



การสอนแบบแลกเปลี่ยนบทบาท:กลยุทธ์การสอนเพื่อส่งเสริม  
ความเข้าใจการอ่านภาษาอังกฤษของนักเรียนมัธยมศึกษา  
Reciprocal Teaching: An Instructional Strategy to Enhance English  
Reading Comprehension of Secondary School Students

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บทคัดย่อ

การสอนแบบแลกเปลี่ยนบทบาทเป็นกลยุทธ์การสอนที่จะช่วยส่งเสริมความเข้าใจในการอ่านภาษาอังกฤษสำหรับนักเรียนระดับมัธยมศึกษาตอนต้นชาวไทย โดยมีนักเรียนจำนวน 40 คนเข้าร่วมในการวิจัยแบบผสมผสานครั้งนี้เป็นระยะเวลา 10 สัปดาห์ การศึกษาครั้งนี้เป็นการเปรียบเทียบความเข้าใจในการอ่านภาษาอังกฤษระหว่างการสอนแบบแลกเปลี่ยนบทบาทและการสอนอ่านแบบกิจกรรมก่อนอ่าน ขณะอ่าน และหลังการอ่าน โดยมีการสำรวจการรับรู้ต่อการสอนแบบแลกเปลี่ยนบทบาทในกลุ่มตัวอย่าง เครื่องมือที่ใช้ในการวิจัย ได้แก่ (1) แบบทดสอบความเข้าใจในการอ่านภาษาอังกฤษ (2) แบบสอบถามการสอนแบบแลกเปลี่ยนบทบาท (3) คำถามในการสัมภาษณ์แบบกึ่งโครงสร้างต่อการสอนแบบแลกเปลี่ยนบทบาท ผลการศึกษาจากข้อมูลเชิงปริมาณโดยใช้สถิติในการวิเคราะห์ข้อมูลจาก paired sample *t*-test พบว่านักเรียนพัฒนาความเข้าใจในการอ่านภาษาอังกฤษโดยการสอนแบบแลกเปลี่ยนบทบาทอย่างมีนัยสำคัญทางสถิติระดับ 0.05 และผลการศึกษาจากข้อมูลเชิงคุณภาพพบว่านักเรียนมีการรับรู้เชิงบวกต่อการสอนแบบแลกเปลี่ยนบทบาท โดยแบ่งออกเป็น 4 กลยุทธ์คือ การคาดเดาเหตุการณ์ล่วงหน้า การสร้างความกระจ่างกับข้อสงสัย การตั้งคำถาม และการสรุปความ ผลของการวิจัยชิ้นนี้สามารถนำไปประยุกต์ใช้ในการสอนวิธีการอ่านเพื่อส่งเสริมการสอนอ่านภาษาอังกฤษเป็นภาษาต่างประเทศ

**คำสำคัญ** : การสอนแบบแลกเปลี่ยนบทบาท, กลยุทธ์การอ่าน, ความเข้าใจในการอ่านภาษาอังกฤษ, การรับรู้

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## Abstract

Reciprocal Teaching has become an instructional strategy to enhance English reading comprehension for Thai secondary school students. Forty students participated in this mixed-methods study for ten weeks. The study compared students' English reading comprehension in Reciprocal Teaching with those students in pre, while, and post-Reading Instruction. It also explored students' perceptions of Reciprocal Teaching strategies. The research instruments included (1) an English reading comprehension test; (2) a Reciprocal Teaching questionnaire, and (3) a Semi-structured interview. Quantitative data from a paired samples *t*-test indicated that students in the Reciprocal Teaching significantly improved their English reading comprehension at a level of 0.05. The qualitative data showed positive perceptions toward Reciprocal Teaching strategies, including predicting, clarifying, questioning, and summarizing. This study led to the application of Reciprocal Teaching to support students reading English in a foreign language.

**Keywords:** reciprocal teaching, reading strategies, English reading comprehension, perceptions

## Introduction

Reading is essential for first language (L1) and second language (L2) learning. People read and comprehend texts for various purposes in daily life at home, work, and school, as well as in their communities. The different purposes of reading determine a particular level of reading comprehension (Grabe & Stoller, 2019). In Thai basic education core curriculum B.E. 2551 (A.D. 2008) (Office of the Basic Education Commission [OBEC], 2008), the English language is compulsory at the primary and secondary school levels, emphasizing the core standards of reading in a foreign language.

