The Effect of the Reciprocal Teaching Procedure (RTP) on Enhancing EFL Students' Reading Comprehension Behavior in a University Setting

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Abstract
The present study aimed at investigating the effectiveness of the Reciprocal Teaching Procedure (RTP), a reading comprehension instructional technique, on enhancing 50 students' reading comprehension behavior in a university setting. The researchers used the Nelson Denny Reading Test (NDRT), forms G and H as pre-and post-tests to assess subjects' reading comprehension behaviors before and after the (RTP) sessions. Subjects completed pre-and post-questionnaires to record information about their general and EFL backgrounds as well as their attitudes to reading before and after the implementation of (RTP) sessions. Comparison of the results of the pre- and post-tests and questionnaires showed a marked improvement in the students' reading comprehension behavior. The students also believed the (RTP) was beneficial to their reading comprehension in an EFL university setting throughout the study. (125) wds.

Keywords: The Reciprocal Teaching Procedure (RTP); reading comprehension performance.

Background and Research Problem
The present study aims at exploiting the rhetorical structure of the text and exploring the effect of strategy training on reading comprehension behavior in an English as a Foreign Language (EFL) situation in a university setting with a class of EFL students based on the exploitation of both the rhetorical structure of the text and the Reciprocal Teaching Procedure (RTP). The exploitation of text structure as a tool to improve reading comprehension has an ultimate goal: making readers aware of and capable of using various reading strategies as well as interpreting the rhetorical information a reading text presents in a satisfactory manner, i.e., how readers conceive it, what textual clues they attend to, how they make sense of it, and what they do when they do not understand it.

Palincsar and Brown (1984,117-175) reported two instructional studies directed at the comprehension-fostering and comprehension – monitoring activities of 7th grade poor comprehenders. The 4 study activities were summarizing (self-review), questioning, clarifying, and predicting. The training method was that of reciprocal teaching, where the tutor and students took turns leading a dialogue centered on pertinent features of the text. In study 1, a comparison between the reciprocal teaching method and a second intervention modeled on typical classroom practice resulted in greater gains and maintenance over time for the reciprocal procedure. Reciprocal teaching, with an adult model guiding the student to interact with the text in more sophisticated ways, led to a significant improvement in the quality of the summaries and questions. It also led to sizable gains on criterion tests of comprehension, reliable maintenance over time, generalization to classroom comprehension tests, transfer to novel tasks that tapped the trained skills of summarizing, questioning, clarifying and improvement in standardized comprehension scores. Many of these results were replicated in study 2.

In contrast to study 1, which was conducted by an experimenter, study 2 examined group interventions conducted by volunteer teachers with their existing reading groups. Palincsar and Brown (1984) designed Reciprocal Teaching, a researcher – developed instructional technique to promote reading comprehension abilities in students. The researchers showed that Reciprocal Teaching Procedure (RTP) is successful in the development of reading comprehension of low ability first language (L1) students. RTP involves explicit instruction by the teacher in the student's use of the strategies, such as predicting, clarifying, questioning and summarizing, to develop their reading comprehension.
As the students become familiar with the use of strategies, the teacher plays a less prominent role and the students develop the ability to work co-operatively with their peers. Palincsar and Brown found that RTP was most beneficial to readers who were good decoders but poor in comprehension skills. Carrell (1985, 727-752) reported a controlled training study designed to answer the question of whether English as a second language (ESL) reading can be facilitated by teaching text structure explicitly. The training introduced the study subjects into the use of organization as a key for understanding. The researcher gave them an explanation of description; causation; problem / solution and comparison types of rhetorical organization and the signals that mark each type to show subjects how to use the corresponding rhetorical organization to organize their writing. The study results indicated that training in rhetorical organization of expository texts significantly increased the amount of information that 25 intermediate – level ESL students could recall. According to Block (1986, 463-494), reading strategies indicate how readers conceive a task, what textual cues they attend to, how they make sense of what they read, and what they do when they do not understand. Block's study examined reading strategies second language readers use and considered the use of text structure as a reading strategy.

The researcher categorized reading strategies into 2 levels: general comprehension and local linguistic strategies. General reading strategies include comprehension – gathering and comprehension – monitoring. Recognition of text structure is included among general reading strategies. Local strategies deal with attempts to understand specific linguistic units. Block's study showed how many L2 readers possess strategic resources to control their reading. However, only some of them were able to use those resources as an aid; most apply them sporadically and unsystematically. The readers who used background knowledge of textual organization improved their reading comprehension and recall.

Da Moita Lopes (1986) indicated that a reader makes use of 2 types of knowledge in reading comprehension: systemic knowledge, i.e., the reader's knowledge of language and schematic knowledge, i.e., the reader's knowledge of content and formal schemata, i.e., the content area of a text and the routines of language interaction as expressed in the rhetorical structure of language. According to the researcher's view, the rhetorical information is interpreted from the actual interplay between local and global formal schematic knowledge and systemic knowledge. This interpretation supposes the selection and integration of information in an intentional way: the reader will focus on a global formal schematic level, i.e., how the different elements of the text hang together as a whole, on the local formal schematic level, i.e., how 2 sentences may be joined by causality, contrast, etc., or on the systemic level depending on the reading situation, i.e., the reader's knowledge of language. Chou Hare, Rabinowitz and Schieble's (1989) drew the same conclusion: teaching structure as an aid for reading performance (comprehension and recall of information).

