



THE EFFECTS OF USING COLLABORATIVE STRATEGIC READING ON READING COMPREHENSION SKILLS FOR NON-ENGLISH MAJORED COLLEGE STUDENTSⁱ

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Abstract:

This study aims to find the effects of using Collaborative Strategic Reading (CSR) on reading comprehension skills for non-English majored college students. It is related to (1) the effects after using CSR for non-English majored college students and (2) the experience sharing from teachers in the college for their students' changes with CSR. This research type is experimental with reading comprehension tests. The data of this research is obtained by collecting results of pre-tests and posttests of 39 non-English majored college students in a college of Can Tho city. The methodology of research is quasi experimental and the experience of 17 teachers about using CSR in teaching reading comprehension skills in questionnaire and 3 teachers for semi-structured interview. The techniques of collecting data are written test to find out the effects students on reading comprehension in college context. The test results showed that there is a significant different score between the experimental class and control class. The research finds the increasing of students' reading comprehension results after being taught through Collaborative Strategic Reading (CSR) technique. Based on the results of tests, it will be found CSR technique has effects on reading comprehension skills better than without. It was shown that students reading achievement after given the treatment using Collaborative Strategic Reading (CSR) technique were higher than the students' reading achievement before they were given the treatment. Besides, interviews for teachers to find out how effective CSR in English teaching language successfully and improve students' reading skills. They almost all chose agreements with the

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improvement when using CSR to increase their students' reading comprehension skills and they had a positive attitude about using CSR as well as its effects on the students. They reported that their students could get more ideas and able to arrange them in their mind before. Their confidence in reading was increased and could use the other reading techniques more effectively such as skimming, scanning, guessing, and predicting.

Keywords: Collaborative Strategic Reading (CSR), reading comprehension skills, non-English majored college students, reading experience, experimental research, English language teaching

1. Introduction

1.1 Research rationale

1.1.1 Theoretical reasons

Reading is one of the most important academic language skills for EFL students which can lead to their professional, social, and personal development. However, reading skill is a complex and dynamic phenomenon and is often considered as an important source of language input which involves a special interaction between the reader, the author and text (Berardo, 2006). Moreover, reading comprehension is a complex process that has difficulties and challenges when dealing with long academic texts at colleges or universities.

Dealing with the importance and challenges of comprehension strategies, there is a strategy that could help a reader understand a text, namely Collaborative Strategic Reading (CSR). CSR is not only a strategy, but it is also a collaborative technique for reading comprehension which is applied by teaching some strategies to the students followed by the activity of working in groups. According to Klingner and Vaughn (1998), CSR teaches students to use comprehension strategies while working cooperatively. CSR strategy can help the students to understand the concepts of a reading text. It is supported by Klingner and Vaughn (1998) who stated that the goals of CSR are to improve reading comprehension and increase conceptual learning in ways that maximize students' involvement. In other words, the contribution of the CSR to reading is producing better comprehension of the students.

According to Richards and Schmidt (2002: 443), "*Reading is perceiving a written text in order to understand its contents and this can be done silently (silent reading)*". Further, Gani, et al. (2016) argues that "*reading is a learned skill that begins when children understand that letters from words and words convey decoded meanings*". In short, reading is a process to build meaning from the text, so it is not merely a process of translating text from printed or written text. Reading process actively relates to text to comprehend the meaning of the text. Some forms of readers' active involvement in reading are getting the main ideas, arguing on the text, and also responding to the comprehension questions. Moreover, reading comprehension is primarily a matter of developing appropriate, efficient comprehension strategies (Brown: 2001). Teaching reading comprehension to the

students has a purpose to make students understand what the authors' intended messages, interpreting the message's meaning, and applying messages in meaningful ways (Gani, et al., 2016).

1.1.2. Contextual reasons

At colleges, reading activities are made to help students comprehend the academic materials and to learn conceptual framework. These materials are such complex ones with lots of concepts and information. Students are supposed to read and understand the assigned texts before coming to classes. Most non-English majored students usually find difficulties in learning reading comprehension, particularly in college context because they consider it unimportantly. So, they meet great challenges when dealing with reading texts. They usually do not understand texts and cannot complete the tasks so they feel tired and do not show enough interest in reading lessons or reading activities. The teachers will find out many ways to solve out the problems with methods for students understand easily.

Appropriate collaborative reading strategies can assist students in dealing with complicated texts more efficiently. It is, therefore, expected that non-English majored students are able to do this skill well when they are often exposed to a set of strategies. Moreover, teaching reading comprehension aims at making students to understand the author's intended message, interpreting the message's meaning and implication, and applying the message in meaningful ways. At college, reading activities are made to comprehend the academic materials and to learn the conceptual framework. These materials are such complex ones with lots of concepts and information. Students are supposed to read and understand the assigned texts before coming to classes on their own. Such a reading process means to read beyond the lines and to think critically (Shelton, 2006). Pressley and his colleagues reported that college students are not strategic and selective while they are studying a text for an exam although researches support that such a reader profile is beneficial for comprehension and remembering the information better (Taraban, Kerr and Rynearson, 2000). In this context, college students can perform an effective reading process by using reading comprehension strategies. At college, reading activities are made to comprehend the academic materials and to learn the conceptual framework. These materials are such complex ones with lots of concepts and information. Students are supposed to read and understand the assigned texts before coming to classes on their own. Such a reading process means to read beyond the lines and to think critically (Shelton, 2006). Pressley and his colleagues reported that college students are not strategic and selective while they are studying a text for an exam although researches support that such a reader profile is beneficial for comprehension and remembering the information better (Taraban, Kerr and Rynearson, 2000). In this aspect, college students can perform an effective reading process by using reading comprehension strategies.

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1.1.3 Reasons for choosing the topic

Based on the observation, most students usually find difficulties in learning reading comprehension, especially in college context. It included finding the main idea in the text, specific information in the text, and understanding the unfamiliar English words or terms used in the text. In addition, they also struggled when they were instructed to work individually. To overcome these problems in teaching reading comprehension, teachers can use many strategies to teach reading comprehension. For example, they can use cooperative and collaborative learning. Therefore, the implementation of the Collaborative Strategic Reading (CSR) has been effective in the class for a long time and applied in many contexts appropriately. This strategy was developed by Klingner and Vaughn (1996).

Moreover, according to Bremer, et al. (2002), *“Collaborative Strategic Reading is an excellent technique for teaching students reading comprehension and building vocabulary and also working together cooperatively”*. The goals of Collaborative Strategic Reading are to improve reading comprehension, increase conceptual learning in ways to enhance reading comprehension skills and develop cooperative skills for students (Klingner and Vaughn, 1998). Furthermore, Collaborative Strategic Reading consists of three phases: before (preview), during (click and clunk, get the gist), and after reading (wrap up) (Bremer, et al., 2002). Bremer, et al. (2002) explained the goals of each phase: Preview serves to motivate students’ interest in the text and to engage them in active reading from the onset; Click and Clunk teach students to monitor the reading comprehension and to identify when they have breakdowns in understanding; Get the Gist teach students to restate in own words the most important point as a way of making sure the students understood what they have read; and Wrap up improves students’ knowledge, understanding, and memory of what was read. Based on the discussion above, the research entitled *“The Effects of Using Collaborative Strategic Reading on Reading Comprehension Skills for Non-English Majored College Students”*.

1.2 Research aims

The study aims to find out the effects of the Collaborative Strategic Reading (CSR) to enhance reading comprehension skills for non-English majored college students. After collecting research data, the results were analyzed to observe:

- 1) the effects of the Collaborative Strategic Reading on non-English majored college

students' reading comprehension skills and

- 2) teachers' experience of using CSR in reading comprehension for college students.

1.3 Research questions

Based on the aims of the study, the research questions formulate for this research are as follows:

- 1) to what extent does Collaborative Strategic Reading affect non-English majored students' comprehension skills in college context?; and
- 2) how do teachers use Collaborative Strategic Reading technique to increase reading comprehension skills for non-English majored college students?

1.4 Benefits of the study

The study has theoretical and practical contribution:

- 1) Theoretically: The result expands the strategy in teaching reading comprehension especially teaching college contexts.
- 2) Practically: For students, the results of the research is expected to be useful for students to encourage them to master reading comprehension by using CSR. For English teachers, the results of the research provide more teaching experience and the effects of using CSR.

1.5 Significance of the study

Following the effects of using CSR to enhance reading comprehension skills for non-English majored students and teachers' experience of CSR for non-English major students in college, the intended results will show that the treatment of using Collaborative Strategic Reading (CSR) technique will be higher than the students' reading achievement before they are given the treatment. Moreover, there is an effectiveness of the Collaborative Strategic Reading (CSR) to enhance reading comprehension skills for non-English majored students in college contexts. Then, it can reflect teaching methods in reading strategies of teachers and revise in better ways.

The participants may be expected to account that CSR is effective in terms of improving reading comprehension and overcoming related problems and affective factors such as feeling incompetent and uncomfortable. The technique of CSR approach is observed to make a contribution to one specific aspect of comprehension. For teachers, in order to glean deep insights into the EFL teachers' self-reported use of teaching strategies that aroused students' interests. The findings of this study will have some pedagogical implications for teachers, particularly for those who are teaching EFL students especially for non-English students in the Vietnamese context generally and college context specifically.

2. Literature review

2.1 Definition of key terms

2.1.1 Collaborative Strategic Reading (CSR)

According to Klingner and Vaughn (1998), Collaborative Strategic Reading “is an excellent teaching technique for teaching students’ reading comprehension and building vocabulary and also working together cooperatively”. Therefore, Collaborative Strategic Reading is a reading comprehension practice that combines two instructional elements: (a) modified reciprocal teaching (Palincsar & Brown, 1984), and (b) cooperative learning (Johnson & Johnson 1987) or student pairing (Bremer, et al., 2002). Collaborative strategic reading is the process of combination in reading comprehension with strategic instruction and cooperative learning and used as a set of reading comprehension strategies. In CSR, students read and discuss text through a combination of teacher-led activities and student-led cooperative group work. Strategy is very helpful for students in determining the main idea and drawing conclusions from a text that is read. According to Lucille Sullivan (1968) in Jammed et al (1998: 32): “*Collaborative Strategy Reading (CSR) is an excellent technique for teaching students reading comprehension and building vocabulary and also working together cooperatively*”.