English reading comprehension has been the primary challenge for Thai students learning English. The Ordinary National Educational Test (O-NET) scores of Mathayomsuksa 3 students have gradually declined each year, and the northeastern region of Thailand's average scores have remained below the national average scores since 2021. In 2021, the English First (EF) English proficiency index reported that Thai English reading proficiency was very low based on the number of people who were taking the EF Standard English Test in Thailand. Indeed, Thailand is ranked 22<sup>nd</sup> out of 24 countries in Asia (EF, 2021). Additionally, Thongwichit (2018) examined that Thai students have only basic reading comprehension skills with limited linguistics aspects to comprehend what they read. It became an obstacle to improve in English reading comprehension.

Grabe and Jiang (2018) identified factors for cultivating students' reading comprehension in L2 learning, such as practicing reading strategies and using authentic content related to students' background knowledge. The more strategies students employ in reading, the better their understanding of the text (Par, 2020). Palincsar and Brown (1984) conducted the first study to examine ways that could help struggling students improve their reading comprehension through Reciprocal Teaching. It is multiple-reading instruction that highlights four effective reading strategies to enhance students' reading comprehension (Oczkus, 2018): questioning; summarizing; clarifying; and predicting with the teacher's support and scaffolding (Oczkus, 2018; Palincsar & Brown, 1984). They need support from the teacher to overcome the difficulty of English reading comprehension (Thongwichit, 2018). The dialog between the teacher and students who alternate in discussing running through each of the four strategies becomes the main emphasis of Reciprocal Teaching (Palincsar & Brown, 1984).

Grabe (2017) defined reading strategies as cognitive processes that readers consciously control to support reading comprehension effectively. Effective reading instruction that incorporates reading strategies can help students acquire productive comprehension abilities in the classroom. Accordingly, both high-performing and struggling readers can achieve positive outcomes (Grabe & Jiang, 2018).

Several studies in the L1 context have been conducted in recent decades to investigate the effects of applying Reciprocal Teaching in the classroom. All grade levels have been explored, including low- and high-proficiency English in the L1 context. Previous studies have shown improvements in students' reading comprehension (Okkinga et al., 2018; Palincsar & Brown, 1984). Navaie (2018) examined the comparison between two groups of intermediate Iranian EFL learners in Iran, who received Reciprocal Teaching and the traditional method. The results showed an improvement toward Reciprocal Teaching over the traditional method on the same activity.

In Thailand, few studies on Reciprocal Teaching have been carried out, most of which have investigated university and high school students to evaluate their reading comprehension (Tolongtong & Adunyarittigun, 2020). No research has been performed on the implementation of Reciprocal Teaching among students in Thailand's lower-secondary classes. Hence, this study implemented Reciprocal Teaching to improve students' English reading comprehension and to explore their perceptions of Reciprocal Teaching strategies.

## **Objectives**

1. To compare students' English reading comprehension in Reciprocal Teaching with those students in Reading Instruction.
2. To explore students' perceptions of Reciprocal Teaching.

## **Methodology**

This study used a 2-group pre-test and post-test quasi-experimental design to compare Mathayomsuksa 3 students' English reading comprehension and their perceptions of Reciprocal Teaching.

### **1. Context and Participants**

This study was conducted at a medium-sized public school in northeast Thailand. The participants were selected purposively. They were 40 lower secondary students with mixed abilities in the second semester of the 2022 academic year; they were studying in the regular program. They were divided into an experimental group for Reciprocal Teaching and a control group for pre, while, and post-Reading Instruction.

### **2. Research Instruments**

Three research instruments were used: (1) an English reading comprehension test; (2) a Reciprocal Teaching strategies questionnaire; and (3) Reciprocal Teaching interviews.

#### **1) English Reading Comprehension Test**

The English reading comprehension test was conducted based on three English reading comprehension purposes proposed by Grabe and Stoller (2019): reading to search for simple information; reading to integrate information; and reading for general comprehension. The test comprises 30 multiple-choice items generated during the pre-test and post-test that correspond to four reading passages, with an equal number of questions for the three purposes of reading. The readability of each passage was determined using the Fry readability grade level (Fry, 1968), ranging from 6 to 9. The test was validated by three experts using the item-objective congruence (IOC) index and pilot tested with 10 lower secondary

school students. The reliability of the overall test, whose results were calculated using the Kuder-Richardson 20 formula (KR-20), was .84. It was reliable. The item difficulty index ranges from 0.4 to 0.8, and the item discrimination index ranges from 0.2 to 0.6.

