The Effectiveness of Reciprocal Teaching Strategy in Developing Critical Reading Skills in English Language for Higher Nasser Military Academy Candidates

A Thesis submitted in fulfillment of the Requirements for the Master’s Degree in Education, Curricula and Instruction TEFL

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The Effectiveness of Using Reciprocal Teaching Model to Improve EFL Reading Comprehension Skills Among Secondary School Students

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ABSTRACT

This research aimed to examine the effectiveness of using reciprocal teaching model on improving EFL reading comprehension skills among 2nd year secondary school students. For this purpose, two complete groups were chosen at random and assigned to an experimental group and a control one, thirty students in each group, from Bloom Secondary school in Cairo, during the second term 2022-2023. The study's methodology was a quasi-experiment. The researcher prepared EFL reading comprehension skills and a pre/post reading test. Students in both groups were pre-tested using the EFL reading test. After that, the researcher used the reciprocal teaching model for teaching the experimental group, while the control group used the traditional method. Finally, the same EFL reading a test was post-tested on both groups. The research's findings showed that in the post-test of the EFL reading comprehension test, the experimental group outperformed the control group. As a result, the reciprocal teaching model was successful in improving the reading comprehension of 2nd-year secondary school students.

Keywords: Reciprocal teaching model, reading comprehension skills.
فاعلية استخدام نموذج التدريس التبادل في تحسين مهارات الفهم القرائي للغة الإنجليزية كلغة أجنبية لدى طلاب المرحلة الثانوية

إعداد
أميرة عبد المنعم خضر
محاضر في أكاديمية ناصر العسكرية العليا

مستخلص البحث

يهدف هذا البحث إلى معرفة مدى فاعلية استخدام نموذج التدريس التبادلي في تنمية مهارات الفهم القرائي للغة الإنجليزية كلغة أجنبية بين طلاب السنة الثانية من المرحلة الثانوية. لهذا الغرض، تم اختيار مجموعتين كاملتين عشوائياً، وتم تقسيمهم إلى مجموعتان تجريبيتان ومجموعة ضابطة، ثلاثون طالباً في كل مجموعة، من مدرسة بلوم الثانوية بالقاهرة، خلال الفصل الدراسي الثاني 2023. كانت منهجية الدراسة شبه تجريبية. أعدت الباحثة مهارات الاستيعاب القرائي للغة الإنجليزية كلغة أجنبية واختبار القراءة الفعلي / البعدي. تم اختيار الطلاب في كلا المجموعتين مسبقًا باستخدام اختبار قراءة اللغة الإنجليزية كلغة أجنبية. بعد ذلك استخدمت الباحثة نموذج التدريس التبادلي لتعليم المجموعة التجريبية، بينما استخدمت المجموعة الضابطة الطريقة التقليدية. أخيرًا، تم تطبيق نفس اختبار القراءة بعدياً على كلا المجموعتين. وأظهرت نتائج البحث أن المجموعة التجريبية تفوقت على المجموعة الضابطة في الاختبار البعدي لاختبار الفهم القرائي باللغة الإنجليزية كلغة أجنبية. ونتيجة لذلك، نجح نموذج التدريس التبادلي في تحسين الفهم القرائي لطلاب السنة الثانية من المرحلة الثانوية.

الكلمات المفتاحية: نموذج التدريس التبادلي، مهارات الفهم القرائي، طلاب المرحلة الثانوية.
Introduction

Nowadays, English represents the dominant language in the world; it is the international language that is spoken worldwide. People can never know how to share the same concepts, anticipations, approvals and so forth, if there is no apparent language comprehension. Therefore, language comprehension has become an important measurement for what it means to be as an individual. People without language could still communicate, but they could not influence one another.

Reading is a crucial receptive skill in language, but it can be challenging to become proficient without the right knowledge and understanding. Reading is a process used to extract meaning from texts. According to Peregoy and Boyle (2017), reading comprehension is the process of assimilating the message from the texts. Reading comprehension is the process of interaction between the writer and the reader in which the writer encrypts a message and the reader decodes the meaning from the text, according to the explanation given above.

However, some pupils have trouble fully understanding the text's meaning. Low reading interest and improper reading skills are to blame for their inability to understand the content (Spear, 2015). By doing this, the issues that the majority of EFL learners encounter
can be identified and fixed. According to the preliminary study's observation and interview data, the students' participation and engagement in reading class were poor. They also appeared unmotivated and passive. Additionally, they had trouble utilising the dictionary and couldn't understand the material clearly.

The Reciprocal Teaching Method (RTM) may be a way to address the learners' difficulties with reading comprehension as a result of their worries about these difficulties (Ofodu & Lawal, 2011). RTM was developed to assist students in improving their reading comprehension across all levels and topics. A four-person small group setting is used in cooperative learning, which gives every student an equal chance to engage and meet the learning objectives (Rojabi, 2021).