Sallie Gotch (1961) in Jammed et al (1998: 36) says that: Special Education Inclusion Teacher statement CSR is great for kids with learning disabilities because they contribute to their groups and feel successful, and they get the help they need with their reading. Janette Klingner and Sharon Vaughn developed CSR in 1996 and 1998. CSR is a reading comprehension strategy that incorporates two instructional elements: modified reciprocal teaching (Palincsar & Brown, 1984) and cooperative learning (student pairing) (Johnson & Johnson, 1987). In reciprocal teaching, the teacher and students alternate leading a discussion about a key feature of the text by summarizing, questioning, clarifying, and predicting, while in cooperative learning, students brainstorm, predict, clarify words and phrases, highlight the main idea, summarize the main idea(s) and important detail, and ask and answer questions.

In addition, according to Bremer, et al. (2002), “*Collaborative Strategic Reading is an excellent technique for teaching students reading comprehension and building vocabulary and also working together cooperatively*”.

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what they have read. Wrap Up improves students' knowledge, understanding, and memory of what was read.

To summarize, Collaborative Strategic Reading (CSR) is a reading comprehension approach in which the teacher teaches students how to employ comprehension strategies while working in groups.

2.1.2 Reading comprehension

Kintsch (1998) and Van Dijk and Kintsch (1983) define reading comprehension as the process of creating meaning from text. The purpose is to get an understanding of the text rather than to acquire meaning from individual words or sentences. The outcome of reading comprehension is the mental representation of a text meaning that is combined with the readers' previous knowledge. According to Brown (2004), there are micro and macro skills for reading comprehension. Micro skills consist of some common techniques such as scanning, skimming, drawing to establish general organization for readers. In macro skills, the understanding of sentences is more deeply in vocabulary, syntax, discourse markers to find out the answers.

According to Hornby (1998), reading comprehension entails not only reading aloud, but also understanding the meaning of words, phrases, and paragraphs, as well as the relationships between concepts. If students simply read a material and are unable to comprehend its content, they have failed to comprehend it. Reading comprehension, according to Smith and Johnson (1978: 56), is defined: "*Knowing, assessing, employing, and gaining through an interaction between reader and author. Reading comprehension is a type of conversation between an author and a reader in which written language serves as the medium.*"

Although reading comprehension has been characterized as the "essence of reading" (Durkin, 1993), poor readers and students continue to struggle with it. These students are expected to comprehend all types of literature, but they lack the capacity to choose and employ comprehension strategies effectively, which prevents them from fulfilling state standards. To support, Philips (2006: 17) indicates that readers must be able to perceive references in a reading text, which is related to the four competencies. Furthermore, Spears (2012: xxi) claims that determining the writer's intent is one of the most crucial reading comprehension abilities. In other words, readers should be able to understand the objective of the text and recognize the references within it in order to demonstrate reading comprehension. Based on the aforementioned viewpoints, it can be concluded that reading comprehension refers to the skill or capacity to grasp reading material in order to extract information from the text. It's a difficult task that entails both perception and thought. Word recognition and comprehension are two connected processes in reading. Word recognition is the process of recognizing how written symbols match to one spoken language, whereas comprehension is the process of understanding words, phrases, and linked material.

2.1.3 Cooperative learning

Many scholars have different definitions of cooperative learning. According to Roger (1992:22), cooperative learning is a group learning activity in which learning is based on the socially structured exchange of information between learners in a group, and each learner is held accountable for his or her own learning while also being motivated to improve the learning of others. Parker (1994:27) defined: *“Cooperative learning as a learning situation in which students work together in small groups to complete an academic activity with the same goal in mind.”*

Meanwhile, according to Davidson (1995:363), cooperative learning is defined: *Working or acting together or jointly in order to generate an effective result.* Moreover, Johnson and Johnson (1998:43) cooperative is working together to accomplish shared goals. Within cooperative activities individuals seek outcomes that are beneficial to themselves and beneficial to all other group members. Cooperative is the instructional use of small groups so that the students work together to maximize their own and each other’s learning. It means that in a cooperative situation, each member makes an effort to reach the same goals.

In addition, Cooperative learning is defined by Newman (1987:21) as a small group of learners working together as a team to solve a problem, complete a task, or achieve a common objective. Cooperative learning, according to Jacob (1997:45): *“Organized and managed group work in which students engage cooperatively in small groups to attain academic, affective, and social goals.”*

A successful teaching technique in which small groups of students with varying levels of ability employ a range of learning activities to deepen their comprehension of a subject is another description. Each team member is responsible for not just learning what is taught, but also for assisting teammates in learning, resulting in an atmosphere of achievement. Based on the definitions above, it can be concluded that cooperative learning is a learning method in which learners are divided into a small group to help each other to reach successful academic purpose (Johnson et al., 1991:2). This is a must in order to easily set up the framework for the CSR strategy for reading comprehension.

2.2 Collaborative Strategic Reading (CSR) in reading comprehension

In CSR, students learn four techniques: Preview, Click and clunk, Get the gist, and Wrap up. Preview is used before reading the entire text for the lesson, and wrap up is used after reading the entire text for the lesson. The other two strategies click and clunk and get the gist are used multiple times while reading the text in each paragraph. The details of process can be described as below:

2.2.1 Preview

Preview is a strategy used to activate students’ prior knowledge in order to facilitate their predictions about what they will read, and to generate interest. A teacher introduces previewing to students by asking them to think about the previews they have seen at the movies or reading text. The teacher prompts students to tell what they learn from

previews by asking questions to activate students' mind. The teacher then asks them to skim information such as headings, pictures, and words that are bolded or underlined to determine what they know about the topic and what they think they will learn by reading the text. The goals of previewing in the CSR technique, according to Abidin (2012: 194), are to activate students' past knowledge about the topic and to assist students in making predictions about what they will learn. In a nutshell, the tasks in the previewing stage involve activating pupils' background knowledge and forming predictions.

2.2.2 Click and clunk

Click and clunk is a strategy that teaches students to monitor their understanding during reading, and to use fix-up strategies when they realize their failure to understand text. The teacher describes a click as something that students already get. You know it just clicks. "After students understand, the teacher explains." A clunk is like when you run into a brick wall. You just really don't understand a word the author is using. That's a clunk." Then, the teacher reads a short piece aloud and asks students to listen carefully for clunks. The teacher asks students to write down their clunks and then teaches fix-up strategies to figure out the clunks. The teacher can use "clunk cards" as reminders of fix-up strategies. There are some fixed-up strategies in this stage:

a. Vocabulary fix-up skills

The student rereads the sentence and looks for clues to understand the meaning of the unknown vocabulary word in the sentence. Also, breaking up the word into its syllables or prefix and suffix to look for smaller words.

b. Read-Pause-Reflect

To help students monitor their understanding during reading, allow them to decide to pause at any point to recall the main ideas for each part. If a student does not understand the topic, he/she rereads the section.

c. Partner retell

Students work in pairs in this activity. One student assigned the role of "re-teller" and the other assigned the role of "listener". The reseller talks about the main idea(s), concepts, and points of the reading while the other student listens, comments, and ask questions. Then, the teacher randomly calls one of the listeners to share information told by the re-teller.

2.2.3 Get the gist

Collaborative Strategic Reading aids students with identifying the core concept of a written material. This activity is seen in the strategy's third step, the grasp the gist strategy. Bremer et al. (2002: 34) and Abidin (2012: 194) endorse this theory, claiming that students learn to "get the gist" by selecting the most essential topic in a portion of text (usually a paragraph). Answering the following questions can help you identify the main

idea: "Who is it for?" or "What is it about?" or "What is the most crucial aspect of the "who or what?". Students are also encouraged to keep their responses to 10 words or less, so that their gist conveys the most important idea(s) while avoiding extraneous information. By concentrating on one paragraph at a time, students can learn to get the gist. The teacher asks pupils to pick the most important person, place, or thing as they are reading the text. The teacher next instructs pupils to state what they believe is the most important aspect of the person, location, or object. Finally, the teacher instructs students on how to put it all together in a ten-word or less statement. The purpose of getting the gist is to educate students how to re-state the most significant idea in their own words as a way of ensuring that they have understood what they have read. This strategy can help students remember what they've studied and understand it better. To summarize, the purpose of the get the gist technique is to determine the text's major concepts by paraphrasing the most important points.

2.2.4 Wrap-up

The students generate questions and review the key ideas in the text at the end of the CSR – wrap up technique. Students learn to wrap up by formulating questions and answers about what they have learned and by reviewing key ideas, according to Bremer, et al. (2002: 35) and Abidin (2012: 194). The objectives are to improve pupils' knowledge, comprehension, and recollection of what they have read. To put it another way, a wrap-up technique is a strategy in which students formulate questions regarding essential material in the section they just read and write down the text's most important concepts to examine it. The teacher initially teaches students to wrap up by telling students to pretend they are teachers and to think of questions they would ask on a test. The teacher suggests the following question starters: who, what, when, where, why, and how. The teacher also encourages students to generate some questions that require an answer involving higher-level thinking skills, rather than literal recall. Finally, the teacher asks students to write down the most important ideas from the day's reading assignment. To apply CSR's reading comprehension strategies, they can help each other while working in their cooperative groups, the teacher's role is to circulate among groups and provide ongoing assistance. Teachers help by actively listening to students' discussions and providing feedback, clarifying difficult words, modeling strategy usage, encouraging students to participate, and providing positive reinforcement. The focus of students' work should be on learning the material and helping their classmates learn it as well, not merely going through the steps of a given strategy. Also, teachers should regularly conduct whole-class previews and wrap ups to introduce new material, facilitate follow up activities, and reinforce learning. They do this by formulating and answering teacher-like questions about the text they have just read and by identifying the most important ideas in the passage. They try to think of easier and more challenging questions that require an understanding of the passage as well as connection with prior knowledge. Finally, students write down one or two of the most important ideas from the passage. They must be prepared to justify why they think their choices of ideas are important.

Students track their understanding during the CSR process by using learning logs. Students complete learning logs before, during and after reading. CSR learning log used as a reference for follow-up activities, a study guide, and for valuation as follows:

Table 2.1: Sample of CSR learning log in Promoting reading comprehension content learning and English acquisition through CSR (Klingner, J. K. & Vaughn, 1990)

CSR Learning Log		
Before reading (Preview)	During reading	After reading (Wrap up)
Knowledge: What do you know about the topic?	Clunks: make a list	Questions and discussion
Prediction: What will you learn?	The Gist: Write the gist for each section (You may add more section).	Review: What did you learn?
	Paragraph 1:	
	Paragraph 2:	
	Paragraph 3:	

Generally, Collaborative Strategic Reading is aimed to link with cooperative learning, which involves students working in small groups (Grabe, 2002; Zhang, 1993). The reason for this infusion is that combining strategic reading with group learning allows students to (a) interact, (b) assist one another in improving their knowledge, and (c) overcome their text comprehension issues.