### 2) Reciprocal Teaching Strategies Questionnaire

The Reciprocal Teaching Strategies questionnaire was adapted from Oczkus (2018). It includes 26 items to assess students' perceptions of Reciprocal Teaching. The questionnaire is divided into four sections: predicting; questioning; clarifying; and summarizing. The questionnaire was translated into Thai to aid participants' understanding. The items are rated on a 5-point Likert scale where 5 corresponded to "strongly agree," 4 corresponded to "agree," 3 corresponded to "neutral," 2 corresponded to "disagree," and 1 corresponded to "strongly disagree." The questionnaire was validated by three experts and pilot tested with 10 lower secondary school students. The reliability was .82, established by Cronbach's alpha coefficient, which indicates high reliability.

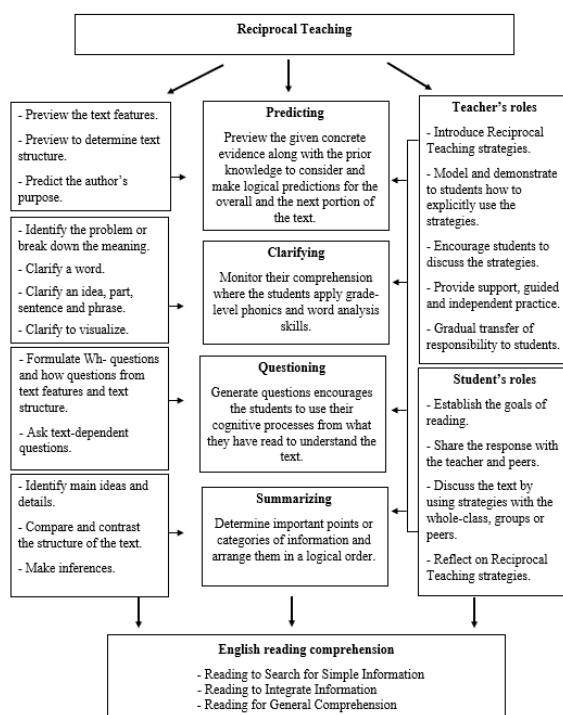
### 3) Reciprocal Teaching Interview

Semi-structured interviews were held to explore the students' perceptions of Reciprocal Teaching. Overall, six students participated in the interviews: two received the highest, average mean, and lowest scores on the English reading comprehension test. They were asked 10 questions about predicting, questioning, clarifying, and summarizing to acknowledge the usefulness of each strategy. Three experts validated the test content and construction using the item-objective congruence (IOC) index.

## 3. Research Framework

The Reciprocal Teaching framework was adapted based on Oczkus (2018) and Palincsar and Brown (1984). Reciprocal Teaching and its strategies were implemented to assess English reading comprehension under three English reading comprehension purposes. Figure 1 shows the framework of Reciprocal Teaching Instruction.

**Figure 1**  
*Reciprocal Teaching Framework*



The Reciprocal Teaching instruction was designed based on the research framework with eight instructional plans in four units. Each lesson lasted 60 minutes, and a 4-step teaching process (predicting, clarifying, questioning, and summarizing) was used consecutively to analyze students' English reading comprehension. The activities and roles of the teachers and students were explicitly taught to explain the details of each strategy.

Predicting is the first step in which students predicted the story from the evidence provided in the reading passage about their prior knowledge. The evidence could consist of textual features such as headings, words in bold, pictures, captions, and labeled diagrams, as well as the author's purposes.

Figure 2

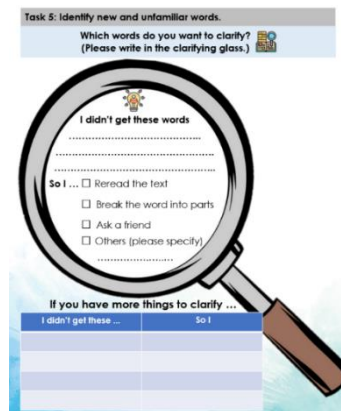
Example of predicting tasks



Clarifying is the second step in which students monitor their understanding of the passage. First, they identify and clarify problems, such as confusing words, phrases, sentences, parts, and ideas.