The actions of group members affect the success of learning. In cooperative learning, students with different skill levels must work together to discuss the assigned materials. RTM is a form of cooperative learning in which group members interact and support one another in order to improve reading comprehension (Tarchi & Pinto, 2016). Students are taught cognitive techniques to help them understand texts and keep track of their understanding (Blazer, 2007).
The researcher uses a paradigm of reciprocal teaching as a teaching strategy for imparting reading comprehension. Reading instruction generally followed the RTM application guideline. The steps are as follows for teaching reading through the RTM more specifically: (a) Four students are selected as a group, and each is given a specific task, such as a foreteller, an interrogator, a summarizer, and a clarifier. The next task was for the pupils to read a paragraph to the class in (a). They were instructed to take notes while reading by underlining, highlighting, and other methods. (c) By making a forecast based on clues from the title or visuals before reading, the student who was chosen as a predictor helps his friends connect earlier parts of the book. After that, the leader gives them the go-ahead to meet with their team and go through their projections. They are instructed to reread the materials in order to confirm their predictions. By offering and responding to questions on the material, the student chosen to pose questions aids his group in learning more about it. The summarizer's job is to assist his group in determining the key ideas and supplementary information while also producing a summary. The group can identify and clarify unclear sections (words and sentences) with the help of the clarifier. (d) After each group of pupils has finished reading the given text, roles are switched. Repeating the process in accordance with their new function, they do it this time. And (e) the instructor gives the
students instructions on how to employ the four strategies independently (Oczkus, 2018).

RTM in reading classes has been the subject of numerous prior studies to determine how well it facilitates student motivation, increases involvement, and enhances reading comprehension. Few research, meanwhile, have looked into RTM's potential to help students' reading comprehension. In light of the aforementioned context, the goal of this study is to examine the effectiveness of reciprocal teaching model in improving EFL reading comprehension skills of 2nd year secondary school students.

**Statement of the problem:**

The problem of the present study lies in the poor performance of 1st year secondary school students in their EFL reading comprehension skills. Hence, the present study attempts to investigate the effectiveness of reciprocal teaching model in improving EFL reading comprehension skills of 2nd year secondary school students.

**Questions of the Study:**

The problem of this study could be stated in the following main question:
- How far is Reciprocal teaching model effective in improving EFL reading comprehension skills required for 2nd year secondary school students?

**Hypothesis of the Study**
- There is a statistically significant difference between the post-test administration mean scores of the experimental and the control groups in overall reading comprehension skills in favor of the experimental group.

**Aim of the Study:**
The current research aimed to improve EFL reading comprehension skills among 2nd year secondary school students through reciprocal teaching model.

**Delimitations of the Study:**
The present study is delimited to:

1- A group of 2nd year secondary school students (N=60) from Bloom Secondary school in Cairo.

2- Some EFL reading comprehension (literal comprehension skills, inferential comprehension skills, critical comprehension skills, creative comprehension skills and appreciative comprehension skills).

3- The academic year's second semester 2022-2023.
Significance of the Study:

The present research might help:

1. **Students** as it helps them in improving their reading comprehension skills.

2. **Teachers** as it helps them in recognizing and using Reciprocal teaching model in teaching and learning in general.

3. **Curriculum designers** as it directs their attention to reciprocal teaching model and incorporate some of the methods, techniques and activities based on the reciprocal teaching model.

4. **Researchers** as it provides them with new avenues of reciprocal teaching model research to investigate and conduct researches on this area.

Definition of terms

**Reading Skills**

According to Kirby (2006:161), Constructing meaning from a text is the process of reading comprehension. Every reading instruction aims to make it easier for the reader to comprehend a certain book. Decoding the writer's words and then applying prior information to develop a rough understanding of the writer's message are both steps in the comprehension process.
The ability of second-year secondary students to comprehend or derive the meaning of the text from written material was defined by the researcher as their ability to do so at five different levels, including literal comprehension, inferential comprehension, critical comprehension, creative comprehension, and appreciative comprehension.

**Reviewing literature**

**Definition of Reading Comprehension**

According to Pangaribuan (2019: 6) Reading comprehension is the process of connecting previously held knowledge to new information found in written text. Lived experiences in turn are dependent on prior information. Reading comprehension skills are developed through effective early reading instruction and the knowledge that children who can read words quickly and accurately have an excellent foundation for comprehension development. The likelihood of a youngster becoming a competent comprehender increases with their oral language proficiency (big oral vocabulary and good listening comprehension) and level of world knowledge.