2.3 The importance of Collaborative Strategic Reading in teaching and learning

Teaching Reading Comprehension skills through CSR is a strategy to teach students how to read the text together or cooperatively Klingner and Vaughn (1998: 32). It means that CSR strategy can help students as an instrument in reading comprehension to reach the goals easier. It is really important to reach the positive results in reading comprehension and their studies. The fact that there are various strategies to improve one's comprehension of a text, as indicated above, demonstrates that reading comprehension is quite significant. Because of the importance of reading comprehension, CSR strategy is also important in improving students' reading comprehension skills. It is highly compatible with a range of reading programs, including literature-based instruction. Moreover, the goals of CSR are to improve reading comprehension and increase conceptual learning in ways that maximize students' involvement. Developed to enhance reading comprehension skills for students with learning disabilities and students at risk for reading difficulties, CSR has also yielded positive outcomes for average and high achieving students (Klingner & Vaughn, 1996; Klingner, Vaughn, & Schumm, in press). The main purpose of Collaborative Strategic Reading is to improve reading comprehension and increase conceptual learning in ways that maximize students' involvement (Klingner and Vaughn, 1998). Furthermore, Klingner, et al. (2004) pointed out CSR provides students with the opportunity to work in small cooperative groups (approximately four students per group) in which each student plays a critical role associated with the effective functioning of the group and the implementation of strategies (e.g., leader, clunk expert, gist). In conclusion, Collaborative Strategic Reading

has the purpose to improve students' reading comprehension and also provides them to work cooperatively. Besides, students can use the CSR technique to better understand for the topics in a reading material and improve their comprehension. The goals of CSR, according to Klingner and Vaughn (1998: 34), are to improve reading comprehension and boost conceptual learning in methods that optimize students' involvement. In other words, the contribution of CSR to reading is that it improves students' understanding.

Collaborative Strategic Reading technique in reading comprehension aligned with Moreillon (2007: 19) suggested strategies for boosting comprehension, in which students' background knowledge is engaged, and then they make predictions about what they will learn (Preview). Furthermore, the CSR technique teaches students how to keep track of their reading comprehension (Click and clunk) and CSR assists students in identifying the core concept of a written material (Get the gist). The students come up with questions and go through the key points in the text. Students learn to wrap up by developing questions and answers about what they have learned and by reviewing key ideas (Bremer, et al. (2002: 35) and Abidin (2012: 194).

2.4 Teacher's role in using CSR

Teachers can help students improve their reading comprehension by implementing CSR. The success or failure of using the CSR method is determined by the teacher's strategy planning and implementation. Furthermore, it must be done in a way that is appropriate for the students' abilities and attracts student participation at the same time. Teachers can assist students by carefully listening to their interactions and clarifying difficult terminology as needed, showing technique use, encouraging students to participate, and modeling a helpful attitude. Students are expected to require assistance in learning to work in groups, executing techniques, and mastering academic content. In CSR strategy, teacher can implement the cooperative groups by steps as follow:

2.4.1 Set-up cooperative groups

Teachers set up students to work in small groups of four or five students to apply CSR strategy. Thus, they will be assigned roles to perform while using CSR strategy. Teacher trains the students to apply CSR through modeling and classroom activities from the beginning of the period. Students may use cue cards to remind them about the strategies and their roles. When they feel confident implementing CSR strategy and roles, they may stop using cue cards. Teacher presents and guides students the CSR strategy and cooperative grouping from the beginning of activity. When students develop the skills and implement CSR strategy in cooperative groups, the teacher should circulate among the groups to facilitate cooperative learning, provide assistance and support when needed, and clarify any misconceptions.

2.4.2 How to increase students' reading comprehension skills

Teaching students to read at an early age is a challenging task, so it requires a great deal of teachers' endeavor (Blair et al., 2007). Specifically, to be better at teaching English

reading, teachers are to implement various materials that may be helpful as we assist students to use both cooperative learning techniques and comprehension strategies. Cue cards or sheets can be effective reminders of cooperative learning roles. Having developed the CSR strategy demonstration skills and understand their roles, they are ready to apply CSR strategy in cooperative groups. The teachers assigned each student a role in his/her group. Roles depend on the number of students in the groups, the teacher can use the reciprocal strategy for using CSR. This means that the teacher can indicate class in reading comprehension by using cooperative activities to combine with reading skills. The skills in CSR strategy are summarizing, question generating, clarifying and predicting. The teacher and students can stimulate the skills as the steps as follow:

Summarizing: allows students to identify and incorporate the most important information in the text. Text can be summarized across sentences, paragraphs, and the entire passage. When students first begin the reciprocal teaching procedure, they tend to concentrate their efforts on the sentence and paragraph levels. They can integrate at the paragraph and passage levels as they gain proficiency. Question generating reinforces the summarizing strategy and moves the learner one step further along in the comprehension activity. When students create questions, they first identify the type of information that is significant enough to serve as the basis for a question. They then pose this information in the form of a question and self-test to ensure that they can answer their own question. Question generation is a versatile strategy in that students can be taught and encouraged to generate questions on a variety of levels. Some school situations, for example, necessitate that students master supporting detailed information; others necessitate that students be able to infer or apply new information.

Clarifying is an activity that is particularly important when working with students who have a history of comprehension difficulty. These students may believe that the purpose of reading is saying the words correctly; they may not be particularly uncomfortable that the words, and in fact the passage, are not making sense. When the students are asked to clarify, their attention is called to the fact that there may be many reasons why text is difficult to understand (e.g., new vocabulary, unclear reference words, and unfamiliar and perhaps difficult concepts). They are taught to be alert to the effects of such impediments to comprehension and to take the necessary measures to restore meaning. And predicting occurs when students make educated guesses about what the author will discuss next in the text. Students must use the relevant background knowledge that they already have about the topic to complete this successfully. The students' reading has a purpose: to confirm or disprove their hypotheses. Furthermore, the opportunity for students to connect the new knowledge they will encounter in the text with the knowledge they already have has been created. The predicting strategy also promotes the use of text structure by teaching students that headings, subheadings, and questions embedded in the text are effective means of anticipating.

Roger (1992:22) states that cooperative learning is a group learning activity organized in such a way that learning is based on the socially structured change information between learners in a group in which each learner is held accountable for his

or her own learning and is motivated to increase the learning of others. Based on the statement about group work, teachers can divide each group with the positions of members. Furthermore, the teacher can design learning cue cards related to the students' positions at the same time, as shown below:

- Leader: Leads and directs the group during the implementation of CSR with the teacher's assistance, if needed and keeps the group's members on task.
- Clunk expert: Clunk expert: Uses clunk cards to show the group the fix-up strategies when they try to figure out a clunk.
- Gist expert: Uses clunk cards to show the group the fix-up strategies when they try to figure out a clunk.
- Encourager: Encourages the group members to participate in the group's discussion and gives the feedback.
- Announcer: Calls on the group members to read or share ideas during the activity.
- Reporter: Share the group's ideas, answers, and questions during a whole class discussion.

In general, the teacher's role is to circulate among groups and provide ongoing assistance. Teachers help by actively listening to students' discussions and providing feedback, clarifying difficult words, modeling strategy usage, encouraging students to participate, and providing positive reinforcement.

2.5 Students' role in using CSR

The students are able to apply CSR's reading comprehension strategies and help each other while working in their cooperative groups. Because cooperative learning appears to operate best when all group members have been assigned a meaningful task, students' responsibilities are a crucial part of CSR. Positions should be rotated on a regular basis so that kids get a chance to try out different roles and everyone has a chance to be the leader. If necessary, students can take on multiple roles at once. The following are examples of possible jobs. Procedures of CSR for using in group are: first, the teacher assigns students to group. Each group should include about four or five students. Then the teacher assigns roles to students. The student has a chance to try out all of the roles. These roles may include:

- Leader: The leader guides the group on how to implement CSR, prompts the group member when to do their jobs and helps the group stay on task.
- Clunk expert: Clunk expert asks the group if they have any "clunks", helps the group use clunk cards and summarizes the meaning of each "clunk" so they can write in their learning log.
- Gist expert: Gist expert guides the group toward the development of a gist and determines that the gist contains the most important idea(s) but no unnecessary details.
- Announcer: Announcer calls on different group members to read or share an idea and makes sure that everyone participates and only one person talks at a time. There are some steps to apply Collaborative Strategic Reading (CSR) in

cooperative learning groups as step 1: Whole class introduction. The teacher introduces the topic, teaches key vocabulary, and provides instruction. Step 2: Cooperative group activity (preview, click and clunk, get the gist and wrap up). Each group member plays an assigned role and fills out a CSR learning log during the activity. Step 3: Whole class wrap up strategy. A teacher discusses the day's reading passage, reviews clunks, answers questions, or shares some review ideas. During the cooperative group activity, the teacher's role is to circulate among the groups, clarifying clunks, modeling strategy usage, modeling cooperative learning techniques, redirecting students to remain on-task, and providing assistance.

- Reporter: During a whole-class discussion, share the group's ideas, answers, and questions.

In brief, the focus of students' work should be on learning the material and helping their classmates learn it as well, not merely going through the steps of a given strategy. Also, teachers should regularly conduct whole-class previews and wrap ups to introduce new material, facilitate follow up activities, and reinforce learning.

2.6 College context and non-English majored college students

2.6.1 Characteristics of college students in learning English

Students who are not specialized in English and study other majors at a college. Most of them consider that English is just one of their compulsory subjects in their program. The English program for colleges in Vietnam complies with the regulations of the Ministry of Labor, Invalids and Social Affairs on the level 2 equivalent of the 06-level Common European Framework of Reference, with a duration of 120 hours. In the basic English program for amateur students, each semester, students have two English courses and are compulsory. Students who only need to achieve a score of 5 or higher will not be retested. Therefore, most of them do not focus much on English but their specialized major that they are studying. They pay less attention to English learning strategies, especially reading skills. The study time is arranged centrally for each semester, Therefore, most of them do not focus much on English. They focus a lot on the major they are studying. They pay less attention to English learning strategies, especially reading skills. The study period is arranged centrally for each semester, English is taught about 30 hours per week and ends within a month.