Carrell, Patricia, Pharis, Becky, Liberto and Joseph (1989,674-678) reported a study of metacognitive strategy training for reading in English as a second language (ESL). Strategy training was provided to experimental groups. Control groups received no strategy training, but participated in pre-and posttesting. Several research questions are addressed: "Does metacognitive strategy training enhance L2 reading? If so, "Does one type of strategy training facilitate L2 reading better than another?" "How is the effectiveness of metacognitive strategy training related to the learning styles of the students?" "How is the effectiveness of metacognitive strategy training related to differences in the learning styles of the students?" Results showed that metacognitive strategy training is effective in enhancing second language reading, and that the effectiveness of one type of training versus another may depend upon the way reading is measured. Further, the results showed that the effectiveness of the training is related to differences in the learning styles of the students. In English as a second language (ESL) settings, Miller and Perkins (1990,79-94) found the Reciprocal Teaching Procedure (RTP) to be a successful method of improving reading comprehension for second language (L2) readers. The researchers added that they believed RTP stimulated L2 students' awareness of the rights and roles of individuals, group and teacher in the learning process. Pearson and Fielding (1991) indicated that reading research in the L 1 and L 2 fields has shown that reading strategies can be taught, and when taught, they enhance students' performance on tests of comprehension and recall.

Carrell (1991), advocated metacognitive training, especially in reading, to promote effective comprehension. According to this researcher, the main aim of metacognitive awareness is to get the students to understand the active role they can play as readers, employing resources to enhance understanding. Hoey (1991), Winter (1992,131-171) and Jordan (1992, 171-227) followed a type of analysis of discourse structure which looks into discourse structure from the point of view of the reader, trying to detect in the surface structure of discourse the elements which the reader follows to interpret a text.
According to this view of structure from the interpreter's point of view, discourse is framed at a lower level into binary discourse relations, that is, relation such as cause – effect, condition – sequence, etc., which are themselves part of a general level of organization (discourse macro – patterns). The rhetorical organization is manifested through resources in the language system. Linguistic resources have a schematic function because what they do is to prepare the reader for the recovery of discourse from the written text through interpretative procedures. Recent research on text has provided evidence of the relationship between coherence and the comprehensibility of a text. McKeown, Beck, Sinatra and Lexterman (1992, 79-99) used the concept of coherence to describe the extent of which the sequencing of ideas in a text makes the nature of ideas and their relationship apparent. The study showed that readers with the more coherent versions of a text yielded better comprehension. In an English as a Foreign Language (EFL) context, Hasan (1994) reported the better reading behaviors of students exposed to the Reciprocal Teaching Procedure (RTP) compared to those using traditional methods at Kuwait University. The researcher added that the (RTP) not only improves reading comprehension but also offers students the opportunity to use English to serve many of the language functions and notions that are typical of the communicative approach. Garcia and Pearson (1995, 67-91) demonstrated that strategy use and awareness of reading strategies are different in more or less proficient readers, and that more proficient readers use various types of strategies, and they use them in more efficient ways. In this study, less able readers benefited more from the strategy training than more able readers; students who were in the low and the intermediate reading proficiency groups exhibited more improvement than the students who already had good reading ability prior to the training.

This finding suggested that the students in the low and the intermediate groups might not be aware of the types and the value of reading strategies prior to the training, or might not utilize those strategies actively even though they may be aware of them, whereas the students in the high group might already know and utilize them efficiently. Janzen (1996, 6-9) pointed out that reading strategies range from simple fix-up strategies such as simple rereading difficult segments and guessing the meaning of an unknown word from context, to more comprehensive strategies such as summarizing and relating what is being read to the reader's background. Baunmann and Duffy (1997) indicated that when reading becomes the primary vehicle for learning, the demands on readers and the strategies they need to use in reading change. Unfortunately, just when the reading load increases and students shift from learning to read to reading to learn, no corresponding instruction in reading is provided to students. The scaffold of systematic and focused reading instruction diminishes or disappears together. Students' behaviors in reading begin to widen, and increasingly, schools begin to use more single – source instructional materials (textbooks, teacher handouts, etc.) for all students.

Thus, a gap emerges between the overall reading ability levels of students and the readability levels of the materials they are expected to read. Teachers must match students to instructional materials for more learning to occur. In a Thai setting, Adunyarittigun (1998) found that there were no differences between the reading behaviors of Thai students in an experimental Reciprocal Teaching Procedure (RTP) group and in a control regular English as a Foreign Language (EFL) group. This result is at odds with the other researchers' findings, but may be explained by the fact that Palincsar and Brown (1984) and Palincsar (1986, 73-98) found that (RTP) was most beneficial to readers who were good decoders but poor in comprehension skills. Adunyarittigun's participants were weak in both decoding and comprehension. According to the researcher, lack of strong skills in English may have required them to spend much time in decoding and translating texts into their first language, thus limiting their time on comprehension development. Song (1998) reported a study of strategy training for reading in an ongoing university foreign language reading classroom. The training method was modified from the procedure developed by Palincsar and Brown (1984), which involved four concrete reading strategies: summarizing, questioning, clarifying and predicting. The following research questions were addressed:

"Does strategy training enhance the reading ability of EFL college students?" If so, "How is the effectiveness of reading strategy training related to the reading proficiency of the students?" "Which types of reading comprehension questions are affected by strategy training?" Results showed that strategy training is effective in enhancing EFL reading and that the effectiveness of the training varies with L2 reading proficiency. The result also indicated that students' performance on certain types of reading comprehension questions is improved by the training method. These findings suggested that foreign language reading pedagogy especially for adult students in academic settings, should include explicit and direct strategy teaching. The National Center for Educational Statistics (2001) showed that little attention and few resources have been focused on students in grades 7-12. Yet, these upper grades are exactly where, according to recent international studies, emphasis is needed.
The National Center for Educational Statistics also revealed that the reading achievement of U.S. 4th graders ranks among the best in the world. By 8th grade, U.S. students' performance declines and by 12th grade, students rank even lower. The basic question to ask is why? Reading demands increase dramatically for students around 4th grade, when learning relies more on the textbooks. The vocabulary encountered is less familiar because it contains more specialized or technical terms. Syntax becomes more complex. Greater reliance must be placed on inferential thinking and prior knowledge. More independent learning is expected than in lower grades. Martinez (2002, 81-98) investigated the use of text structure as a tool to facilitate and improve English as a foreign language (EFL) students' comprehension of a text written in a foreign language. It explained the results of an experimental study carried out to analyse the relationship between the use of the rhetorical organization that a text employs, on the one hand, and the comprehension and the reproduction of information of the text on the other. The researcher found that it is only when reproduction and conscious recognition coincide in the reader, that the structure has a positive effect on reading comprehension and reproduction of the information presented in a text. When the reader does not recognize the organization of the text (even if he/she reproduces it), this text structure does not affect the reader's performance. In this way, making readers aware of the rhetorical organization becomes the reading teachers' first criterion for an approach to text structure as a teaching instrument.

Allington (2002, 16-19) pointed out that students need textbooks they can read – especially in middle school and high school where there is a heavy reliance on textbooks as the primary instructional resource and source for learning. Students in the same classroom have different levels of reading proficiency, yet all of them are typically reading the same materials. The result is a mismatch for many students, who cannot read. For them, this means, lower comprehension, lower test scores, and less progress on attention proficiency, not just in reading, but across the curriculum in math, science, social studies, and all other subjects. Seymour and Osana (2003, 325-344) used a case study methodology to characterize the development of 2 teachers' thinking as they engaged in 4 separate training sessions on Reciprocal Teaching Procedure (RTP), a reading comprehension instructional technique. The researchers used this case study methodology to address the following questions: As they undergo training, what are the meanings the two teachers ascribe to the 4 expert strategies used in Reciprocal Teaching (questioning, summarizing, clarifying, and predicting) and 4 of the learning principles upon which Reciprocal Teaching is built (cognitive, apprenticeship, scaffolding, the zone of proximal development (ZAD, and prolectic teaching). How do the conceptions of the teachers change over the course of training? The research site was a Midwestern middle-level (grades 6, 7 and 8) school. A pilot study was conducted several months before this study began at the same site with several teachers interested in improving their implementation of Reciprocal Teaching. Work with these teachers allowed the researchers to approach 2 language teachers who agreed to participate in this study because they were interested in improving their practice. The researchers' analyses suggested that the evaluation of teachers' conceptual development revealed several misconceptions about both principles and procedures of Reciprocal Teaching as well as cognitive growth during the intervention. As expected, the principles and procedures were difficult for participants to understand.

Daggett (2003) explained that the importance of all students achieving reading proficiency, as well as the new federal requirements to set proficiency standards and monitor progress across subgroups of students, continues to influence policymakers, educators, and the American public. No Child Left Behind (NCLB) requires that all students be "proficient" in reading by 2013 and demands that all schools make adequate yearly progress (AYP) toward that end, i.e., reading proficiency is a truly worthy goal. More recent research on first language (L1) contexts, as Oczkus (2004) stated, has shown the Reciprocal Teaching Procedure (RTP) to be effective with students of different ages and abilities operating in a variety of teaching and learning situations. The studies on assessing reading proficiency the National Capital Language Resource Center (NCLRC) (2004) conducted revealed that reading ability is very difficult to assess accurately. In the communicative competence model, a student's reading level is the level at which that student is able to use reading to accomplish communication goals. This means that assessment of reading ability needs to be correlated with purposes for reading. Vocabulary knowledge is one of the best predictors of reading achievement. Bromley (2004, 3-12) and Richek (2005, 414-423), in a comprehensive review of research on vocabulary development, concluded that vocabulary knowledge promotes reading fluency, boosts reading comprehension, improves academic achievement and enhances thinking and communication. Spelling is an important consideration in reading comprehension.
Templeton (2004, 118-138) argued that spelling knowledge provides the basis for explicit awareness and understanding of morphology which, in turn, may guide the systematic growth of vocabulary knowledge in predicting reading achievement, the complex interrelationships among these areas are significant. According to Paynter, Bodrova and Doty (2005), reading comprehension is a complex undertaking that involves many levels of processing. One of the most fundamental aspects of comprehension is the ability to deal with unfamiliar words encountered in text. Readers who struggle with word – level tasks use up valuable cognitive space that could be allotted to deeper levels of text analysis. It is not enough to rely on context cues to predict the meaning of new words, since this strategy often results in erroneous or superficial understandings of key terms, readers need to possess a basic knowledge of “how words work” and a set of strategies for approaching new words encountered throughout the day.

Blachowicz, Fisher, Ogle, and Watts – Taffe (2006, 524-539) indicated that skilled language users display "word consciousness". They have a metacognitive understanding of how words are built, and can articulate the strategies they employ as readers to solve unfamiliar words. Martinez (2006) carried out an analysis of the capacity of English as a second language (ESP) readers to make use of the rhetorical information and of the textual clues. The researcher first carried an analysis of the reading of 60 Spanish students of English as a foreign language. The second part of the study was an analysis of the relationship between the subjects' metacognitive conceptualizations about reading in L 2 and their reading efficiency in that language. That is, the researcher studied the relation between readers' perception about effective strategies and reading comprehension. The study showed a relation between the use of structure and reading comprehensions, i.e., it showed how a text structure facilates reading comprehension when the reader identifies or recognizes the organization the text presents and interprets those structured resources at his disposal. This, according to the researcher, characterizes the reader as an autonomous reader who is able to use his structured resources effectively. The analysis of the capacity of the study subjects to make use of the structured clues served the researcher to identify the reading problems these subjects had in reading related to the use of a text structure: lack of knowledge of ways of organizing a text, failure to exploit this knowledge to make predictions about what is going to come next, and to make decisions about how sections of the text relate to the overall development of the topic, lack of familiarity with expressions used as structure markers and problems with recognizing the various types of structure marker signals.