Figure 3

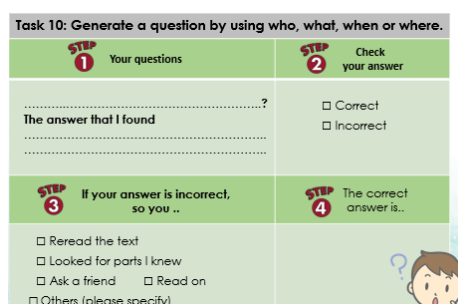
Example of a clarifying task



Questioning is the third step in which students generate and answer questions from passages. These questions are combined into different levels and types, such as WH-questions and questions about the author's purpose(s).

Figure 4

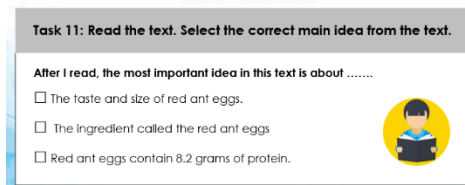
Example of a questioning task



Summarizing is the fourth step in which students should find the main information in the text. Saddler et al. (2019) proposed some summarizing procedures, such as identifying the main ideas and details of the text, inferring concepts and ideas, and regenerating and paraphrasing the information using one's own words.

**Figure 5**

*Example of a summarizing task*



#### **4. Data Collection**

This study assessed students' reading comprehension and explored their perceptions of Reciprocal Teaching strategies after participating in Reciprocal Teaching instruction. The study was conducted in a classroom for 10 weeks. Forty participants were enrolled in the experimental and control groups, with 20 students each.

During the first week, an English reading comprehension pre-test was administered to both groups. They received an 8-week treatment with four units covering eight reading passages. The experimental group received Reciprocal Teaching instruction, whereas the control group received pre, while, and post-reading instruction. In the last week, all students took the English reading comprehension post-test. The scores were used to examine the students' English reading comprehension.

#### **5. Data Analysis**

The quantitative data were obtained from students' scores on the English reading comprehension pre-test and post-test and reported as mean scores, standard deviation, and *t*-test. Furthermore, a Reciprocal Teaching Strategies questionnaire and semi-structured interviews were used to explore the students' perceptions of Reciprocal Teaching instruction after implementation. The results of the questionnaire were measured with means and standard deviations. The questionnaire is divided into four sections: predicting; clarifying; questioning; and summarizing. The results of the semi-structured interviews were examined using thematic analysis based on the Reciprocal Teaching framework.

### **Results**

**Research objective 1: To compare students' English reading comprehension in Reciprocal Teaching with those students in Reading Instruction.**

The results of the English reading comprehension post-test for both groups were compared. The results from the pair-sample *t*-test ( $p < 0.05$ ) showed that students in Reciprocal Teaching experienced a significant improvement, as shown in Table 1.

**Table 1***Descriptive statistics of the students' English Reading Comprehension.*

English reading comprehension test	Group	<i>M</i>	<i>SD</i>	<i>t</i>	<i>Sig.</i>	Effect size
Pre-test	Reciprocal Teaching (RT)	13.00	3.85			
	Reading Instruction (RI)	12.10	3.11	0.98	0.34	0.26
Post-test	Reciprocal Teaching (RT)	20.55	4.01			
	Reading Instruction (RI)	17.00	3.11	3.78	0.00*	1.55

\* $p < 0.05$   $n=20$ 

Table 1 shows that the pre-test mean scores ( $M = 13.00$ ,  $SD = 3.11$ ) of students in the Reciprocal Teaching group were not significantly ( $p > .05$ ) higher than those ( $M = 12.10$ ,  $SD = 3.85$ ) of the students in the pre, while, and post-Reading Instruction group. The effect size, calculated using Cohen's  $d$  (Cohen, 1988), was small ( $d = 0.26$ ).

On the other hand, the post-test mean scores ( $M = 20.55$ ,  $SD = 4.01$ ) of students in the Reciprocal Teaching group were significantly higher than those ( $M = 17.00$ ,  $SD = 3.11$ ) of the students in the pre-while, and post-Reading Instruction group at a significance level of .05. The effect size, calculated using Cohen's  $d$  (Cohen, 1988), was large ( $d = 1.55$ ).