Reading is interactive in the sense that linguistic information from the text interacts with knowledge that the reader has retrieved from long-term memory, claim Grabe and Stoller (2019: 12). Reading is the skill of deriving meaning from the written word and applying that knowledge effectively (Grab and Stoller 2019: 3).
Reading is a method for extracting information from a text and creating an interpretation of that information

**Levels of reading comprehension**

Pangaribuan (2019) illustrated four levels of reading comprehension, each level containing a combination of skills and each one is following efficiency at the former level:

**Literal Comprehension.** It is the most main level of comprehension requiring understanding of the real data offered in the document. It includes some sub-skills such as comprehending the meanings of words, realizing the main idea and understanding the series and arrangements of details or events. This level relies greatly on the student's own background knowledge and cleverness.

**Inferential Comprehension.** It necessitates that the reader go beyond what is actually provided in the paper and engage in "reading between the lines" in order to predict and draw conclusions from experiments. For example, readers at this level are able to forecast events, draw generalisations, and deduce cause-and-effect linkages even when they are not explicitly stated. Because it requires more than just prediction and inference, this level is known as the interpretative level by reading experts.

**Critical Comprehension.** It includes judgments of the goodness, appreciation and credibility of what is read. It asks readers to provide personal and emotional response.
Creative Comprehension. It involves going beyond the message of the document to create new ideas or increase new premeditation related to the subject or topic, but not clear in the document.

Appreciative comprehension. Based on hints in the text, you can deduce the author's point of view, goal, tone, etc. For an entire text or specific passages, such as a statement, a quote, a rationale, an example, or a scenario that the author may have provided, this might be used to ascertain the author's purpose, message, etc.

Reading Principles
SORAYA (2021) divided six reading principles, they are the following:

a) Encourage pupils to read as much and as frequently as they can is one of them. The better, the more the students read. Every action we do ought to encourage them to read widely, if not more so than intensely.

b) Discussing this issue with kids is a fantastic idea.

c) Students must be interested in the material they are reading. Students should engage in enjoyable reading outside of scheduled class times when they are reading extensively. We ought to work to make sure they provide us as much joy as they can. But we'll also try our best during the class to keep them interested in the subject of the reading book and the tasks they have to complete.
d) Inspire children to respond to a text's ideas. It is crucial for students to analyse reading texts in class in order to discover factors like how language is used, how many paragraphs are included, and how frequently relative clauses are used. However, the text's purpose and message are just as crucial. We must thus provide pupils the opportunity to react to that message in some way.

e) A key element of reading is prediction. We frequently have a fair understanding of the subject before we start reading when we read literature in our own language. Book covers give us an indication about what is within the book; images and headlines give us a sense about what articles are.

f) In the case of intensive reading texts, match the duties to the subject. After choosing the reading material that the students will read (depending on the text's content), we must select acceptable reading tasks, the right kind of questions, activities before, during, and after reading, and effective study exploitation. Even the most insightful and engaging text can be compromised by tedious or unsuitable duties.

g) Effective educators make the most of reading texts. Every text you read contains sentences, phrases, thoughts, descriptions, etc. Good teachers incorporate the reading material into engaging lesson plans, employing the subject for further activities and discussion, the language for study and then activation, and a variety of activities.
Types of reading

Rashid (2021) asserts that there are various kinds of reading that are used in the teaching of foreign languages. The kind used by the teacher is appropriate for the aim of teaching reading.

1- Intensive reading

Reading a text slowly while trying to understand every unfamiliar word, grammatical structure, and style is known as intensive reading. Additionally, translating the reading portion is occasionally necessary. To fully understand the text, it also necessitates a thorough inspection.

2- Extensive reading

While extensive reading refers to reading for enjoyment over a long period of time and slowly and leisurely, intensive reading is more likely to be more committed to reaching academic goals. To determine the meaning of words, the reader makes assumptions. It usually has to do with reading lengthy materials.

3- Speed reading

Actually, speed reading is a synthesis of several reading strategies. It seeks to increase the rate of reading and comprehension of texts. Additionally, it seeks to enhance readers' understanding of the text itself. The reader's eyes should remain focused on the groups of words for as long as possible in order to read groupings of words more accurately and fluidly.
4- **Silent reading**

Because a reader uses it silently without moving their lips, it is referred to as silent. In actuality, we read most of the time in silence. As a result, since it is a crucial talent, we must correctly improve silent reading through instruction and practise.

5- **Critical reading**

By integrating what you read into your existing body of knowledge, critical reading broadens the concept of comprehension beyond merely understanding what has been provided. It entails assessing what has been understood.

**Reading strategies**

Banditvilai (2020) identified the types of reading strategies as follows:

A. **Skimming**

Skimming is a reading strategy for accelerating reading speed. Skimming a passage from a book is done to acquire a general impression of how the text is structured and what its major topic is. When a reader skims a piece, they read it rapidly and omit the intricacies. Each paragraph's opening sentence was read. Usually, the topic sentence in each paragraph establishes the major theme.

B. **Scanning**

Reading ability called scanning enables the reader to swiftly find specific information. When you scan, you are already aware of
the type of information you are looking for. Scanners are used to extract specific information. A key component of reading improvement is scanning.