The researchers found that those readers who considered the global strategies based on the use of the contents of the text and knowledge about the rhetorical resources of the text as effective strategies comprehended the text better. McNamara and Scott (2009, 387-392) indicated that readers who self – explain texts aloud understand more from a text and construct better mental models of its content. This study examined the effects of providing self – explanation training on text comprehension, as well as course grades. Effects of prior knowledge and reading skill were also examined in relation to the benefits of self – explaining and self – explanation training. In general, low – knowledge readers gained more from training than did high – knowledge readers. The researchers found that readers who explain a text, either spontaneously or when prompted to do so, understand more from it and construct better mental models of the content. However, some readers are better self – explainers than others; less – skilled self- explainers offer little to the text to help them better understand it. Weida and Stolley (2010) identified 3 types of rhetorical appeals, or persuasive strategies, used in arguments to support claims and respond to opposing arguments. According to the researchers, a good argument generally uses a combination of all three appeals to make its case: logos, or the appeal to reason relies on logic or reason. Logos often depends on the use of inductive or deductive reasoning, ethos or the ethical appeal which is based on the character, credibility, or reliability of the writer and pathos, or emotional appeal, appeals to an audience's needs, values, and emotional sensibilities.

The previous studies on ESL/EFL readers' use or exploitation of the rhetorical information or structure of the reading texts along with strategy training for reading show that the presence or absence of rhetorical information or textual clues as well as reading strategies tend to increase or decrease comprehension and recall of information. The present study aimed at extending such pieces of research work by investigating whether similar results are revealed in another sample of readers in an English as a Foreign Language (EFL) reading classroom situation based on the exploitation of Reciprocal Teaching Procedure (RTP). The researchers of the present study motivated the reading strategy training of Brown and Palincsar (1984). In their teaching, Brown and Palincsar taught students 4 concrete reading strategies: summarizing, questioning, clarifying, and predicting. From their study, they found that the Reciprocal Teaching Procedure (RTP) was effective in enhancing their students' reading ability.
However, they did not conduct their study in an English as a Second / Foreign Language (ESL/EFL) setting. The subjects of their study were 7th grade native speakers of English, and they did not carry it out in a classroom setting: they gave each study subject individual training. In other words, like most reading strategies training studies, the researchers did not do the study in an ongoing regular class. Therefore, the present study aimed at adapting Brown and Palincsar's (1984) to an English as a Foreign Language (EFL) university reading classroom setting. That is, it investigated whether the (RTP) is effective in enhancing EFL students' reading comprehension behavior. Once again, since the researchers of the present study conducted it in a university EFL reading class where subjects' reading proficiency was mixed, its second purpose was to find out how the (RTP) influences subjects with mixed reading proficiency. Since Brown and Palincsar tried the (RTP) with students whose reading ability is low, it was important to investigate the effectiveness of the (RTP) on subjects with intermediate and high levels of reading proficiency.

To serve the purposes of the present study, the researchers addressed the following two specific research questions:

- Does Reciprocal Teaching Procedure (RTP) enhance EFL Jordanian university students' reading comprehension behavior? If so.
- How is the effectiveness of the (RTP) related to students' reading comprehension behavior in an EFL university reading classroom setting?

**Methodology**

**Purpose of the Study**

The purpose of the present study was to investigate the effects of the Reciprocal Teaching Procedure (RTP), a reading comprehension instructional technique on the reading comprehension behavior of a sample of English as a Foreign Language (EFL) Jordanian university students.

**Subjects**

The subjects of the present study were 50 first year EFL Jordanian students at a university setting in the Spring semester of 2011 in Amman – Jordan.

**Research Instrument**

The research instruments used in the present study included pre – and post – tests: a. a pre – test, the Nelson Denny Reading Test (NDRT) form G, to assess subjects' reading comprehension behaviors before the Reciprocal Teaching Procedure (RTP) teaching sessions, and b. a post – test, NDRT form H, to assess subjects' reading comprehension behaviors after the (RTP) teaching sessions. The researchers also used Pre- and post – questionnaires: a. a pre – questionnaire to collect information on the subjects' backgrounds in English as a Foreign Language (EFL) and b. a post – questionnaire to record subjects' responses to (RTP) and to the teaching sessions, the model lesson and the class organization. The researchers included their maintained written comments about the (RTP) teaching sessions along with the subjects' reading comprehension behaviors as a third research instrument.

**Procedure**

The researchers of the present study presented seven ninety – minute training sessions based on the Reciprocal Teaching Procedure (RTP) techniques prior to the onset of the training, i.e., (RTP) training involved explicit instruction in the subjects' use of the strategies, such as predicting, clarifying, questioning and summarizing to develop their reading comprehension behaviors. The researchers devoted two (RTP) sessions to explanations of these strategies, to practical application of their use, and to the development of group work skills. The researchers presented one training / teaching session as a model to illustrate both the instructional procedure and the group process. The remaining 4 training / teaching sessions each involved an analysis of a reading text by the study subjects in randomly assigned groups of 6 using a survey of the reading text title and sub – headings of the text to activate the subjects' (EFL) backgrounds and to make predictions before reading followed by a silent reading of the first paragraph of the reading text by the subjects in their groups; discussion of the paragraph led by the assigned group leader, focusing on clarification of reading difficulties, questions, summary of the main ideas and predictions about the paragraphs that follow, written recording of any difficulties, predictions and / or questions and silent reading of the reading text and subsequent paragraphs with discussions led by, once again, a new group leader for each paragraph.
The researchers selected 12 reading passages which would be covered during the Spring semester of 2011 from a variety of resources. The researchers drew 5 reading passages from the subjects' reading textbooks and 7 from popular writings or EFL reading materials. The researchers chose the reading passages for their readability.

