implementing CSR?

7. What advantages and disadvantages did you find when implementing RT?

8. If you were to use one of the two strategies in the future, which one would you use? Why?

Answers of the teacher:

1. **What do you think about CSR?**

   It's so creative, motivating for the students. It encourages them since it is group work and they express their ideas. I liked it!

2. **What do you think about Reciprocal Teaching?**

   It's encouraging for students to participate. It takes into consideration all different needs of students.

3. **Why do you think CSR yielded better results?**

   In general grade 4 B's achievement or level is better than 4 A, the number of students in section B is more. Moreover, the roles the students played were very effective that's why they attained better comprehension. The papers they filled, the hard copies of the strategy were all beneficial.

4. **How did you feel about implementing CSR and how did your students react toward it?**

   I was so excited so were my students. First, they felt strange but then they got the idea and got encouraged. They acquired a lot when they worked in groups as if it is peer tutoring.

5. **How did you feel about implementing RT and how did your students react toward it?**

   As a strategy, the students were excited. Everything was clear specially after several practices. Students became familiar with the terms. I felt motivated about it and ready to implement it again.

6. **What advantages and disadvantages did you find when implementing CSR?**

   Advantages: group work, students depending on each other, specific roles, special objectives.

   Disadvantages: time consuming specially to the teacher because the lesson is divided into cluncks of reading, grammar, and writing.

7. **What advantages and disadvantages did you find when implementing RT?**

   Advantages: group work, stated and clear objectives that they had to work on and achieve.

   Disadvantages: time consuming.

8. **If you were to use one of the two strategies in the future, which one would you use? Why?**

   I prefer CSR because everything is clear about it; clear roles, enough for the students, so close to my objectives satisfying them as lesson plan and in practice.

Appendix F

Questions to the students

1. Did you like the way the teacher put you in groups to work together? Why?

2. If there's something that you don't understand, do you prefer to ask the teacher or your friends for help? Why?

3. Did you feel that when working in groups, you were freer to participate and ask questions?

4. Would you like to keep applying the strategy again? Why?

Answers of the students

Student 1

Gr: 4 A (Reciprocal Teaching)

1.   Did you like the way the teacher put you in groups to work together? Why?

Yes, because it's nice to have group work because if someone doesn't know, the other will help and it's fun.

2.   If there's something that you don't understand, do you prefer to ask the teacher or your friends for help? Why?

I prefer to ask my friends if it was a group to be effective because it is a group work.

3.   Did you feel that when working in groups, you were freer to participate and ask questions?

When I am working in groups I feel freer.

4.   Would you like to keep applying the strategy again? Why?

I prefer both, sometimes to work in a group and sometimes with the teacher because sometimes there are difficult questions you ask the teacher and silly questions I can ask my friends.

Student 2

Gr: 4 A (Reciprocal Teaching)

1.   Did you like the way the teacher put you in groups to work together? Why?

Yes, because we are together.

2.   If there's something that you don't understand, do you prefer to ask the teacher or your friends for help? Why?

I prefer to ask my friends to check if they know.

3.   Did you feel that when working in groups, you were freer to participate and ask questions?

Yes.

4.   **Would you like to keep applying the strategy again? Why?**

Yes, because I love to work in groups.

Student 3

Gr: 4 A (Reciprocal Teaching)

1.   **Did you like the way the teacher put you in groups to work together? Why?**

Yes, because she knows how to organize us and we learned and at the same time we had fun.

2.   **If there's something that you don't understand, do you prefer to ask the teacher or your friends for help? Why?**

I prefer to ask the teacher because the teacher knows more than my friends and explain to me better.

3.   **Did you feel that when working in groups, you were freer to participate and ask questions?**

When working in groups, I feel I can ask my questions without being shy or afraid.

4.   **Would you like to keep applying the strategy again? Why?**

To keep working in groups because if there are 3 students next to me the friends can help.

Student 1

Gr: 4 B (Collaborative Strategic Reading)

1. **Did you like the way the teacher put you in groups to work together? Why?**

Yes, because we can understand better.

2.   **If there's something that you don't understand, do you prefer to ask the teacher or your friends for help? Why?**

I prefer to ask the teacher because the teacher knows more.

3.   **Did you feel that when working in groups, you were freer to participate and ask questions?**

I feel free.

4. **Would you like to keep applying the strategy again? Why?**

    I prefer to work in groups because we can ask questions to out friends.

Student 2

Gr: 4 B (Collaborative Strategic Reading)

1. **Did you like the way the teacher put you in groups to work together? Why?**

    Yes, because we worked with each other.

2. **If there's something that you don't understand, do you prefer to ask the teacher or your friends for help? Why?**

    I ask my friends first; if they don't know I ask the teacher so that I know what I don't know. But first I check if my friends know.

3. **Did you feel that when working in groups, you were freer to participate and ask questions?**

    Yes.

4. **Would you like to keep applying the strategy again? Why?**

    I prefer to keep applying it because I didn't feel shy to ask questions.

Student 3

Gr: 4 B (Collaborative Strategic Reading)

1. **Did you like the way the teacher put you in groups to work together? Why?**
    Yes, because we worked together and we put ideas together.

2. **If there's something that you don't understand, do you prefer to ask the teacher or your friends for help? Why?**

    If I ask my friends and they don't know I ask the teacher. I prefer to ask them maybe they know.

3. **Did you feel that when working in groups, you were freer to participate and ask questions?**

Yes.

4.   **Would you like to keep applying the strategy again? Why?**

Yes because I liked it.