C. Making Predictions

Making assumptions involves readers drawing conclusions about the book's content based on the cover and title. The title of a work can make readers think of previous texts, allowing them to extrapolate the content of the new text from existing memories. Successful readers are able to predict future events or the arguments an author will use to support a point while they are reading.

D. Questioning

Students can assess their comprehension and maintain interest in their reading by asking questions. The questions can be used by readers prior to, both before and after reading. Readers can develop meaning, advance their understanding, identify problems and answers, access information, and learn new information by asking themselves questions.

Definition of Reciprocal teaching

The major objective of the instructional approach known as reciprocal teaching is text comprehension. The scaffolded discussion technique known as the reciprocal teaching technique is built around the four reading comprehension strategies of predicting, questioning, clarifying, and summarising (Yawisah et al., 2017). As part of a
reciprocal teaching method, which is a comprehension technique, the teacher and students work together to develop their interpretations of the text utilising four tactics (Oo et al., 2021).

In order to increase students' understanding and help them acquire meta-knowledge behaviors—which are described as considering and recognising both what they know and what they don't—reciprocal teaching is an interactive method (Mafarja & Fadzil, 2022). The four roles of reciprocal teaching—predicting, clarifying, asking questions, and summarizing—serve as a scaffolding technique to liven up learning problems (Oczkus, 2013).

By structuring instructional methods using four comprehension-fostering and comprehension-monitoring techniques, a method known as reciprocal teaching seeks to increase students' reading comprehension: (1) the student's own questioning based on the text, (2) the student's own word-for-word summarization based on the text, (3) the student's own explanation of what the student does not understand in the text, and (4) the student's own forecast of what will happen next in the text. The discussions that students engage in small groups while being taught in a general reciprocal manner are not the only thing that matter.

Procedures of implementing reciprocal teaching
According to Kula & Budak (2020) the reciprocal teaching technique is as follows:
- Each student receives their reading assignment from the teacher.
- The teacher and pupils only consider the text's title when speculating about its content. At this point, the teacher tries to engage the students' prior knowledge by asking them to recall what they may already know about the potential content of the text.
- The students silently read the opening sentence of the text.
- The teacher demonstrates how to summarise and articulate the primary idea of the paragraph, how to clarify hazy areas, how to anticipate the content of the next paragraph, and how to impose questions about unclear points in the paragraph. Because it could take some time for children to feel comfortable taking on responsibilities, the instructor might repeat modelling at the subsequent phases. The teacher should be patient and mindful of wait time.
- A student volunteer is requested to direct the same process: first, the leader has the class read the paragraph aloud. Then, the leader asks a leading question about any confusing or unclear parts of the paragraph and nudges the class to ask further questions.
- The leader enquires about or clarifies any uncertain topics (such as ambiguous terms or imprecise grammatical constructions that hinder students' comprehension).
- The leader summarises the paragraph's substance and states the paragraph's key topic.
- The leader then asks a volunteer student to take the lead after making predictions regarding the substance of the subsequent paragraph.

**Phases of Reciprocal Teaching Technique**

The five phases of the reciprocal teaching method (RTT) implementation are described by Klinger et al. (2007: 135). The teacher's demonstration, the students' autonomous application of the strategies, the direct instruction and supervised practise, the teacher-student groups, the student-led groups, and the teacher-student groups are these. These are how they are described:

**a) Phase 1 : Teacher Demonstration**

The tactics (predicting, clarifying, questioning, and summarising) are used by the teacher as examples. On the first day, students are exposed to all four tactics, allowing them to form an overall impression. As a result, they won't have any trouble using such techniques in the following stage.

**b) Phase 2 : Direct Instruction and Guided Practice**

One strategy is covered in greater detail by the teacher in each lesson. While the pupils are reading, the teacher walks them through how to use the technique. In addition, the teacher provides suggestions and reminders to the pupils while they practise the technique. The instructor then offers commentary.
c) Phase 3 : Teacher-student Group

The instructor facilitates small-group discussions regarding the text, encourages students to use the techniques, and offers assistance and criticism as necessary. As students improved, the teacher progressively gave them more independence.

d) Phase 4 : Student-led Groups

Students take the lead in the document discussion and encourage their peers to employ the suggested tactics. Students give their friends advice on how to implement a strategy. The instructor offers assistance as needed in the interim.

e) Phase 5 : Students' Independent Use of the Strategies

While reading the material, students employ the four methods and self-regulate how they are put into practise. They keep an eye on their own understanding. Additionally, they keep tabs on their friends' understanding of the conversation and provide feedback.

Depending on those phases, the teacher will help the students as they employ reciprocal teaching practises in guided, semi-directed, and independent settings. The teacher needs to adhere to these stages. As a result, reciprocal teaching can be successfully implemented, and it is possible to improve pupils' reading comprehension.
Teaching Reading Using Reciprocal Teaching Technique (RTT)

The following are steps for using the Reciprocal Teaching Technique (RTT) to teach narrative material, according to Pangaribuan (2019):

First, explain the Reciprocal Teaching Technique (RTT) process. Inform students of the benefits of learning to read utilising the reciprocal teaching technique (RTT) and let them know how it can help them improve their ability to comprehend narrative content.