Most college students are between the ages from 18 to 22 and a few are already in their adulthood and working. At this age, students have solid and logical thinking, good coordination, teamwork, and some higher-order thinking. For reading skills, they have the ability to reason, evaluate, and have their own personal opinion. Therefore, in order to develop a strategy for the process in terms of reading, and elaborate its skills meaning to enhance comprehension (Paris and Hamilton, 2009; Carrell and Grabe, 2013). Drawing on these perspectives, in this study, reading is defined as an interactive process between the reader, a given text, and the context in which the reader decodes information and understands the meaning of such triad.

2.6.2 The principles for English program for non-English college students

According to The Vietnamese Ministry of Labor, Invalids and Social Affairs about English program for non-English majored students in vocational schools and colleges, the English program for non-English majored college students is required as follows:

In case English is a compulsory foreign language subject, the college level training program will have a duration of 120 hours including:

- 42 hours of theories;
- 72 hours of practices, discussions, exercises;
- 6 hours of tests and revisions.

After completing the program at the college level, learners achieve level 2 foreign language competence according to the 6-level CEFR (level A2).

However, if learners fall into the following cases, they will be exempted from studying or taking the final exam in English:

- Have a certificate of English level 2 or higher according to the 6-level CEFR.
- Have an English certificate equivalent to A2 level or higher according to the CEFR issued by foreign organizations.

2.6.3 Challenges of college students in reading comprehension skills

In college contexts, where English has nearly been taught as a foreign language, the only skill which seems to be of paramount importance for tertiary education is EFL reading skills (Birjandi & Noroozi, 2008; Farhady & Mirhassani, 2001). Due to the transmission style of teaching language still prevails across schools, colleges or universities in most EFL contexts. In addition, English language teaching (ELT) research studies support the idea that the non-majority of EFL students who are admitted into over-tertiary education are under-prepared in terms of their EFL reading abilities (Dreyer & Nel, 2003; Haghani, 2004). Some suggest that the reason for EFL learners' ill-preparedness in reading comprehension performance is, in large part, attributable to traditional language teaching methods. Given the challenges of meeting the needs of college level in college context, there is a need for empirically-based interventions that can enhance students' engagement in English classrooms and facilitate reading comprehension by developing strategic behavior of students in EFL reading. Moreover, considering the importance of collaborative strategic reading and cooperative group work, it seems that reading strategy instruction within the framework of cooperative learning pedagogy is under-explored in college level education where reading and understanding of English texts play an important part in students' further learning.

In addition, students can decode words and use knowledge of syntax to construct the meaning of sentences (Kintsch 1998). But Winograd and Johnston (1987) showed that the conditional knowledge is necessary for reading comprehension and the teaching of reading comprehension can be advanced by understand the conditions under which particular strategies in the reading comprehension research base and these strategies are not sufficient for understanding and interpreting text at more than a superficial level.

Reading comprehension processes to make sense of text may assist struggling readers in answering comprehension questions on reading achievement tests.

2.7 Related studies

Firstly, the study is intended according to the studies of Klingner, et al. (1998) through many recent years and developed them year by year. The first study was conducted by Klingner, et al. in 2004. The research was conducted in 10 classrooms across five schools located in a large metropolitan school district in the south-eastern United States. Five teachers and their classes (in two schools) were assigned to the CSR condition, and five teachers and their classes (in three schools) were assigned to a control condition. In the study, there were pre or post interviews and classroom observations and also testing. The researchers found that students in CSR classrooms showed greater improvement in reading comprehension than students in classrooms where CSR was not implemented.

The second study was conducted by Anieke Rosalina in 2014 at the second grade of SMA PGRI 109 Kota Tangerang. In this study, the researcher used a quasi-experimental study method in two classes. There were experimental and control classes. In experimental class, the researcher taught reading text by using Collaborative Strategic Reading and in control class, the researcher taught reading text without using Collaborative Strategic Reading. The result showed the significant influence of students' reading comprehension achievement of reading comprehension skills after using CSR. It can be claimed that Collaborative Strategic Reading technique can enhance the students' reading comprehension achievement for reading texts. This approach is selected since it was hypothesized that its positive effects on literal reading or even reading lines could also be transferred to a higher type of reading (reading beyond the lines).

3. Research methodology

3.1 Research questions and hypotheses

3.1.1 Research questions

The current study is aimed at investigating the effects of using CSR to improve reading comprehension skills and find out the experience sharing of teachers in college context on non-English majored college students. In order to measure and evaluate the effects of CSR on non-English majored college students' reading comprehension skills, the following research questions are proposed:

- 1) To what extent does Collaborative Strategic Reading affect non-English majored students' comprehension skills in college context?
- 2) How do teachers use the Collaborative Strategic Reading techniques to increase reading comprehension skills for non-English majored college students?

3.1.2 Hypotheses

The study was based on theories of the effects and experience in teaching and learning of using CSR to improve reading comprehension skills for non-English majored college students. The following research hypotheses are posited:

(H1) The significant difference in effects of using CSR between the experimental group and the control group in the post-test.

(H2) The experimental group has a higher level of using CSR than the control group in the post-test.

3.2 Research design

According to Creswell (2012: 12), there are three types of quantitative research designs: experimental, correlational, and survey. *“In quantitative research, experimental design (also known as intervention studies or group comparison studies) are procedures in which the investigator examines if an activity or materials make a difference in the findings for participants”* (Creswell, 2012: 21).

This study mainly followed as an experimental research by using pre-test and post-test instrument in a college of Can Tho City. There are two classes divided into two groups, control and experimental group. The quantitative was applied in pre-test and post-test in reading comprehension texts for students. After taking two kinds of tests, the results were analyzed to show the effects of CSR between two groups. The study involved two groups of participants labeled the control and experimental group. In this study, both quantitative approach and qualitative approach were employed to answer the research questions. The quantitative data was collected to measure the effects of using CSR to improve reading comprehension skills while the qualitative approach with the questionnaire and the semi-structured interview were used to investigate teachers' experience toward using CSR in reading comprehension skills for non-English majored college students.

The intervention of the study lasted within eight weeks. During the intervention, both groups received traditional face-to-face instruction of English from Unit 6 to Unit 8 of the course book (English for college students). The control group were taught the lessons in traditional way of reading comprehension. Meanwhile, for the experimental group, CSR were implemented and students' reading comprehension skills was measured. The implementation of CSR activities was monitored during the study. To collect quantitative data for the study, the pre-test and post-test which were designed in the form of reading tests with multiple-choice format were administered. In order to collect the questionnaire, the quantitative data for the study is obtained on the experience and effects of CSR, and the semi-structured interview is implemented to better support the effects of CSR on reading improvement in the experimental group.

Generally, the quantitative method was used in questionnaires that were distributed to teachers to learn about their experiences with CSR in improving reading comprehension in college students. The qualitative method of a semi-structured

interview was used to further investigate the impacts of CSR on reading comprehension abilities and the teachers' experiences with CSR.

3.3 Participants

3.3.1 Respondents to the questionnaire

Seventeen teachers will be invited to participate in the study who are teaching for non-English major students in colleges in Can Tho City. The questionnaire was implemented with 22 items about their own experience about using CSR as well as the effects of this technique. They completed the questionnaire about how to utilize the CSR technique and the effects of utilizing it to teach reading comprehension skills on a regular basis. Therefore, the teachers were required to present their own ways in teaching reading skills with CSR and its effects simultaneously. In total numbers of participants, they consist of 12 females and 5 males. Age and years of teaching experiences ranged from 25 to 40 and from 1 to 10 years respectively. All of participants gain Bachelor degrees (100%) with highest qualification of 11 Bachelors (64,8%) and 6 others gain Master degrees (35,2%). They took the questionnaire by marking the scale of (1) strongly disagree, (2) disagree, (3) neutral, (4) agree and (5) strongly agree for the statements about CSR's effects and teaching experiences. The table below can be shown the detailed demographic about the teachers who response the questionnaire:

Table 3.3.1: Demographic components of the respondents to the questionnaire

		Numbers	Percent
Gender	Males	5	25,5%
	Females	12	76,5%
Age	From 21 to 30	9	52,9%
	From 31 to 40	8	47,1%
Years of English teaching	From 1 to 5 years	9	52,9%
	From 6 to 10 years	4	23,5%
	Over 10 years	3	17,6%
Qualification	Bachelor	11	64,8%
	Master	6	35,2%

3.3.2 Interviewees

English language teachers' instructional decisions have an impact on CSR experiences they plan for their students, and the effects of CSR on their students. Furthermore, several studies have revealed that teachers may make differentiating decisions based on their students' abilities. Depending on their gender and teaching expertise, they make different instructional options (e.g. Ross, 1998). According to Hogan, Rabinowitz, and Craven III (2003), experienced teachers, defined as those with 5 years or more of classroom experience (Gatbonton, 1999; Martin, Yin, & Maya11, 2006; Richards, Li, & Tang, 1998; Tsui, 2003, 2005, as cited in Rodriguez & McKay, 2010), were particularly concerned with student understanding and used a variety of strategies to aid individuals with different levels of experience. They also stressed that with a concentration on short-term planning, novices who have less than 2 years of teaching experience, according to Gatbonton (2008).

In current study, three teachers are invited to take the semi-structured interview to support and share the experience as well as the experience about CSR teaching:

- Participant 1 (female) Cantho Tourism College, 26 years old, 3 years of teaching;
- Participant 2 (female) Cantho Tourism College, 35 years old, 7 years of teaching;
- Participant 3 (male) Dai Viet College, 34 years old, 7 years of teaching.

In general, the teachers who were invited to participate in the study had a positive attitude. Although the questionnaire was used to collect quantitative data and the interview was used to collect qualitative data, both were used to demonstrate teachers' experience of how to employ CSR strategies to increase reading comprehension abilities.

3.3.3 Samples for experimental study

Thirty-nine students in total at the first year in a college at Can Tho City who participate in this study and were divided into two groups of control and experiment. The participants are at A2 level in Common European Framework of Reference (CEFR) and they are non-English major in the first year of college. They are in different classes and different non-English majors in Hotel Management class (Control class, 18 students) and Restaurant Management class (experimental class, 21 students). The experimental class receive Collaborative Strategic Reading (CSR) instruction firstly by workshop or announcement.

Table 3.3.3: Control group and experimental group in the study

Group	Numbers of students	Gender		Year in college
Control	18	6 males	12 females	1
Experimental	21	3 males	18 females	1

3.4. Materials

3.4.1. The text book for non-English majored college students

The reading passages in the students' books, namely, Pre-intermediate Student's Book, English for non-English students used for colleges which were used as the teaching material in all college classes. The book's sources include English materials for non-English majoring college students from the General Department of Vocational Education in 2020. This material is based on the CEFR standard's pre-intermediate (A2) level. The material is separated into two semesters and consists of 12 sections. It takes time totally of 120 periods. This study used two reading sections in two Units. Given that the proper time length for the intervention of this study to be effective should be from 8 to 12 weeks (McInemey & Elledge, 2013).