**Table 2***Descriptive statistics of the three reading purposes of the English Reading Comprehension*

Reading comprehension purpose	Post-test	<i>M</i>	<i>SD</i>	<i>t</i>	<i>Sig.</i>	Effect size
Reading to search for simple information	Reciprocal Teaching (RT)	7.90	1.59			
	Reading Instruction (RI)	6.65	0.99	3.10	0.01*	0.94
Reading to integrate information	Reciprocal Teaching (RT)	6.15	1.50			
	Reading Instruction (RI)	5.10	1.48	2.33	0.03*	0.70
Reading for general information	Reciprocal Teaching (RT)	6.50	1.47			
	Reading Instruction (RI)	5.25	1.33	3.32	0.00*	0.89

\* $p < 0.05$   $n=20$ 

Table 2 outlines the results of the paired-sample  $t$ -test for the three purposes of English reading comprehension for both groups. The post-test mean scores of the Reciprocal Teaching group were higher than those of the pre, while, and post Reading Instruction for each purpose at a significance level of 0.05. First, in terms of reading to search for simple information, the post-test mean score of the RT group was 7.90 ( $SD = 1.59$ ), while that of the RI group was 6.65 ( $SD = 0.99$ ), with a large effect size ( $d = 0.94$ ). Second, in terms of reading to integrate information, the post-test mean score of the RT group was 6.15 ( $SD = 1.50$ ), while that of the RI group was 5.10 ( $SD = 1.48$ ); the effect size was medium ( $d = 0.70$ ). Third, in terms of reading for general information, the post-test mean score of the RT group was 6.50 ( $SD = 1.47$ ), while that of the RI group was 5.25 ( $SD = 1.33$ ); the effect size was large ( $d = 0.89$ ). This implies that Reciprocal Teaching is an effective instructional strategy to enhance students' English reading comprehension.

## Research Objective 2: To explore students' perceptions of Reciprocal Teaching.

The experimental group data from the Reciprocal Teaching questionnaire and the semi-structured interviews were used to explore Thai lower-secondary school students' perceptions of Reciprocal Teaching after implementation.

**Table 3**

*Descriptive Statistics for Students' Perceptions of Reciprocal Teaching Strategies*

Reciprocal Teaching strategies	Statements	Mean	SD	Meaning
Predicting	Item 2 RT helps me predict the story using textual features such as headings, photographs, drawings, charts, and graphs.	4.45	0.689	Agree
	Item 7 RT helps me pause during reading to confirm or change my prediction about the story from the text.	3.20	1.01	Neutral
	Overall	3.76	0.38	Agree
Questioning	Item 11 RT helps me use textual evidence to answer questions.	4.20	0.77	Agree
	Item 10 RT helps me ask various questions, including lower-level and higher-level questions...	3.30	0.92	Neutral
	Overall	3.81	0.43	Agree
Clarifying	Item 18 RT helps me clarify my comprehension using multiple strategies.	4.15	0.75	Agree
	Item 20 RT helps me use sentence frames to clarify the text.	3.25	0.72	Neutral
	Overall	3.70	0.38	Agree
Summarizing	Item 25 RT helps me incorporate vocabulary from the selection in the summary.	3.85	0.67	Neutral
	Item 22 RT helps me summarize an overall understanding of the reading passage in a logical order.	2.80	0.70	Disagree
	Overall	3.39	0.45	Neutral

*Note.* The mean scores from the four Reciprocal Teaching strategies represent the students' perceptions of Reciprocal Teaching.

Table 3 shows that each Reciprocal Teaching strategy received a different level of agreement across the strategies to facilitate English reading comprehension. The overall mean score was 3.67 ( $SD = 0.31$ ), indicating that students agreed on the Reciprocal Teaching strategies. Moreover, the students agreed on questioning ( $M = 3.81$ ,  $SD = 0.43$ ), predicting ( $M = 3.76$ ,  $SD = 0.38$ ), and clarifying ( $M = 3.70$ ,  $SD = 0.38$ ). However, they had a neutral agreement on summarizing ( $M = 3.39$ ,  $SD = 0.45$ ). It presents the outcomes for the highest and lowest item scores for each strategy. Item 2 (RT helps me predict the story using textual features such as headings, photographs, drawings, charts, and graphs) obtained



the highest mean score for predicting. However, Item 7 (RT helps me pause during reading to confirm or change my prediction about the story from the text) had the lowest mean score.