-Second, break up the class into smaller groups. Group the pupils into groups of four. Give each group member a note card describing their particular function in the group. Questioner, Clarifier, Predictor, and Summarizer.

Third, encourage pupils to practise reading activities utilising Reciprocal Teaching Technique (RTT), including anticipating, elaborating, clarifying, and asking questions. Request that the students read a few sentences from the assigned text. Encourage students to use note-taking strategies like sticky notes or selective highlighting to help them better prepare for their part in the talk.

Fourth: At the predetermined stopping point, the summarizer will highlight the reading's key points. The questioner will next inquire further about the option, focusing on any ambiguous facts, complex details, or linkages to previously taught concepts. In addition to attempting to answer the questions that have just been posed, the
clarifier will attempt to explain any obscure passages. If it's a literary selection, the predictor might guess what the author will say next to the group or offer ideas on what will happen next in the story. The next option is read when the roles are switched by one person to the right.

**Fifth**: Monitor each group of pupils while they work and offer assistance if an issue is discovered.

**Sixth**, students reenact the scenario in their new roles. This continues until the whole selection has been read. In order for the students to successfully implement the four tactics in small groups, the teacher's job is to support and encourage them. Less emphasis is placed on the teacher's role as students advance.

**Seventh**, present the material again while the other students present their points of view.

**Eighth**: Pose some inquiries to the class concerning the text. This task is carried out alone. They finished and gathered the response sheet. Make a final assessment of the students' responses so that the teacher is aware of their reading comprehension level.

**Method of the study**

**Design of the Study**

Two entire student groups were randomly split into experimental and control groups, each with 30 participants, for this study's quasi-experimental design. Through a paradigm of reciprocal education,
the experimental group developed their reading comprehension abilities. The control group used the conventional strategy. The two groups each received a pre-test and a comparable post-test before and after the treatment.

**Participants of the Research:**

Sixty students in the first year of secondary stage participated in the research. They were enrolled in Bloom Secondary school in Cairo. The participants' ages ranged between fifteen to sixteen years old.

The three-month trial included teaching both the control group and the experimental group at the same time. However, the experimental group underwent training to enhance their reading comprehension skills utilising a reciprocal teaching methodology. The control group also received regular instructions from the researcher.

To evaluate the performance of the two groups (experimental and control) at the pre-test, the researchers utilised an independent samples t-test to determine the significance of the difference between the mean scores of the experimental group and the control group. Table (1) shows the t-values.
Table (1): The t-Value, which denotes the difference in mean scores between the two groups (EFL Reading skills)

<table>
<thead>
<tr>
<th>Group</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t-value</th>
<th>d.f</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literal comprehension skills</td>
<td>Experimtal</td>
<td>3 0</td>
<td>3.37</td>
<td>1.10</td>
<td>0.75</td>
<td>5 8</td>
<td>Not Significant</td>
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<tr>
<td></td>
<td>Control</td>
<td>3 0</td>
<td>3.57</td>
<td>0.94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inferential comprehension skills</td>
<td>Experimtal</td>
<td>3 0</td>
<td>3.23</td>
<td>0.90</td>
<td>.279</td>
<td>5 8</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>3 0</td>
<td>3.30</td>
<td>0.95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical comprehension skills</td>
<td>Experimtal</td>
<td>3 0</td>
<td>3.53</td>
<td>0.86</td>
<td>.906</td>
<td>5 8</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>3 0</td>
<td>3.30</td>
<td>1.12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creative comprehension skills</td>
<td>Experimtal</td>
<td>3 0</td>
<td>2.73</td>
<td>1.01</td>
<td>1.98</td>
<td>5 8</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>3 0</td>
<td>2.20</td>
<td>1.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appreciative comprehension skills</td>
<td>Experimtal</td>
<td>3 0</td>
<td>3.43</td>
<td>1.07</td>
<td>1.98</td>
<td>5 8</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>3 0</td>
<td>2.87</td>
<td>1.14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EFL Reading skills</td>
<td>Experimtal</td>
<td>3 0</td>
<td>16.2 7</td>
<td>2.46</td>
<td>1.94</td>
<td>5 8</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>3 0</td>
<td>14.8 0</td>
<td>3.31</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The aforementioned table makes it evident that there was no difference in the calculated values of "t," which meant that there was no significant difference between the mean scores of the two groups.
The values of calculated "t" are not significant, as shown in Table 1. Therefore, before the study experiment was conducted, the two groups (experimental and control) were comparable.

**Instruments and Materials of the Research**

The following instruments and resources were produced by the researchers to achieve the research's objective:

1- Reading comprehension skills checklist.