Each unit in the material includes seven lessons such as Warm-up, Vocabulary, Grammar, Listening, Reading, Speaking, and Writing. Each lesson is instructed in one 45-minute period. Each revision lesson is provided in two 45-minute period. This material is included attached audio records for all conversations and listening tasks.

3.4.2 CSR activities in the reading texts

In this study, CSR was used the instructional material by practicing for experimental group. Based on the texts in the course book and the participants' English proficiency, the researcher built CSR learning log as well as many cue cards or clunk cards for students to learn The researcher guided the new vocabulary of each unit 6, 7 and 8 in the first step of CSR teaching technique.

3.5 Research instruments

Three collection methods were employed to discover the answers for research questions. Quantitative data was collected via the pre-test and post-test and the questionnaire. Besides, qualitative data was collected via a semi-structured interview. The following sections will go over these research devices in details.

3.5.1 Pre-test and post-test

The pre-test and post-test used to explore the effects of using CSR on non-English majored college students' reading comprehension skills. *"Pretest in an experiment measures some attribute or characteristic that is assessed for participants before they receive a treatment"* (Creswell, 2012). Meanwhile, *"posttest in an experiment measures some attribute or characteristic that is assessed for participants after a treatment"* (Creswell, 2012). In this study, the Collaborative Strategic Reading (CSR) technique is used for the experimental group and the control group without teaching CSR. Therefore, two kinds of tests (pre-test and post-test) were implemented as an instrument to measure the effects of CSR for non-English majored students' reading comprehension in this college.

Pretest and posttest were implemented in level A2 in CEFR standard in Vietnamese contexts for them to take the research about enhancing reading comprehension skills. Students are given a pre-test of reading comprehension to assess their initial performance in reading comprehension and to exclude extreme cases. At pre-intermediate level (the second level of CEFR level A2), the reading comprehension pre-test included three reading comprehension texts for non-English majored students in colleges. Each of the reading comprehension text is followed by twenty MCQs and T/F statements. Each correct answer receives 5 points and the maximum score is 100 points. The control group, which received traditional reading comprehension instruction, was also told that they would take the pretest and posttest at the same time as the experimental group, which did not get CSR instruction.

At the end of the treatments, the students are given a post-test of reading comprehension, with the same format and same type of questions but with different passages in the pretest, to measure the participants' reading comprehension after the treatment. At the pre-intermediate level, three different passages are selected from different tests and at the pre-intermediate level (level A2, the second level of CEFR).

3.5.2 The questionnaire

The questionnaire was composed of three sections with 22 main items in the questionnaire and teachers who were invited to answer based on their own experience in teaching reading comprehension and share the effects of CSR are effective on their students

The first section was about general information of the participants such as their age, their sex, workplace and their experiences for English language teaching. The second section was about the experiences of teachers how to use CSR effectively. The third section was aimed to get the teachers' sharing towards using CSR on students' reading comprehension. All of the items in the clusters were presented in the form of five-point Likert scale ranging from (1) strongly disagree to (5) strongly agree.

The first cluster is about teachers' experience of using CSR during their reading comprehension teaching. This cluster 1 consists of 8 items (items 2.1 to 2.8) to get to know how teachers use CSR as well as to measure the frequent use of CSR technique in reading comprehension for their students.

Table 3.5.2: Key to understand the averages (Oxford, 1990)

Levels	Range
Very high	4.5 to 5.0
High	3.6 to 4.4
Medium	2.5 to 3.5
Low	1.0 to 2.4

The second cluster consisting of 14 items (items 3.1 to 3.14) is about teachers' sharing about the effects of using CSR that the teachers have better results with their students' improving in using CSR in reading comprehension.

3.5.3. Semi-structured interview

Semi-structured interviews consist of a sequence of open-ended questions depending on the research issues. The open-ended character of the inquiry specifies the issue under investigation while also allowing both the interviewer and the interviewee to delve deeper into some of the themes. If the interviewee is having trouble answering a topic or just gives a quick response, the interviewer can utilize cues or prompts to encourage the interviewee to think about it more (Mathers, Fox, & Hunn, 1998). In a semi-structured interview, the interviewer has the option of probing the interviewee further to clarify the original response or to pursue a line of inquiry initiated by the interviewee.

In the present study, based on findings of the data analysis from the questionnaire, the interview consisted of four open-ended questions was conducted in order to cross-check the participants' responses in the questionnaire and gain more information relating to the teachers' experience of CSR teaching as well as their sharing about the effects of using CSR on students' reading comprehension.

3.6. Data collection procedure and analysis

In this study, data were collected from the pre-test and post-test, the questionnaire and the semi-structured interview for the effects of using CSR on non-English majored college students.

3.6.1. Data collection procedure

a. Pre-test and post-test

The study was conducted in five stages. Stage 1 lasted one week before the intervention. In the stage 1 (week 1), the two groups were announced to take part in the workshop about the CSR teaching. They were delivered materials about CSR and how they proceed continuously to come to the tests. The researcher introduced to students at the first time what to study about. Stage 2 was the administration of the intervention with 5 weeks. Stage 3 consists of 2 weeks was conducted after the intervention.

Stage 1 was aimed at preparing for the participants and the instruments of the study. The participants in two classes of Hotel Management and Tourist Management. In this stage, the workshop mainly investigate how they are in the level by asking and answering the questions about CSR. After the results they answer, the research got the information and to know how to teach and give the tests for the study appropriately. The experimental group and the control group, they all come from the two intact classes at a college in Can Tho City where the researcher was working. They were pleased to accept the invitation to join in the study. Then, the researcher randomly assigned the two classes into the experimental group and the control group respectively. The experimental group included 21 students and the control group also had 18 students. After assigning students into either one or other group, the pre-test was done by the two groups without notification to check the participants' ability. The data was then run to analyze the validity and reliability by using an Independent Sample T-Test.

In stage 2, the pre-test and post-test were developed in 20 questions in reading comprehension tests. The tests' design consists of 10 multiple-choice questions (MCQs) and 10 True/False (T/F) statements in pre-intermediate level. For quantitative method, the study was focused on the control class (18 students) taking pre-tests for their initial performance in reading comprehension. Conversely, the control group do not receive any particular instructions in strategic reading of CSR despite of the same teaching materials; they were taught by Pre-while-post stage in reading comprehension skills in the same units (see Appendix 3). This stage was lasted for 5 weeks and given a post-test of reading comprehension at the same time with experimental group to measure their reading comprehension performance. After 5 weeks, the experimental group took post-tests after utilizing CSR to teach reading, and the assessments were usually 60 minutes long and were done on paper. In comparison to the control group that did not use CSR tactics, these replies were assessed and reported via SPSS program.

In stage 3, there was 2 weeks after the intervention, the post-test was administrated immediately on the control and experimental group to measure students' reading comprehension skills. The participants got no notification of the administration of

the post-test. The procedure to administer the post-test and grade the participants' test paper was like that of the pre-test. Two weeks after the post-test, the researcher collected and analyzed in SPSS program for qualitative data.

b. The questionnaire data collection method

The questionnaire was delivered in both of two versions in English and Vietnamese at the same time (translation) to 17 teachers who are English teachers in colleges in Can Tho City via email addresses. In the process of the questionnaire contribution, the researcher explained and introduced the questionnaire's purpose to the headmasters of English teachers before delivering the questionnaire. They have 2 weeks to finish the questionnaire and response back to the researcher via the email. Then, the researcher input the data into SPSS to analyze and synthesize.

c. The semi-structured interview administration

The semi-structured interview was conducted with three teachers from different colleges in Can Tho City. Meetings were set up between the researcher and the interviewees to discuss the interview preparation. These interviewees were also given the interview outline ahead of time so that they could prepare adequately for the interview. The interviewees were involved in responding questions within 20 to 30 minutes of four main questions among 8 questions in total including personal information. The questions were concentrated on teachers' experience and teachers' sharing towards the effects of using CSR on their students' reading comprehension skills.

3.6.2 Data analysis

a. Data from pre-test and post-test

The data collected from the pre-test and post-test were statistically analyzed by using the software Statistics Package for the Social Sciences (SPSS) version 20. Because the tests were applied the reading tests in the textbook for non-English majored college students, they were not necessary to analyze the Scale Test to take reliability and validity value. Then, Descriptive Statistic Test and Paired-Sample T Test were performed to find out the participants' results the effects of using CSR on reading comprehension skills. This part was to carry out the difference between two groups after the invention of CSR technique.

b. Data from the questionnaire

The data collected from the questionnaire were also statistically analyzed by using the software Statistics Package for the Social Sciences (SPSS) version 20. Firstly, the reliability of the questionnaire was analyzed by using Scale Test calculation. Next, Descriptive Statistic Test and One-Sample T Test were performed to find out: (1) teachers' experience about CSR teaching in reading comprehension for non-English majored college students (8 items), (2) teachers' sharing about the effects of using CSR on students' reading comprehension skills. Finally, Descriptive Statistic Test and A One Sample T-Test were applied to examine whether there was a significant difference between participants'

experience and sharing the effects towards using CSR and their demographic variables such as gender, age, and years of English language teaching.

c. Data from the semi-structured interview

The interview data was transcribed. To position the right answers addressing the effects of using CSR on students' reading comprehension skills. Thematic analysis and grouping of responses from different interviewees to comparable questions were used. The researcher thoroughly studied the responses of the participants and created the transcript and protocol. The focus of the study was on teachers' experiences with CSR and how they shared their findings with college students.

3.7 The implementation of CSR technique

The experimental group (21 students) was taught one of the intended treatments about CSR technique in reading comprehension skills. Then, the participants were divided into small groups of 4 or 5. They were asked to look at the reading texts in their textbook for non-English majored college students.