As for the clarifying strategy, the highest mean score was for Item 18 (RT helps me clarify my comprehension using multiple strategies, such as re-reading, reading on, breaking words into parts, sounding out the words, and using synonyms). Item 20 (RT helps me use sentence frames to clarify the text; for example, I didn't understand the part where..., and this [sentence, paragraph, page, chapter] is not clear, so I....) received the lowest mean score.

As for the questioning strategy, Item 11 (RT helps me use textual evidence to answer questions) received the highest mean score, but Item 10 (RT helps me ask various questions, including lower-level and higher-level questions) received the lowest mean score.

Finally, the highest mean score for the summarizing strategy was Item 25 (RT helps me incorporate vocabulary from the selection in the summary). In contrast, Item 22 (RT helps me summarize an overall understanding of the reading passage in a logical order) had the lowest mean scores.

The qualitative data were analyzed based on the semi-structured interviews, which were grounded in the four Reciprocal Teaching strategies.

### **1. Predicting**

All students were satisfied with predicting because they found it easy and understandable. Most participants applied this strategy before reading, but only a few applied it before and during reading. They frequently applied it while reading the title, illustrations, and headings.

Student 1: "I like it the most because I love to see the pictures and read the heading to help myself predict the whole story."

Student 2: "I used it before reading to guess the outcome of the story and relate it to my background knowledge."

Student 3: "I like this strategy. I used it before and while reading. I used it to help myself guess the story of what would happen in the next paragraph."

### **2. Clarifying**

When students encountered unknown vocabulary or phrases, the clarifying strategy helped them to resolve confusing points.

Student 1: "When I do not know what certain words mean, I identify the problems which are my confusing words, and clarify them to help me understand the text."

Student 6: "I often do not know certain words, phrases, or sentences. This helps me become aware of the problems and know how to resolve confusing points."

### **3. Questioning**

All students reported that questioning helped them to understand the text comprehensively. However, half of them were dissatisfied with this strategy because they thought they had used the wrong grammar.

Student 3: "In my opinion, generating and answering the questions helped me understand the text, but I do not have things to ask. It is still difficult to ask questions in English."

Student 6: "I like this strategy, but it is difficult to generate questions. I understand the text after generating and answering the questions."

### **4. Summarizing**

All students thought this strategy was the hardest. They were unsure about the main point of the text after reading it.

Student 1: “I think this strategy is the hardest one to use to understand the whole text or to identify the main ideas.”

Student 5: “This strategy helps me read the text comprehensively if I can summarize the text correctly. I like it, but it is hard. I need more time for practicing the strategy.”

The interviews showed that the students consciously developed their reading comprehension using the four Reciprocal Teaching strategies. All students preferred predicting because they found it easy, and it helped them to comprehend the text. Conversely, they indicated that summarizing was the most challenging strategy owing to difficulties in vocabulary, identifying the main idea(s), and grammar.

## Discussion

This study implemented Reciprocal Teaching on students’ English reading comprehension and their perceptions of its reading strategies. Each strategy included predicting, clarifying, questioning, and summarizing.

### Implementation of Reciprocal Teaching on English Reading Comprehension

Reciprocal Teaching is an instructional strategy to enhance English reading comprehension. Students’ mean scores from the Reciprocal Teaching group were significantly higher than those of the Reading Instruction group for all three English reading comprehension purposes. Reciprocal Teaching strategies tended to improve students’ English reading comprehension.

In the first step, students applied the predicting strategy to gather clues from textual features for locating specific information. According to Grabe and Stoller (2019), this strategy referred to the reading purpose of searching for simple information. In this study, students selected the correct clues from the given task. They predicted the overall information to identify and generate the main ideas and the author’s purposes in reading for general information.

In the second step, students clarified their comprehension through monitoring, identifying, and resolving problems. For instance, they applied word analysis strategies to decode new and unfamiliar words. They also searched for synonyms or familiar words to help them obtain specific and overall information. In this case, they were able to better their comprehension after clarifying confused information and resolving problems.