2- A pre-post reading test with a criteria for improvement to assess the success of the reciprocal teaching model by assessing some EFL reading comprehension skills among 2nd year secondary stage students.

3- A rubric.

4- Teachers’ guide.

**Construction of the Pre-post Reading comprehension Test**

**Objective of the Test**

The pre-post reading comprehension test was created to measure the EFL reading comprehension skills of first-year secondary pupils. The test specifically seeks to evaluate students' reading comprehension skills before to experimentation. It also tries to evaluate how well their reading comprehension skills are improving as a result of the web-based flipped learning.
Description of the Pre post- Reading Test

The pre-post reading comprehension test's comparison of the pupils' reading comprehension abilities was its main goal. It only only one component. After each of the two reading passages, there were fifteen questions. The weight of each skill is displayed in the specs table below:

Table (2) : The Pre-post reading comprehension test specifications:

<table>
<thead>
<tr>
<th>Skills measured</th>
<th>Sub-skills measured</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- literal comprehension skills</td>
<td>1- interpreting words based on their context.</td>
<td>Passage 1:Q1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Passage 2:Q1</td>
</tr>
<tr>
<td></td>
<td>2- identifying the main idea'.</td>
<td>Passage 1:Q 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Passage 2:Q 2</td>
</tr>
<tr>
<td></td>
<td>3- Recognising supporting details</td>
<td>Passage 1:Q 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Passage 2:Q 3</td>
</tr>
<tr>
<td>2- Inferential comprehension skills</td>
<td>4- Assuming a cause-and-effect connection.</td>
<td>Passage 1:Q 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Passage 2:Q 4</td>
</tr>
<tr>
<td></td>
<td>5- Deducing what the author's intended meaning is.</td>
<td>Passage 1:Q 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Passage 2:Q 5</td>
</tr>
<tr>
<td></td>
<td>6- Relate textual information to prior knowledge.</td>
<td>Passage 1:Q 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Passage 2:Q 6</td>
</tr>
<tr>
<td>3- Critical comprehension skills</td>
<td>7- Identify the author's goal.</td>
<td>Passage 1:Q 7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Passage 2:Q 7</td>
</tr>
<tr>
<td>Skills measured</td>
<td>Sub-skills measured</td>
<td>Items</td>
</tr>
<tr>
<td>----------------</td>
<td>---------------------</td>
<td>-------</td>
</tr>
</tbody>
</table>
|                | Recognising connections between sentences. | Passage 1: Q8  
|                |                     | Passage 2: Q8 |
|                | Deducing logical conclusion | Passage 1: Q9  
|                |                     | Passage 2: Q9 |
| 4- Creative comprehension skills | Creating fresh concepts.  
|                | Supporting or criticising the author.  
|                | Responses to the thoughts in the passage | Passage 1: Q10  
|                |                     | Passage 2: Q10  
|                |                     | Passage 1: Q11  
|                |                     | Passage 2: Q11  
|                |                     | Passage 1: Q12  
|                |                     | Passage 2: Q12 |
| 5- Appreciative comprehension skills | Obtaining from the text an emotional or other valuable response. | Passage 1: Q13  
|                |                     | Passage 2: Q13 |
|                | Showing sympathy, empathy, or sensitivity to persons and circumstances by identifying with them. | Passage 1: Q14  
|                |                     | Passage 2: Q14 |
|                | Addressing a character or circumstance in a text personally. | Passage 1: Q15  
|                |                     | Passage 2: Q15 |
Validity of the Reading Comprehension Pre-Post Test

The test was presented to a jury of experts in curriculum and English teaching techniques in order to be validated.

They were asked to read the passages and answer the questions before providing their feedback on:

1. The content's acceptability for secondary school students.
2. The passages' difficulty and duration
3. The extent to which each question assesses the intended skill

By computing the square root of the reliability coefficient (i.e., experimental validity), the reading comprehension test validity was determined to be (0.73). The test was therefore determined to be legitimate.

Table (3) the correlation coefficient between the degrees of dimensions and the total score of the reading test

<table>
<thead>
<tr>
<th>EFL writing skills</th>
<th>literal comprehension skills</th>
<th>inferential comprehension skills</th>
<th>critical comprehension skills</th>
<th>creative comprehension skills</th>
<th>appreciative comprehension skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>0.68**</td>
<td>0.77**</td>
<td>0.72**</td>
<td>0.71**</td>
<td>0.79**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
</tbody>
</table>

**. The 0.01 level of significance for correlation (2-tailed).

The test was valid, according to the results in table (3).
Reliability of the Pre-reading test

Twenty 2nd-year secondary students were given the EFL reading comprehension skills test to determine its reliability, and then the same group was given the test again four weeks later. The SPSS programme was used to calculate the correlation between the students' test scores from the two administrations. The reliability coefficient that resulted was discovered to be high (0.732). This indicates that the test is trustworthy, as indicated by table (4).