First, the participants were asked to 'preview' the text. The previewing strategy encompassed four activities: the teacher introduced the passage topic and asked some questions about it; the participants brainstormed what they already knew about the topic; they were taught to preview the passages in 3 units in the textbook. The participants predicted what they thought they would learn from the passages. Afterward, in each reading section, the participants read the first paragraph of the text. Then, the leader of each group read that paragraph aloud. After that, the group members worked collaboratively and discussed the covered paragraph. In the second strategy, the "click and clunk and get the gist" was aided them to discuss the difficult parts and misunderstandings by applying a fix up strategy. The teacher described a click as something that "you really get. You know it just clicks." After students understand, the teacher explained "A clunk is like when you run into a brick wall. You just really don't understand a word the author is using. That's a clunk." Then, the teacher read a short piece aloud and asked students to listen carefully for clunks. The teacher asked students to write down their clunks and then teaches fix-up strategies to figure out the clunks. The teacher can use "clunk cards" as reminders of fix-up strategies. They could also use key elements in words, contextual clues, guessing, and background knowledge to find the meaning of the word in its context. Then, they apply 'get the gist' strategy to talk about the main idea of the text. Finally, the participants engaged in the final strategy (i.e. wrap up). They summarized the text and asked questions about important parts of the passage. The participants used their learning logs to record previews, gist, clunks, and summaries the reading texts. The teacher could help by actively listening to students' discussions and providing feedback, clarifying difficult words, modeling strategy usage, encouraging students to participate, and providing positive reinforcement. The focus of students' work should be on learning the material and helping their classmates learn it as well, not merely going through the steps of a given strategy. Also, the teacher should

regularly conduct whole-class previews and wrap ups to introduce new material, facilitate follow up activities, and reinforce learning.

4. Findings and Discussion

4.1 Students' reading comprehensions skills before and after the intervention

As mentioned in Chapter 3, reading tests were employed as the pre-test and post-test to measure the reading comprehension skills of the participants in both control and experimental groups before and after the intervention. The scores of the reading tests were ranged from 0 to 100 points, and the test scores were transferred to SPSS for data analysis.

4.1.1 Students' reading comprehension skills within the two groups before and after the study

Firstly, the control group with a Descriptive Statistics Test for Min, Max, Mean and Standard Deviation was used to identify mean scores the pre-test. The results of the test were presented in Table 4.1.1.a.

Table 4.1.1a: The mean scores of pre-test and post-test of the participants in control group

Group	Tests	No.	Min.	Max.	Mean	Std. Deviation
Control	Pre-test	18	50	85	71.11	10.22
	Post-test	18	60	90	75.27	9.15

The General Linear Model Test (GLMT) was run to compare the mean score of pre-test and post-test to check whether there is a change in students' reading comprehension skills before and after the study. The result indicated that the difference between the 2 mean scores of the pre-test (M.pre = 71.11) and of the post-test (M.post = 75.27) was statistically significant ($p = .00$). The results showed the relative difference of means in the pre-test and post-test of the participants in the control group that the mean score of the post-test was higher than that of the pre-test.

With experimental group, a similar Descriptive Statistics Test about Min, Max, Mean and Standard Deviation and General Linear Model Test were employed to identify the mean scores of experimental groups' reading test. These scores were illustrated in Table 4.1.1b.

Table 4.1.1b: The mean score of pre-test and post-test of the participants in experimental group

Group	Tests	No.	Min.	Max.	Mean	Std. Deviation
Experimental	Pre-test	21	50	85	70.00	10.95
	Post-test	21	70	90	80.23	6.41

It can be seen in the table that the mean score of the pre-test was different from that of the post-test (More = 70.00; M.post = 80.23). To investigate students' changes in the experimental group in reading comprehension skills before and after the intervention, a

General Linear Model Test was run. With $p = .00$, it is confident enough to indicate that the reading comprehension skills of experimental group was significantly different. It can be concluded that after the intervention, students' reading comprehension skills of the experimental group was improved.

4.1.2 Participants' reading comprehension skills between the two groups before and after the intervention

The Descriptive Statistic Test, and the Independence Sample T-Test were carried out to evaluate students' reading comprehension skills between the two groups before and after the intervention. First, the results of the Descriptive Statistic Test were presented in the Table 4.1.2 below.

Table 4.1.2: The overall mean scores of participants' reading comprehension skills between two groups

	Group	No.	Min.	Max.	Mean	Std. Deviation
Pre-test	Experimental group	21	50	85	70.00	10.22
	Control group	18	50	85	71.11	10.95
Post-test	Experimental group	21	70	90	80.23	6.41
	Control group	18	60	90	75.27	9.15

a. Students' reading comprehension skills between two groups before the intervention

It can be seen in table 4.1.2 that the mean score of the control group ($M_{pre} = 71.11$) was a little higher than the mean score of the experimental group ($M_{pre} = 70.00$) in the pre-test. An Independence Sample T-Test was run to check whether there was a significant difference in the students' reading comprehension skills between the control group and experimental group in the pre-test. The result showed that the students' reading comprehension skills between the two groups was not significantly different ($t = .57$, $p = .57$) in the pre-test. It can be concluded that students' reading comprehension skills in the pre-test of two groups was relatively at the same level. Therefore, the students of two groups were the same in the first place of proficiency levels.

b. Students' reading comprehension skills between two groups after the intervention

It was revealed in Table 4.1.2 that there was a difference in students' reading comprehension skills between the two groups after the intervention. While the participants' mean score of the experimental group indicated the improvement in their reading comprehension skills ($M = 80.23$), the participants in control group didn't gain the improvement when the mean score went down slightly ($M_{post} = 75.27$). It can be seen that there was a significant difference in participants' reading comprehension mean score of the pre-test and post-test between two groups. At pre-test, there was a gap between two groups' reading comprehension skills (control group Mean = 71.11, experimental group Mean = 70.00) in which the control group had a higher mean score. However, the post-test showed the different trend in both groups' mean scores in which

the posttest result of experimental group ($M = 80.23$) was higher than control one's ($M = 75.27$).

In conclusion, it could be observed that there was an improvement of reading comprehension skills of the experimental group while there was no significant improvement in control one. The result led to the consideration that CSR contributed to the improvement of students' reading comprehension skills.

4.2 Teachers' experience towards using CSR in reading comprehension skills for non-English majored college students through questionnaire

After piloting and collecting a 22-item questionnaire was conducted to collect data on teachers' experience about the effects by using CSR on students' comprehension skills in college context. A Scale Test was run to examine the reliability of the questionnaire. The result revealed that the reliability coefficient of the questionnaire was slightly high ($\alpha = .74$). Thus, the questionnaire used in the study was validated and reliable for the data collection.

Table 4.2a: The reliability of the questionnaire

	Number of respondents	Reliability (Cronbach's Alpha Coefficient)
Pilot questionnaire	9	0.77
Official questionnaire	17	0.74

In details, the 22-item questionnaire was carried out to collect the data. This following section, the Descriptive Statistic Test was carried out to examine the total mean score of teachers' experience towards using CSR in teaching reading comprehension for non-English majored college students and teachers' sharing about the effects of using CSR in their context. Seventeen participants, who are teachers responded to the questionnaire about the ideas to investigate the effects of using CSR for their own context and better reading comprehension skills of their students by marking five-point scales ranging from "strongly disagree" to "strongly agree".

Table 4.2b: The overall mean score of teachers' experience and sharing towards using CSR in teaching reading comprehension skills

Variables	No.	Max.	Mean	Std. Deviation
Teachers' experience	17	4.63	4.04	.35
Teachers' sharing about the effects	17	4.64	3.95	.38

From Table 4.1.2, it can be seen that showed that the overall mean score of the teachers' experience towards the effects of using CSR ($M = 4.04$) and the effects of using CSR through the teachers' sharing ($M = 3.95$). The next section presents the results from the Descriptive Statistic Test and One Sample T-Test was run to evaluate whether there was a statistic difference between level of teachers' experience ($M = 4.04$) and teachers' sharing about the effects of students when using CSR for non-English majored college students of 3.95 considered as the high level in the light of Oxford framework (1990). The Table

4.1.2 shows the mean score of two main clusters of two aspects need investigating. With the mean score of both of two clusters in the questionnaire for teachers toward using CSR ($M_{exp} = 4.04$, $M_{eff} = 3.95$). It can be claimed that this result of teachers' experience about the effects of using CSR for non-English majored college students was high.

4.2.1 Teachers' experience towards using CSR in reading comprehension skills for non-English majored college students

The Descriptive Statistic Test was conducted to explore the mean of teachers' experience in using CSR in their own context, it showed how they used CSR on students' comprehension skills.

Table 4.2.1a: The mean score of teachers' experience

	No.	Min.	Max.	Mean	Std. Deviation
Teachers' experience	17	3.25	4.63	4.04	.35

It can be seen in Table 4.2.1a, the mean score of teachers' experience in using CSR ($M = 4.04$) is high. A One Sample T-Test was conducted to evaluate whether the mean of teachers' experience was significantly different. The result indicated that the mean score ($M = 4.04$, $SD = .35$) was significantly different from 4.5 for the very high level in the test value ($t = 47.55$, $df = 16$, $p = .00$). It can be concluded that participants have a high level of experience towards the effects of using CSR on reading comprehension.

Table 4.2.1b: The teachers' experience about CSR result

No.	Teachers' experience in using CSR	Mean	SD
1.	CSR is an effective technique in teaching reading comprehension skills for students?	4.23	.75
	Have used CSR in reading comprehension every time in reading sections.	3.99	.56
3.	CSR increased students rapidly and easily in reading comprehension skills	4.17	.80
4.	Using CSR, the connection of teachers and students can be raised effectively.	4.00	.87
5.	During teaching with CSR, students seem more confident in raising questions, discussing with other students about reading passages.	4.17	.64
6.	Teachers can evaluate easily students' ability in reading comprehension when using CSR.	3.94	.66
7.	Teachers can make the steps more clearly when using CSR in reading comprehension teaching.	3.94	1.02
8.	Teachers can master and manage better students in using CSR.	3.94	.75

The One Sample T Test was conducted on the mean score of teachers' experience towards the effects of using CSR on students' reading comprehension skills. The Table 4.2.1b showed the details in teachers' answers for the questionnaire toward using CSR in their context. The answers were based on the five-point Likert scale of (1) Strongly disagree, (2) Disagree, (3) Neutral, (4) Agree, (5) Strongly agree. With the mean scores that they significantly different from 3.94 (item 2, 6, 7, 8) to 4.0 (item 1, 3, 4, 5) on the five-point-scale, respectively. They shared the experience to answer how to use CSR to improve

reading comprehension skills for students. It was clearly proved that students' reading ability change in using CSR strategy. The result showed in details below:

The mean scores of most items (2, 6, 7, 8) were significantly different from 3.0, the mean for "neutral" in five-point scale. And the mean scores of items (1, 3, 4, 5) were not significantly different from the value test 4.0, the mean for "agree" in five-point scale. Therefore, it can be concluded that most the participants admitted and agreed with achievement in using CSR for non-English majored students in college context.