Data Analysis

The researchers of this study analyzed both the quantitative and qualitative data by calculating and comparing the average scores for the pre – and post – tests and the standard deviations to reveal any changes in subjects' reading comprehension behaviors between the pre – and post – tests. The researchers also analyzed the subjects' pre – and post – questionnaires, i.e., the pre – questionnaire related to information about the subjects' general and English as a Foreign Language (EFL) backgrounds and post – questionnaire which recorded the subjects' attitudes to reading, the (RTP) training sessions and the skills the subjects developed through using the (RTP). The researchers read and compared the subjects' completed written responses before and after the implementation of the (RTP) sessions and made notes of frequently occurring answers. They also analyzed their maintained written comments about the (RTP) sessions and the subjects' reading comprehension behaviors throughout the present study. They closely read the contents of these at the conclusion of the (RTP) sessions.

Results

The researchers subjected the study data to assessment and comparison of the results of the Nelson Denny Reading Test (NDRT) forms G and H as the pre – and post – tests in order to test the first research question of the present study: "Does the Reciprocal Teaching Procedure (RTP) enhance EFL Jordanian university students' reading comprehension behavior?." Comparison of the results of such tests revealed a marked change / improvement in the study subjects' reading comprehension behaviors. The average scores in the pre – and post – tests were 34.25 and 48.26 respectively. The t – test indicated a significant difference between the average scores of subjects before and after the period of instruction (14.01) at p < 0.05. Tables 1 and 2 pp. 28-29 display these figures. Thus, in answer to the first research question, the study result suggests that the Reciprocal Teaching Procedure (RTP) does enhance EFL Jordanian university students' reading comprehension behavior.

The second research question of the present study was the following: "How is the effectiveness of the (RTP) related to subjects' reading comprehension behavior in an EFL university reading classroom setting?" In order to answer this research question, the researchers of this study administered the pre – questionnaire to provide information about the subjects' general and English as a Foreign Language (EFL) backgrounds, i.e., the ages of the 50 subjects (30 females and 20 males) in the study ranged from 18 to 19. These had 12 years of English education. The researchers also administered the post – questionnaire to collect data related to the study subjects' attitudes to reading and to the (RTP) as a tool for developing reading comprehension behaviors. All subjects', i.e., (the 50 subjects) completed it. They commented that they were unfamiliar with the (RTP) precisely and believed such a technique was beneficial to their reading comprehension in EFL and other subject areas as well. The subjects also commented that the (RTP) training sessions and the model lesson were important in the study simply because they were not, once again, familiar with the (RTP). As for group size, 6 was acceptable to the subjects and researchers, because it allowed adequate researcher assistance and, more importantly, peer interaction. The subjects' responses to both the pre – and post questionnaires revealed a conservative self – evaluation of their abilities/behaviors in both reading comprehension and English vocabulary knowledge.

Table 3 p.30 shows that 1 subject (2%) thought his ability / behavior was "very good" in these two categories, 32 subjects (64%) commented their reading comprehension was "average" and 25 (50%) believed their English vocabulary knowledge was also "average". This conservative self – evaluation of ability in both reading comprehension and English vocabulary knowledge was even more marked when another 18 subjects (36% + 50%) placed themselves "poor" and "average" in English vocabulary knowledge. The majority of the subjects in this study considered the process of reading an English text to be one that they undertook on their own. (Table 4 p. 31) displays that 22 of them (44%) "seldom" and 6 (12 %) "never" read with friends / peers. However, many subjects were prepared to discuss their reading with other readers / friends / peers; with 6 (12%) "always" and 14 (28%) "often" talking about what they had read / seeking confirmation and / or assistance with their interpretation / understanding of the reading text(s). This social approach to the process of reading was clearly evident when the study subjects experienced reading difficulties.
Table 4 p.31 indicated that when the subjects were unable to comprehend or uncertain about what they had read, they sought for consulting with the researchers and / or friends / peers with 6 (12%) "always" and 14 (28%) "often", a total of 20 subjects (40%) placed themselves "always" and "often".

As for the subjects' recognition of the importance of reading in English / the importance of developing good English reading skills, they were positive towards the Reciprocal Teaching Procedure (RTP) as an invaluable and effective technique / tool to improve such skills , despite their unfamiliarity with it. The present study revealed that the (RTP) represented a challenge for the study subjects, i.e., it made great demands / expectations upon them of approaching reading texts by predicting, questioning, clarifying and summarizing, very often in a group context working with peers without the immediate direction of a teacher. Such a teaching and learning environment is not part of the classroom culture of Jordanian schools and universities. The structural framework of the present study involved the Reciprocal Teaching Procedure (RTP) using small groups for the sake of developing, once again, the strategies of predicting, questioning, clarifying and summarizing. Such an approach represented a departure from the whole class teacher – directed or teacher – centered structure of traditional EFL Jordanian classroom contexts to the application of the subjects' skills to the readings texts in a group context. The study subjects did not expect to direct themselves with their groups with close teacher / researcher supervision / direction, which represented a challenge for the majority of them.