**Table (4) Reliability statistics by calculating cronbach's alpha of the scores of EFL reading comprehension skills test**

<table>
<thead>
<tr>
<th>Skill Type</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>literal comprehension skills</td>
<td>0.731</td>
</tr>
<tr>
<td>inferential comprehension skills</td>
<td>0.657</td>
</tr>
<tr>
<td>critical comprehension skills</td>
<td>0.689</td>
</tr>
<tr>
<td>creative comprehension skills</td>
<td>0.693</td>
</tr>
<tr>
<td>appreciative comprehension skills</td>
<td>0.711</td>
</tr>
<tr>
<td>EFL Reading comprehension skills</td>
<td>0.732</td>
</tr>
</tbody>
</table>

The test's Cronbach's Alpha value was 0.732.

The test was reliable, according to the results in table (4).

**Scoring the Pre-post reading test**

A rubric was created by the researcher to correct the reading comprehension test.
Content of the teacher's guide
It consisted of twelve sessions. To select the method content, the following topics have been taken into consideration:
1. The overall objectives of the teacher's guide.
2. The students' achievement standard.
3. The texts that lend themselves to a task and activity based content.

Findings of the Study
Students' scores on the pre and post administration of reading comprehension test were analyzed statistically. Relevant data to the hypotheses of the study are provided in this part.

Investigating validity of the hypotheses:
Results related to the first hypothesis of the Research
"There is a statistically significant difference between the post-test administration mean scores of the experimental and the control groups in overall reading comprehension skills in favor of the experimental group."

The following table shows the results of the calculations made to determine the arithmetic average (Mean), standard deviation, minimum and maximum values for the two groups—the experimental group and the control group—in order to examine the validity of this hypothesis.
Table (6) Descriptive Statistics to the Scores of Students of the Control Group and the Experimental Group in the overall reading comprehension skills

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
<th>Mean dif.</th>
<th>total score</th>
</tr>
</thead>
<tbody>
<tr>
<td>overall reading skills</td>
<td>Experimantal</td>
<td>30</td>
<td>25.73</td>
<td>2.2</td>
<td>20</td>
<td>30</td>
<td>8.6</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>30</td>
<td>17.13</td>
<td>6.3</td>
<td>4</td>
<td>28</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (6) demonstrates that the experimental group's mean score for total reading ability was 25.73, greater than the control group's score, which was (17.13). Table 6 demonstrates that after administering the overall reading skills test, the experimental group's results increased more than those of the control group. Additionally, it demonstrates how the experimental group's grades are becoming more homogeneous than those of the control group as a result of using reciprocal teaching model to teach the experimental group. Figure illustrates this in pictorial form (2).
Figure (2) The Mean Scores of the Control Group and the Experimental Group in the Post Overall reading skills Administration

The previous diagrams demonstrated that there were notable discrepancies between the two groups' scores. And the figure demonstrated it as follows by summarising the degrees of the two groups:
Table ( 7 ) Summarizes of the Degrees of the Control Group and the Experimental Group

<table>
<thead>
<tr>
<th>Statistical measures</th>
<th>The control group</th>
<th>The experimental group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>Maximum</td>
<td>28</td>
<td>30</td>
</tr>
<tr>
<td>Lower Quartile (Q1)</td>
<td>14.25</td>
<td>25</td>
</tr>
<tr>
<td>Median</td>
<td>16.5</td>
<td>26</td>
</tr>
<tr>
<td>Upper Quartile (Q3)</td>
<td>22.25</td>
<td>27</td>
</tr>
</tbody>
</table>

The t-value for the difference between the mean scores of the two groups was calculated to examine the significance of the differences, as shown in table (8).

Table ( 8 ) The t-Value to Signify the Difference between the Mean Scores of the Two Groups in the Post Administration

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>S. D</th>
<th>t-value</th>
<th>d.f</th>
<th>Sig</th>
<th>$\eta^2$</th>
<th>D</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall reading</td>
<td>Experimental</td>
<td>25.73</td>
<td>2.24</td>
<td>6.968</td>
<td>58</td>
<td>at (0.01)</td>
<td>0.46</td>
<td>1.83</td>
<td>Large</td>
</tr>
<tr>
<td>skills</td>
<td>Control</td>
<td>17.13</td>
<td>6.38</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The difference between the mean scores of the two groups reached the level of statistical significance, as shown in table (8) by the calculated value of "t" (6.968) being higher than the tabulated value of "t" at 58 degrees of freedom and significant level "0.01".