4.2.2 Teachers' sharing about the effects of using CSR for non-English majored college students

A Descriptive Statistic Test was run to explore the mean of teachers' sharing about the effects towards the help of using CSR on non-English majored students in their own context.

Table 4.2.2a: Teachers' sharing about the effects towards the effects of using CSR on non-English majored students

	No.	Min.	Max.	Mean	Std. Deviation
Teachers' sharing about the effects	17	3.29	4.64	3.95	.38

With analysis in table 4.2.2a, the mean score of Teachers' sharing about the effects towards the help of using CSR on non-English majored students (M = 3.95) is high. A One Sample T-Test was run to evaluate whether the mean of teachers' sharing was significantly different from 4.04, the very high level of understanding. The result showed that the difference between teachers' sharing (M = 3.95) and the test value (4.5) was statistically different ($t = 42.11$; $df = 16$; $p = .00$). In is concluded that teachers' sharing about the effects of using CSR on non-English majored college students' reading comprehension is high.

Table 4.2.2b: The teachers' sharing about CSR effects of using CSR on students' reading comprehension skills

No.	Teachers' sharing about CSR effects	Mean	SD.
9.	When students are taught by CSR, they are really easy to approach the reading passages.	4.23	.56
10.	With CSR technique, teachers help students to active students' prior knowledge more effectively.	4.35	.70
11.	Being taught by CSR, students can brainstorm and identify main ideas of reading passages more easily.	4.05	.75
12.	Students can work cooperatively with their peers better when you are teaching reading comprehension with CSR technique.	3.88	.78
13.	CSR helps increase students to read entire passages in spite of a part before.	3.64	.86
14.	This technique of reading comprehension can improve students' memory of what they have learnt.	3.82	.88
15.	It helps students to wrap up well teacher-like questions about the text.	3.94	.82
16.	Even it can help students think more about challenging questions that require understanding the passages.	3.58	1.12

17.	When being taught CSR, students can be influenced better in other skills such as Speaking, Listening and Writing skills.	3.82	.95
18.	Students can be learnt each other's when they work cooperatively or do peer correction in CSR activities.	3.88	.93
19.	After using CSR technique, students can improve their reading comprehension skills than before?	4.11	.86
20.	After using CSR technique, students can increase conceptual learning in ways to enhance reading comprehension skills.	3.88	.92
21.	With CSR technique, it guides students strategies in reading comprehension well in checking vocabulary, grammar, sentences or understanding ability.	4.05	.83
22.	Using CSR technique in reading comprehension, students proceed more smoothly through the text.	4.05	.75

The Table 4.2.2b showed the details in teachers' answers for the questionnaire toward using CSR in their context. The participants' answers were indicated mainly in strong and strongly agreement on the effects of using CSR. The mean score of each of item in the questionnaire, it can be claimed that teachers generally agreed with the effects of using CSR for their students in improving reading comprehension skills. As be seen the mean scores of teachers' sharing about the effects of CSR, they were totally high when they were from minimum score of 3.64 to the maximum score of 4.35.

As be seen in details, The One Sample T Test was conducted on the mean score of teachers' sharing towards the effects of using CSR on students' reading comprehension skills. The Table 4.2.2b showed the details in teachers' answers for the questionnaire towards using CSR in their context. The answers were also based on the five-point scale. With the mean scores that they significantly different from 4.0 (item 12, 13, 14, 15, 20) and not significantly different from the test value 4.5 (item 9, 10, 11, 16, 17, 18, 19, 21, 22) on the five-point-scale, respectively. It can be seen that most of them strongly agreed with the effects towards using CSR in reading comprehension.

4.3 Result from the semi-structured interview

As mentioned in the previous Chapter, the semi-structured interview three teachers who are the participants joined in to enrich about the effects of using CSR technique in teaching reading comprehension for non-English majored college students. In the interview, the researcher carried out eight open-ended questions including four of personal information as age, workplace, qualification and experience in English language teaching. They were asked to sharing the effects of using CSR, how they use CSR as well as the difficulties they met when taking CSR in their own contexts. In other words, the questions were aimed in order to probe how they use CSR in English teaching reading comprehension for non-English majored college students. Three teachers in colleges in Can Tho City were invited to take the semi-structured interview. They are 2 females and 1 male teachers that were interviewed via Zoom application at the same time. So, they were asked with the same questions and the same purposes as mentioned. Most of them are experienced in teaching English for non-English majored college students (see Chapter 3, the participants), so that they could easily catch the purposes of questions.

After analyzing interview for participants' sharing the effects towards using CSR in reading comprehension, the researcher divided the answers into some part to get more evidence in support of the interview's purposes:

4.3.1 Participants' use CSR for non-English majored college students

At the beginning of the interview, to ensure the participants understood about CSR, the researcher asked about some simple questions about CSR such as what is it and how they know. Fortunately, almost all interviewed participants conceded what they already know to what extent they concentrated on and issues for sharing. When asking about the use of CSR, they response and realized immediately about it to the effects of CSR in reading comprehension for college students. These interviewed participants underlined: I have known about CSR, and I think it is very useful in reading teaching for students, especially for non-English majored students (Teacher D) I have known about CSR, and I think it is very useful in reading teaching for students, especially for non-English majored students (Teacher T)

Actually, it's a really effective instrument in reading comprehension teaching skill but I not always apply for my lessons (Teacher H). The answers were clearly connected to entertaining features of CSR effectively. However, it is not always used each time for any reading sections in college program. They expressed: Some are short, I guide them in some simple steps for mainly get understanding the text, that's all. E.g. Pre-while-post reading steps" (Teacher H). He explained that CSR is the effective technique in reading comprehension, but not always used for each reading section but appropriate reading ones. In addition, he knows clearly about CSR and smoothly sayings towards using CSR for their students (non-English majored students). Teacher H talked coherently about CSR, such as:

"Some steps in CSR as I did:

Previewing key:

- *Helps students make connections.*
- *Provides multiple exposures.*
- *Provide background knowledge.*

Click (control) & Clunk:

- *When you understand what you read, everything "clicks" along smoothly.*
- *When you don't understand what you read, "clunk," you stop. When you get to a clunk, use the fix-up strategies to figure out what the word or phrase means.*

Get the Gist:

- *Name the "who" or "what" that the section of text is mostly about.*
- *What is the most important information about the "who" or "what"?*
- *Write the gist in approximately 10 words or less."*

In general, the interviewed participants had positive responses towards using CSR in reading comprehension through their attitudes and expert understanding. As can be

seen the answers, they mentioned the stages and strategies to applied CSR refined in reading comprehension. It can be ensured that they had the certainly succeed in using CSR in their context. Therefore, these responses were linked to the effects' sharing they mentioned next part.

4.3.2 Participants' sharing about the effects towards CSR technique

During the interview, they talked positively about the effects of their students after applying this technique in the time. They carried out the effects when using CSR in their teaching as well as their teaching context.

"More confident in reading skills, they give more ideas than before." (Teacher H)

"Able to arrange ideas in their mind before they give answers for the passage well. Apply more effective some techniques in reading such as skimming, scanning, guessing, predicting." (Teacher T)

"Understandable from main ideas to details. Cooperate better with their partners than before." (Teacher D)

Moreover, among of them mentioned several problems in applying CSR in reading comprehension. For instance, the participant D said: *"However I sometimes use CSR because it takes time and teacher must hold classroom in group-works to reach better effects. They can interact more and more with their peers despite they are passive in their seats before."* (Teacher T). *"At the end of the interview, three of them totally agreed with CSR is the effective technique in reading to increase students' reading comprehension skills. They assessed: Of course, after teaching with CSR they are better than in studying results and it influences to other skills."* (Teacher T, D and H). When asked, the participants all agreed with the effects of CSR in reading comprehension for non-English majored college students. They also agree they will continue to learn and apply CSR in reading sections in their English program.

In general, all participants are excited and understood clearly about CSR and applied in their context of colleges for non-English majored students well so far. Although they are different in ages, experience of teaching, they shared about CSR as a very good instrument in teaching reading comprehension for achievement reading skills in teaching and learning English.

4.4 Summary of findings

This Chapter has presented the results of the effects of using CSR for non-English majored college students. The findings revealed the results in details of pre-test, post-test of the two group of control and experimental, the questionnaire for investigating teachers' experience and sharing about the effects towards using CSR and the interview to enrich the effects of CSR technique in teaching reading comprehension.

The pre- and post-test results revealed a considerable improvement in the quality of students' reading comprehension in the experimental group, whereas the quality of students' reading comprehension in the control group improved. This means that students in both groups improved their reading skills, but those in the experimental condition improved even more. CSR, with the help of the teacher, appears to have considerably enhanced the pupils' reading comprehension skills. The results were presented through the mean score of the experimental group is higher than the control group after the intervention for using CSR in reading comprehension skills. Although the beginning level of the two groups were the same, the result showed the better scores of the experimental group than the control group.

In this Chapter, the result of the questionnaire can be concluded to a positive different after the intervention of using CSR. The participants had a positive attitudes towards CSR. It is also showed that CSR is recognized to be useful and helpful for students to be better in reading ability. They showed their own experience in using CSR and the effects as well as the real better results in their context.

5. Conclusion and Discussions

5.1 Summary of the study

The study mainly focused on the effects of using CSR on reading comprehension to improve college students' comprehension skills. The study was conducted in eight weeks at a college in Can Tho City. Thirty nine college students from two intact classes were invited to participate in the research. The data for the current study was collected by reading comprehension achievement tests as the pretests, posttest, the questionnaire and the semi-structured interview. It is hypothesized that the experimental group has a higher level of reading comprehension skills than the control group in the post-test.

5.1.1 Theoretical framework of the study

Some various studies have shown its effectiveness on the development of students' reading comprehension and content learning (Fitri 2010; Karimabadi, Khonamri, and Mahdavi 2015; Klingner and Vaughn 2000; Klingner, Vaughn, and Schumm 1998; Oladele and Oladele 2016). For instance, Fitri (2010) investigated the effectiveness of CSR on students' reading comprehension ability. The study was of a quasi-experimental design with 56 college students in Indonesia. According to the findings, CSR increased the students' reading comprehension achievement. Oladele and Oladele (2016) examined the effectiveness of CSR and whole language approach on reading comprehension performance of primary school children with learning disabilities in Oyo state Nigeria. Seventy eight pupils participated in the study which lasted for ten weeks. A significant difference was found in the pre- and post-test scores of the participants in the CSR group and whole language approach group. The CSR group had a better performance in the post test compared with the whole language group.