Despite the training sessions and the model lesson the study subjects experienced at the very start and throughout this study, and as Table 4 p.31 displays, 14 subjects (28%) reported that they were not aware of their roles in the small group context. This, of course, made initial efforts at comprehension of the reading texts difficult as they did not know their duties, i.e., they were grappling with the reading texts in a foreign language. Again, the early difficulties the (14) study subjects (28%) experienced in the (RTP) training sessions and model lesson, due to their lack of awareness of their roles in the group contexts, illustrated the need to prepare for and proceed in such roles in such groups carefully and slowly. Initially, i.e., at the very start of the (RTP) training sessions, the researchers led the groups, but, as the (RTP) strategies, i.e., predicting, questioning, clarifying and summarizing and group skills matured, the researchers played a less dominant role, acting as facilitators / helpers instead of class directors / supervisors.

As for the written comments the researchers maintained throughout this study, they found that the (RTP) allowed the study subjects to develop their reading comprehension behaviors and assisted their solution of the difficulties they encountered with reading text comprehension. Despite the time – consuming demands of preparation and implementation involved in the (RTP), the researchers considered it to be an invaluable teaching technique for developing the study subjects' reading comprehension behaviors. Thus, in answer to the second research question, the study results suggest that the (RTP) is related to its effectiveness to the subjects' reading comprehension behaviors in an (EFL) university reading classroom setting.

**Discussion**

The average scores the study subjects obtained in reading comprehension pre – and post – tests (Nelson Denny Reading Test (NDRT) forms G and H) indicated a significant increase in their reading comprehension behaviors despite the fact that they initially worked with the Reciprocal Teaching Procedure (RTP), an unfamiliar teaching and learning method (Sullivan, Palincsar & Brown, 1984; Miller & Perkins, 1990; Pearson & Fielding, 1991; Hasan, 1994; Song, 1998; Seymour & Osana, 2003. Oczkus, 2004) support this study finding. These researchers pointed out that engaging students in the 4 strategies of the (RTP), i.e., predicting, questioning, clarifying and summarizing encourages them to monitor their own reading comprehension behavior. The subjects' responses to both the pre – and post – questionnaires revealed a conservative self- assessment of their abilities in both reading comprehension and English vocabulary knowledge. Generally, such a conservative self – assessment in such categories is probably in accord with the general nature of EFL Jordanian students and it is reasonable to assume that the study subjects' doubts about their abilities in the categories of reading comprehension and English vocabulary knowledge are likely to be more pronounced / marked when they are working in a foreign / second language (EFL/ESL). Once again, the majority of the present study subjects (86%) regarded the process of reading English texts as a 'solitary' activity, i.e., an activity they undertook on their own. (10 subjects (20%) + 23 subjects (46%) + 10 subjects (20%) = 86 %). Table 5 p.32 displays this. This, in the researchers' view, suggests that EFL Jordanian students read a certain reading text as a 'solitary' activity, but sought for understanding of their reading socially with other readers / friends / peers as a social activity.
Such a technique may suit EFL Jordanian students who are, as Table 3 p. 25 reveals, conservative in self – evaluation of their abilities in the categories of both reading comprehension and English vocabulary knowledge. They may be more comfortable struggling with reading texts on their own. Then, upon the completion of this process, they are prepared to test their comprehension in the session of discussion with friends / peers seeking confirmation of and / or assistance with their interpretation / understanding of the reading texts (s). (Martinez, 2006; McNamara & Scott, 2009) confirmed these justifications. These researchers indicated that readers who self-explain reading texts aloud, spontaneously either when prompted to do so, or when they interpret structured resources at their disposal, understand more from a text and construct better mental models of its content.

Again, the social approach to the process of reading a text which usually involved consultations with the researchers and / or friends when the subjects were unable to comprehend or uncertain about what they had read, as Table 4 p.31 displays, sits comfortably with their conservative self – assessment the researchers mentioned in Table 3, p. 30, i.e., if a study subject is not confident about his / her ability in a certain language area, then it is reasonable to assume that assistance with and / or confirmation of his / her interpretations of reading texts will be eagerly sought from other friends / peers / people in an attempt to comprehend / understand such texts.

The study subjects were positive towards the (RTP) as a tool to improve their reading comprehension behaviors. That is why when they had established awareness of its techniques, they were able to work effectively on developing reading strategy skills and understanding the reading texts. On the other hand, the (RTP) places, as the present study revealed, expectations on EFL Jordanian students of approaching a certain reading text by predicting, questioning, clarifying and summarizing, very often in a group context, working with peers without the immediate direction / supervision of a language teacher. This, in the researchers’ view, represents a challenge for the study subjects. This may be because such a culture is based on an EFL Jordanian teachers’ position as a highly respected person with superior knowledge whose role is one of imparting this superior knowledge to the students. This is, one again, usually done in an EFL Jordanian class of often, of 50 students, more or less.

The teacher’s respectful attitude and the large class sizes usually do little to promote / encourage student teacher and / or student – student open dialogue, which is an important feature of the (RTP) tool. (Miller & Perkins, 1990, Hasan , 1994; Oczkus, 2004; Paynter, Bodrova & Doty, 2005) give evidence to such justifications. These researchers reported the better reading comprehension behavior of students exposed to the (RTP) compared to those using traditional methods. These researchers also added that (RTP) not only improves reading comprehension, but also offers students the opportunity to use English to serve many of language functions and notions that are typical of the communicative approach. In many traditional EFL Jordanian classroom contexts, there is, as always happens, a heavy emphasis on rote learning, involving all students doing the same language activity, irrespective of abilities, interests and / or needs. This EFL Jordanian style of teaching and learning usually stresses whole class activities with repetition and memorization of facts, not necessarily understanding. Understanding and confidence in the use of predicting, questioning, clarifying and summarizing, not just a memorization of them, is an invaluable element in the (RTP) which allows the students to adapt and employ their abilities in a range of situations / contexts as appropriate. There also remains a tendency for EFL Jordanian education, especially in Basic Education and secondary schools, to be teacher – centered and teacher – directed with infrequent use of group work, discussion, and / or individual research.