Thus, the hypothesis was accepted which indicated that "There is a statistically significant difference between the post-test administration mean scores of the experimental and the control groups in overall reading comprehension skills in favor of the experimental group."
The value of ETA square and the effect size (d) were determined as its value (ETA square) was 0.46 to analyse the effect and educational importance of the outcomes as well as their effectiveness. The height effect, educational value, and practical significance of the ETA square value outweighed the psychological research results, which were 0.14. And in light of this, it can be said that using the reciprocal teaching model to enhance general reading skills had a significant educational impact and could be responsible for 46% of the differences in student scores in overall reading comprehension skills between the two groups of students.

**Discussion of Results**

The students in the reciprocal teaching class in this research appeared to acquire accustomed to the reciprocal teaching model, even if it was still regarded as a new teaching paradigm in the Egyptian environment. A sizable discrepancy in the students' results served as evidence. The experimental group performed better on the posttest. These outcomes are consistent with earlier study on the use of reciprocal teaching model in EFL cases, which demonstrates successful outcomes following application, and they support that research (see: Dew Swanto & Pang, 2021; Pangaribuan, 2019).

The results of the research were given, and they demonstrated the significance of reciprocal teaching in the teaching of reading as well as its favourable impact on the reading levels of ESL students.
reciprocal teaching can be seen as the major tool for enabling students to fully participate in the learning process and acquire higher grades with higher levels of critical thinking abilities. As a result, educators should use this strategy when instructing students (Lestari, 2016).

**Limitations of the study**

The researchers encountered a number of unique difficulties in putting the reciprocal teaching model into practise, but they also gained important insights.

**First**, because every student is unique and has a distinct learning style, the reciprocal teaching class may not be appropriate for everyone. The amount of time that students should anticipate spending on extracurricular activities needs to be clarified and relocated. It is acceptable to use a screening procedure to identify students who are self-motivated, skilled at self-regulated learning, and good at time management. Practice sessions on effective study habits may be essential at the start of the course to aid in increasing the students' sense of responsibility.

**Second**, Instructors were faced with the issue of reorganising their lesson plans in order to make the most of the valuable classroom time that had been freed up from explanations of the topic. There was a necessity to apply present tools to merge seamlessly the online learning significance with the classroom instruction.
The results of the current study are in line with a number of findings from earlier, similar investigations. For instance, the results supported Rojabi, 2021; Swanto & Pang, 2021; and Pangaribuan, 2019 about reading comprehension abilities.

**Findings of the current study might be due to the following:**

**First:** One of the phases of reciprocal teaching model is setting goals. Students became acquainted with the aims and purposes of the reciprocal teaching model during the introduction lesson.

**Second:** In a safe learning environment with a low-effective filter, the usage of reciprocal teaching model encourages the development of reading skills.

**Third:** The reciprocal teaching paradigm provides a framework for instruction in which modules were developed and tailored to each learner's specific linguistic needs and linguistic developmental stages.

**Fourth:** The reciprocal teaching model activities engage students more in the learning process and pique their attention. Learning consequently has a deeper significance.

**Fifth:** Before, during, and after the exercises, the researcher provided verbal persuasive feedback in the form of encouraging statements to help the participants develop confidence in their abilities.
Conclusion:
The findings showed that the RTM could help learners enhance their reading comprehension and participation in reading lessons. RTM is used in reading exercises to assist students become more resourceful and innovative. As was evident in the reading classroom, students enthusiastically participated in the group discussions on the texts. After using the four comprehension tactics, they are more enthusiastic to read. In the teaching-learning process of reading, the reciprocal teaching approach enables students to anticipate, clarify, ask certain questions, and summarise the material.

Recommendations

The following recommendations could be made based on the earlier findings:

1- Reading comprehension skills need to be taught in English language classes more frequently.

2. Reciprocal teaching model should receive more attention while teaching English classes, particularly to pupils in high schools.

3. Students in secondary school should have the chance to take part in activities that encourage their motivation to develop reading comprehension abilities.
4- Secondary students who struggle with EFL reading comprehension should receive treatment using the reciprocal teaching model.

5- In order to avoid any potential reading comprehension issues the kids may have, teachers should concentrate a lot of emphasis on the development of the students' reading comprehension skills in the early educational stages.

6. Students should be exposed to genuine, real-world learning scenarios that could aid in the improvement of their reading comprehension skills.

7. In order to help their pupils overcome any challenges, English teachers should show them how to use reciprocal teaching model when reading books.

Suggestions for Further Research

The following ideas were suggested to be further researched in light of the findings of the current research:

1- More research is required to determine how reciprocal teaching model affects the development of other EFL reading comprehension skills.

2- More research is required to determine the impact of reciprocal teaching model on the instruction of speaking English.
2. More research is required to determine the impact of reciprocal teaching model on the instruction of English listening.

3- More research is required to examine how reciprocal teaching model might help secondary school students improve their EFL language skills.

4. Additional research is also required to determine how specific EFL reading skills at various educational stages are affected by reciprocal teaching model.

Reference


Kirby, J. R. (2006). Reading Comprehension, What have we learned about reading comprehension? Faculty of Education, Queen’s University.