Different researchers have focused on the effectiveness of EFL contexts (Commander and Guerrero 2013; Hamada 2014; Sadeghi, Afghari, and Zarei 2016). Commander and Guerrero (2013) studied shadow-reading in L2 classrooms. The results showed that the experimental group outperformed the other group in both immediate and post-tests. Hamada' (2014) investigated the effectiveness of pre- and post-test in improving reading comprehension skills. The participants were 56 Japanese university freshmen. The results showed an improvement in the reading comprehension skills of the experimental group.

5.1.2 Summary of key findings of the study

The main findings of the study are summarized in this section. The results of the findings showed that students' reading comprehension of the control group and the experimental group were improved after eight weeks, but there was no significant difference in participants' ability in the beginning between the two groups. In terms of groups, the post-test of the experimental group was higher than the control group. The results were also enriched by the data analysis of the questionnaire and the semi-structured interview further revealed that teachers' experience and their students' effects toward using CSR in reading comprehension.

5.2 Discussions

The findings of this study can be discussed and related to research questions.

5.2.1 The effects of using CSR on students' reading comprehension

The results showed the difference of means in the pre-test, post-test for the control and experimental group that demonstrated a significant on students' reading comprehension skills ($M_{pre}=70.00/71.11$, $SD=10.22/10.95$; $M_{pos}=75.27/80.23$). The mean score of the post-test was higher than that of the pre-test of both experimental and control groups. It can be concluded that after eight weeks of intervention, students' reading comprehension skills, control group and experiment were improved.

Then, the research proved more the difference of mean score of the experimental group's pretest by the General Linear Model test ($p=0.00$) led to a conclusion that it was fully confident that reading comprehension skills of the experimental group was different at pretest, posttest. Later, the mean scores of the pre-test, post-test were clarified by the Correlation Test.

It is not deniable to claim that there has been a variety of research worldwide on the effects of CSR on reading comprehension. It was shown that students reading achievement after given the treatment using Collaborative Strategic Reading (CSR) technique were higher than the students' reading achievement before they were given the treatment. Thus, it can be concluded that Collaborative Strategic Reading (CSR) technique can affect students' reading comprehension and working together cooperatively. Moreover, there is an effectiveness of the Collaborative Strategic Reading (CSR) to enhance the students' achievement in reading comprehension of college context.

It can be seen from the progression of the result of the research. However, the study is considerable limited and difficult in the setting of the context. Therefore, it anticipated to make some contributions to use CSR in reading comprehension teaching in real contexts or extent.

In this research, the participants used CSR to get increase by the cooperative technique of Preview, Click and Clunk and Get the Gist and Wrap-up steps in reading comprehension. The improvement between pretest/ posttest and pre-test is attributable to Creswell (2012): *“Pretest in an experiment measures some attribute or characteristic that is assessed for participants before they receive a treatment”* Meanwhile, *“posttest in an experiment measures some attribute or characteristic that is assessed for participants after a treatment”*. The students of the experimental group had a chance to study the CSR technique to get improvement in reading comprehension skills for passages or texts simultaneously. This finding matched with Bremer, et al. (2002), *“Collaborative Strategic Reading is an excellent technique for teaching students reading comprehension and building vocabulary and also working together cooperatively”*. The goals of Collaborative Strategic Reading are to improve reading comprehension, increase conceptual learning in ways to enhance reading comprehension skills and develop cooperative skills for students (Klingner and Vaughn, 1998). Thus, the significant differences between pre-test depict the positive effects of CSR as an effective strategy in reading comprehension.

This present study supported Klingner and Vaughn finding that the experimental group used CSR on students' reading comprehension skills to get higher results than the control group. It also answered the first question about the effects of using CSR on non-English majored college students' reading comprehension skills. Results indicated that this is possible when students are taught how to use the strategy through modeling. Previous studies were performed in general education classes in relevant students before. In general, the results revealed that students in college are able to increase higher-level to improve their reading comprehension. The outcome replicated the findings of earlier studies (Adams, 1990; Klingner & Vaughn, 2004, Williams, 2003) in that students are capable of higher results, although the outcomes of this current study were not very high. It also reveals that CSR can be utilized with students with non-English majored college students with some success.

5.2.2 Teachers' experience towards using CSR in reading comprehension skills for non-English majored college students through questionnaire

The findings revealed that teachers had high positive thoughts toward using CSR on students' reading comprehension. As seen, the results showed that teachers who are the participants take part in raising the understanding about CSR strategy in reading comprehension. All the participants understood the importance of each strategy in CSR's activities. With the measurement of the result of the reliability ($\alpha = .74$) The mean score of teachers' experience ($M_{exp} = 4.04, SD = .35$) was significantly different from the mean score of the effects by teachers' sharing from their own context ($M_{eff} = 3.95, SD = .38$), ($t = 47.55, df = 16, p = .00$). The result of the questionnaire was lightly high for the mean

score of teachers' experience to answer how to use CSR and sharing the effects of using CSR on students' reading comprehension. Although they agreed that the CSR strategy is very effective in learning and teaching reading comprehension, the strategy was difficult for the students to master the time allotted for study, the strategy could be taught and the students would be more successful readers as a result.

With previous studies, CSR strategy can help the students understand the concepts of reading text to enhance their comprehension and increase conceptual learning in ways that maximize students' involvement. In other words, the contribution of the CSR to reading is producing better comprehension of students. In the questionnaire section, they answered with a positive attitude about CSR when using it to improve students' reading comprehension. This study supported some previous studies on CSR (Klingner, 1998; Standish, 2005; Fan, 2010; Ziyae Mehr, 2012; Novita, 2012; Karabuga, 2012) have shown that CSR has an effective impact on reading comprehension of EFL and ESL students. CSR provides the opportunity for readers to apply most of the strategies needed for the reading skill. Through the collaborative approach emphasized with CSR, student learning is supported by both teachers and peers (Vaghaun et al., 2011).

Many studies utilized the implementation of the CSR has been effective in the class for a long time and applied in many contexts appropriately. Moreover, according to Bremer, et al. (2002), "*Collaborative Strategic Reading is an excellent technique for teaching students reading comprehension and building vocabulary and also working together cooperatively*". These claimed the effectiveness of using CSR in classroom especially cooperative learning in reading comprehension. Therefore, the teachers in the survey for experience and sharing about the effects gave positive effects about using CSR and their students in reading sections.

The questionnaire and the semi-structured interview presented through the collected data. In the questionnaire, seventeen teachers with twelve-female teachers (70%) and five-male teachers (30%) agreed that the CSR is very effective on students' reading comprehension skills. They almost all chose agreements with the improvement when using CSR to increase their students' reading comprehension skills. In the semi-structured interview, although they had a positive attitude about using CSR as well as its effects on the students, they also got worried about the limited time to set up the cooperative class in CSR activities. This strategy must take time before activating. It can be seen as a challenge for this strategy in the teaching and learning reading section.

5.3 Pedagogical implications

English teachers are suggested to use Collaborative Strategic Reading as an alternative technique in teaching reading comprehension since it has been proven that Collaborative Strategic Reading technique can impact effectively in increasing students reading comprehension. The teacher should be well prepared. It means that before entering the classroom, they should prepare the materials that are going to be taught to the students. The students need to realize that learning is not only teacher centered, but also student centered. It means that they have significant roles in achieving their success in study.

Moreover, the students have to read more reading text in order to have more knowledge and vocabulary.

The literature review found that the studies of Klingner, et al through many recent years and developed them year by year. The first study was conducted by Klingner, et al., in 2004. The research was conducted in 10 classrooms across five schools located in a large metropolitan school district in the south-eastern United States. Five teachers and their classes (in two schools) were assigned to the CSR condition, and five teachers and their classes (in three schools) were assigned to a control condition. The data was gained from several kinds of data collection. There were pre or post interviews and Classroom observations and also testing. The researchers found that students in CSR classrooms showed greater improvement in reading comprehension than students in classrooms where CSR was not implemented.

5.4 Limitations and suggestions for further research

5.4.1 Limitations

There are some limitations in the study from the beginning to the course-end result. The study in initial estimation is forty students of the two groups are not available. The experimental group is only twenty-one and the control is only eighteen students, there are thirty-nine in total. The results in two groups are not highly possible. Second, the study involved only thirty-nine students and twenty teachers (totally in both questionnaire and semi-structured interview). Therefore, the study could not achieve generalized results to all college students of English. Moreover, after eight weeks of giving treatment to two groups, the situation of the Covid-19 epidemic happened unexpectedly and made it difficult to collect data.

In the investigation of questionnaire and semi-structured, they were difficult to get samples from teachers because of the Covid-19 pandemic and summer vacation. The small number of samples affects the results greatly. With reliability ($\alpha = .774$) for the number of 17 teachers, although the quality is not high, it is still quite good. If the number is more than, the reliability will be higher, the results of the consultation will be much better. In addition, this study is insufficiently powered for the use of a multilevel model that would account for the clustering of data that occurs within and between classrooms. As we gather data on two groups involved in the first year of implementation of CSR, we can pool data across years and increase our sample size at the teacher level. As sample sizes increase, we also plan to use propensity score matching to conduct a quasi-experimental study examining the effect of dosage since it is intuitive that more instruction in CSR would be associated with greater student reading gains over time.

5.4.2 Suggestions for further research

After conducting the experimental research, analyzing and discussing the data result, there are some suggestions to those who might be benefited to the result of this research. They are the English teacher, the future researcher, and the students: English teachers are suggested to use CSR as an alternative technique in teaching reading comprehension

since it has been proven that CSR technique can impact effectively in increasing students' reading comprehension. Besides, the teacher should be well prepared about setting time and cooperative groups before beginning. For English teachers, to the future researcher, this research is recommended for them who want to develop the teaching method. This research needs a further research to get the better results. The study also showed that the students need to realize that learning is not only teacher centered, but also student centered. It means that they have significant roles in achieving their success in study. The students have to read more reading texts in order to have more knowledge and vocabulary.

With the current document for non-English majors compiled in a synergistic manner from many different documents, the question-making is highly dependent on the teacher, so the standardization of the question on the test is not really at a reliable level. The level in the documentation for non-English majors in college (or vocational training) is quite easy and sketchy, only at level 2 on the CEFR scale. In future research, it is recommended to choose English of a specific major so that the research will achieve better results and the research results will be more accurate.

The limitation of this study is about the class size, the further research can be conducted with a larger class size to get better results. In addition, this study only focused mainly on CSR on students' reading comprehension skills, it is vital the further research to examine the specific skills in reading comprehension.

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Conflict of interest statement

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