In the researchers’ view, this tendency may be due to the ‘superiority’ the EFL Jordanian teacher experiences and may also be considered a necessity because of the demands of managing large class sizes, heavy teaching loads and considerable administrative duties. Once again, the (RTP) is not, in its regular form, teacher – centered nor teacher – directed. It is usually driven by the students’ abilities and needs, and depends upon their skills in handling reading texts in group contexts / situations. As a result of these features of EFL Jordanian education, the researchers of the study believe that EFL Jordanian students may find it difficult to develop skills in creative thinking, independent and alternative learning, questioning and / or discussion. In the researchers’ view, the pressure which is usually put upon students to conform is powerful, i.e., the majority of EFL Jordanian teachers focus on rote learning. Submissive students who do not ask questions, teachers usually see them as well behaved. In contrast, students who are creative, critical and analytical and who reason with them often view them as aggressive and disobedient, and have trouble fitting into the Jordanian education systems. These justifications receive confirmation from (Allington, 2002 & Chareonwongsa, 2002,4).
The researches of this study assure that there have been considerable efforts to change this approach to language teacher training, but with varying degrees of success. The structural framework of the present study involved the (RTP) using small group contexts / situations, without close teacher supervision / direction, which represented a departure from the whole class teacher – centered or teacher – directed of traditional EFL Jordanian classroom contexts. This, in the researchers' view, indicated a cultural problem that the proponents of the (RTP) in EFL settings have to confront. The subjects' initial lack of expertise in being able to use the strategies of predicting, questioning, clarifying and summarizing was probably due to their unfamiliarity with them and also attributed to the fact that they were expected to direct themselves within their groups without close teacher supervision / direction. The researchers of the present study believe that EFL Jordanian students need to develop skills using such strategies and also require assistance in becoming acquainted with the dynamics of a new (RTP) teaching and learning environment. (Song, 1998; Seymour & Osana, 2003; Paynter, Bodrova & Doty, 2005) give evidence to these findings.

At the very start of the present study, (14) subjects (28%), as Table 4 p.31 displays, experienced difficulties in both the (RTP) training sessions and the model lesson due to their unfamiliarity, once again, with the role in the group contexts / situations. As a result, the researchers of this study started to play a less dominant role acting as facilitators rather than directors / supervisors as the (RTP) techniques and group skills matured. This framework, in the researchers' of the present study view, appeared to suit the EFL Jordanian study subjects who were happy to work on their own on their reading comprehension tasks, but welcomed the assistance of and recognized the value of their peers and researches when they experienced difficulties. (Sullivan, Palincsar & Brown, 1984; Paynter, Bodrova & Doty, 2005; Blachowicz, Fisher, Oyle & Watts – Taffe, 2006; Martinez, 2006; McNamara & Scott, 2009; Weida & Stolley, 2010) lend support to these pedagogical justifications.

In their maintained written comments on the study subjects' reading comprehension behaviors throughout the present study, the researchers indicated that increased subjects' awareness of their duties / roles in the group contexts / situations led to enhanced confidence in their reading comprehension behaviors and made them welcome and appreciate the recognition that they receive when they performed their group duties / roles properly and correctly. What is more, the demands of comprehending a reading text in a foreign / second language usually enhances EFL students' collaborative nature in the group, encouraging them to assist each other at a reasonable / satisfactory rate that accommodate for all members in the reading group, irrespective of reading ability. This supportive atmosphere may be even more significant with less capable EFL / ESL students who may be experiencing anxiety and lack of confidence in the L 2 setting.

The researchers found that anxious students were more willing to speak up not only because group discussions gave them a chance to rehearse their thoughts to each other in a low – risk, high – gain situation, but also because of their peers' / friends' support. With regards to the maintained written comments on the (RTP) sessions and the subjects' reading comprehension behaviors throughout this study, the researchers found that the study subjects' development of their reading comprehension behavior was due to the significant role group discussions played in providing help / assistance with clarification and understanding for subjects as individuals. Despite the time – consuming demands of preparation and implementation involved in the (RTP), the researchers of this study considered it to be, once again, an invaluable teaching technique as it provided the study subjects with ample opportunity to take responsibility for their own learning, i.e., the (RTP) does encourage the EFL / ESL student to be an independent learner and a discoverer of knowledge, with the EFL / ESL teacher as a facilitator. (Sullivan, Palincsar & Brown, 1984; Miller & Perkins, 1990; Carrell, 1991; Martines, 2002; Seymour & Osana, 2003; McNamara & Scott, 2009) give support to such pedagogical implications for EFL reading instruction.

Conclusion

The purpose of this study was to investigate the effects of the Reciprocal Teaching Procedure (RTP), a reading comprehension instructional technique, on the reading comprehension behaviors of a sample of English as a foreign language (EFL) Jordanian university students. The findings of the study showed that the (RTP) does enhance and improve EFL Jordanian students' reading comprehension behavior in a university setting after the (RTP) training. Furthermore, the present study demonstrated that the (RTP) is related to its effectiveness to the subjects' reading comprehension behavior in an EFL university classroom setting. Throughout this study, the researchers noticed that reciprocal teaching with students in an EFL university setting guides them to interact with the reading text in more sophisticated ways and leads to a significant improvement in the quality of their reading comprehension behavior.