In the third step of questioning, students constructed questions from the texts to analyze for obtaining specific information. Findings from this study were consistent with Harvey and Goudvis’ study (2017) in that students gained a better understanding when they drew on multiple pieces of information for reading to integrate information, such as finding similarities or differences between paragraphs.

In the last step of summarizing, students synthesized or collated details from various parts of the text to integrate information (Harvey & Goudvis, 2017; Izadi & Nowrouzi, 2016). They tended to put together implied, different, and similar pieces of information. When they applied the summarizing strategy, they grasped the overall information to identify the topic, main ideas, and text structures, such as cause and effect, and problems and solutions (Oczkus, 2018).

All in all, four Reciprocal Teaching strategies assisted students to overcome various difficulties when reading the text through planning and self-monitoring their comprehension, as well as self-evaluating their planning and outcomes. Findings from this study were similar to those of McLaren (2018), Okkinga et al. (2018), and Palincsar and Brown (1984) in various first-language reading contexts from the elementary to university levels. It is also supported by previous studies in foreign language reading contexts at different levels (Dabarera et al., 2014; Huang & Yang, 2015; Izadi & Nowrouzi, 2016; Tolongtong

& Adunyarittigun, 2020). It could thus be implied from the findings that students in the Reciprocal Teaching group benefitted from practicing these four Reciprocal Teaching strategies.

### **Perceptions of Reciprocal Teaching**

According to the Reciprocal Teaching questionnaire and semi-structured interviews, the results indicated positive student perceptions at the moderate level. They employed four reciprocal teaching reading strategies to foster and monitor their English reading comprehension.

For predicting, the results showed that most students used predicting to guess the story and relate it to their background knowledge. Most spotted textual features before and during reading. Diana and Dina (2016) postulated that students predicted to promote comprehension when they draw connections between their prior knowledge and new information.

For clarification, most students identified problems and boosted their comprehension using multiple strategies. In addition to the semi-structured interviews, they reported that they employed the clarifying strategy while reading to resolve confusing points in words and sentences. Diana and Dina (2016) described clarifying as a crucial strategy for students who had dealt with comprehension difficulties to obtain a deeper understanding.

For questioning, all students used the questioning strategy while reading. They generated questions to resolve confusing points and did so throughout the reading process (Harvey & Goudvis, 2017; Palincsar, 2013). The students elicited and answered questions while reading, which appeared to be key to mastering reading (Harvey & Goudvis, 2017).

For summarizing, most students used the summarizing strategy after reading the text to summarize the story. However, more than half of them considered it the hardest strategy to apply because they needed to comprehend both general information and identify the most significant one. Oczkus (2018) advocated summarizing to be one of the most complex strategies.

In conclusion, Reciprocal Teaching was likely to be a meaningful reading strategy for increasing lower secondary school students' English reading comprehension. These four particular reading strategies supported them to become more aware of their thinking and reading processes. They knew what to do before, during, and after reading when encountering English reading comprehension difficulties. Thus, students planned and monitored to better both comprehension and perceptions with reciprocal teaching strategies throughout the reading process.

### **Recommendations**

Reciprocal Teaching should be implemented to teach English reading for comprehension at the secondary school level. Before implementing this Reciprocal Teaching in the classroom, teachers must profoundly understand its fundamental framework and practical applications. As such, they require intensive workshops and discussions for appropriate, meaningful, and effective implementation.

Second, students should be taught when, why, and how to effectively employ Reciprocal Teaching to predict, clarify, question, and summarize for comprehension of texts (Oczkus, 2018; Palincsar & Brown, 1984). Teachers should explicitly and carefully teach students Reciprocal Teaching strategies (Oczkus, 2018). Students should recognize the significance of Reciprocal Teaching and its procedures. At the outset, they may be likely to feel unfamiliar with it. Therefore, they should be given adequate time to practice each strategy, work collaboratively in groups, and take turns performing in all four roles as a predictor, clarifier, questioner, and summarizer in a Reciprocal Teaching cycle.

Future studies should employ a greater number of participants in each group to obtain more reliable and precise outcomes. In addition to exploring students' perceptions of the Reciprocal Teaching strategies, other studies should investigate before and after the treatment to compare changes in their perceptions.

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