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As the students become familiar with the use of the strategies the (RTP) employs, their reading teacher plays a less dominant role and they develop the ability to work co-operatively with peers. This, of course, increases the amount of information students can recall. What is more, the researchers concluded that the (RTP) also promotes English vocabulary knowledge which is one of the best predictors of reading achievement. This, in turn, promotes reading fluency, boosts reading comprehension, improves academic achievement and enhances thinking and communication. This study took a method of strategy training, the (RTP), shown to be successful with first language (L 1) students, and investigated its effects on English as a Foreign Language (EFL) students in an EFL university setting in which the teacher traditionally directed language activities, the students' reading ability was not strong and reading was not a popular cultural pastime, i.e., something done to pass one's time in a pleasant way. The study subjects attained improvement in reading comprehension tests over the period of the study, i.e., the Spring semester of 2011, and the subjects and researchers made positive comments about the benefits of the (RTP) as an invaluable research tool. The (RTP) may have much to offer EFL Jordanian students as 'reciprocal teaching' has been designed to be dialogic’ (Palincsar, 1986, 95). The structure of the (RTP), based on students discussing meaning sof reading texts in small group contexts / situations, using the skills of predicting, questioning, clarifying and summarizing, could lend itself to a culturally – appropriate way in which EFL Jordanian students can improve and monitor their own reading comprehension behaviour.

References


**Table 1: Study Subjects' Average Scores and the Standard Deviations for the Pre – and Post – tests (* NDRT forms G and H)**

<table>
<thead>
<tr>
<th>NDRT Form</th>
<th>N</th>
<th>Average Score</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>50</td>
<td>34.25</td>
<td>10.42</td>
</tr>
<tr>
<td>H</td>
<td>50</td>
<td>48.26</td>
<td>11.20</td>
</tr>
</tbody>
</table>

- **NDRT**: a Pre – test, the Nelson Denny Reading Test (NDRT, form G) to assess subjects' reading comprehension behaviors before the Reciprocal Teaching Procedure (RTP) teaching sessions.
- **NDRT, Form H**: a post – test, NDRT form H, to assess reading comprehension behaviors after the (RTP) teaching sessions.
- **N**: Number of study subjects.
Table 2: Study Subjects' Average Scores and the Standard Deviations for the Pre – and Post – tests (* NDRT forms G and H): Paired Samples Test

<table>
<thead>
<tr>
<th>NDRT Form</th>
<th>N</th>
<th>Average Score Diff.</th>
<th>Standard Deviation Diff.</th>
<th>T – value</th>
<th>Significant (2 – tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms G and H</td>
<td>50</td>
<td>14.01</td>
<td>10.40</td>
<td>9.70 *</td>
<td>0.000</td>
</tr>
</tbody>
</table>

P < 0.05

- **NDRT, forms G and H**: the Pre – and Post – tests, Nelson Denny Reading Test (NDRT, forms G & H) to assess subjects' reading comprehension behaviors before and after the Reciprocal Teaching Procedure (RTP) teaching sessions.
- **N**: Number of study subjects.
- **Average Score Diff.**: Difference between average scores of subjects before and after the period of instruction at p > 0.05.
- **S.d.**: Standard Deviation in the pre – NDRT form G and in the post – test NDRT form H.
- **T- value**: The t – value indicated a significant difference between the average scores of subjects before and after the period of instruction at p < 0.05.

Table 3: Self-evaluation of Study Subjects' Abilities in Reading Comprehension and English Vocabulary Knowledge Frequency %

<table>
<thead>
<tr>
<th>Language Category</th>
<th>Very good</th>
<th>Good</th>
<th>Average</th>
<th>Poor</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rdg. Comprehen.</td>
<td>1 (2%)</td>
<td>11 (22%)</td>
<td>32 (64%)</td>
<td>6 (12%)</td>
<td>50 (100%)</td>
</tr>
<tr>
<td>Eng. Vocab.</td>
<td>1 (2%)</td>
<td>6 (12%)</td>
<td>25 (50%)</td>
<td>18 (36%)</td>
<td>50 (100%)</td>
</tr>
</tbody>
</table>

- **Rdg. Comprehen.**: Reading Comprehension Behavior.
- **Eng. Vocab.**: English Vocabulary Knowledge.

Table 4: Study Subjects' Preferred Style in Reading English Texts: Frequency %

<table>
<thead>
<tr>
<th>Subjects' Preferred Rdg. Learning Style</th>
<th>Frequency %</th>
</tr>
</thead>
<tbody>
<tr>
<td>I prefer to read English texts with friends / peers.</td>
<td>2 (4%), 9 (18%), 11 (22%), 22 (44%), 6 (12%)</td>
</tr>
<tr>
<td>I talk about the reading text I have read with other friends / peers / people</td>
<td>6 (12%), 14 (28%), 17 (34%), 13 (26%), 0%</td>
</tr>
</tbody>
</table>

NB: 5= always ; 4= often ; 3= sometimes ; 2= seldom ; 1= never

Table 5: Study Subjects' Social Learning Style and Their Reading Obstacles: Frequency %

<table>
<thead>
<tr>
<th>Social Learning Style &amp; Rdg. Difficulties</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>If I don't understand / comprehend a reading text, I ask my teacher or friends to explain / clarify it.</td>
<td>10 (20%), 23 (46%), 10 (20%), 7 (14%), 0</td>
</tr>
<tr>
<td>If I am not certain / sure of a certain reading text, I check my comprehension with my teacher / friends/ peers.</td>
<td>11 (22%), 20 (40%), 12 (24%), 7 (14%), 0%</td>
</tr>
</tbody>
</table>

NB: 5= always ; 4= often ; 3= sometimes ; 2= seldom ; 1= never

Rdg. : Reading