

The Effectiveness of Collaborative Strategic Reading (CSR) in Improving Students' Reading Comprehension

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Abstract—This study was conducted to investigate the effectiveness of Collaborative Strategic Reading (CSR) in enhancing students' reading comprehension. Pre-experimental research was applied in the form of one group pre-test/post-test design to understand the influence of CSR on the students' reading comprehension. Study participants included 30 English as a Foreign Language (EFL) students in their second semester of study in the English Department of a West Java private university. This sampling was determined through purposive sampling. The data for the research question of this study was collected through two test instruments - a pre-test and a post-test - with each consisting of 50 questions in each test in the form of multiple choice and observation. Both tests contained questions based on the five indicators of Barrett's taxonomy: literal comprehension, reorganization, inferential comprehension, evaluation, and appreciation. The study applied a gain-score calculation in which the average N-gain score is 61.38. The results showed that the Sig. (2-tailed) value was 0.000 <0.05. Therefore, based on the decision-making criteria, it can be concluded that there is a significant difference between learning outcomes in the pre-test data and post-test data. This means that the implementation of CSR is quite effective in enhancing the students' reading comprehension competence.

Index Terms—Barrett's taxonomy, comprehension, reading, CSR

I. INTRODUCTION

Living in the twenty-first century is challenging and competitive and part of this competitive character necessitates that everyone is able to read (Nurwahidah et al., 2023). In addition, Baleghizadeh (2011) said that reading is essential in our society since we are always surrounded by literature. Furthermore, Riyawi (2018) remarked that to be successful in modern society, citizens must be proficient readers. Talking about reading, Wangchuk and Chalermnirudorn (2019) explained that reading is a meaning-making process of the text through active interaction among the readers' current knowledge, written information, and the context of the reading situation. In addition, Islamiah et al. (2017); Erdiana et al. (2017) argued that reading is one of the vital skills learners must master in academic settings to gain more information and a deeper understanding of a text. It also fosters the other imperative language skills of writing, listening, and speaking.

As stated by Pallathadka et al. (2022) that the importance of reading comprehension for academic success cannot be discounted, yet just being able to read is not enough; one should be able to comprehend what is being read as well. After all, the gist of reading is comprehension which is the act of establishing meaning from the text with intellect (Syafii, 2022). It means that comprehending a text requires a needed knowledge. Reading is not easy but is a complex and interactive process that requires the readers to know and comprehend the words and sentence patterns (Gopal & Ton, 2019; Ying & Veerappan, 2021). As a result, students should be taught using a proper learning strategy regarding reading competence so that the intention of the texts being read can be better understood. One of the most effective learning strategies that can be used by the lecturer today to enhance student's reading comprehension competence is Collaborative Strategic Reading (CSR).

Collaborative Strategic Reading is an effective strategy and several studies have proven the effectiveness of this strategy in helping students' reading comprehension competence. Among them are Ying and Veerappan (2021); Pahlawan and Tambusai (2022); Miftahus et al. (2023).

The evidence that suggests CSR is effective in helping students' comprehension skills is what led researchers to conduct this study concerning refining students' reading comprehension at an English Department of a private university in Bekasi, West Java, Indonesia. Based on our primary study it was found that the expectations of success in reading were contrary to the real situation. In the learning process, it was difficult for students to comprehend the meaning of the reading text (Nasir et al., 2019), as seen in the relatively low results of the final semester exam scores of students in the second semester.

Accordingly, we would like to fix those students' reading comprehension competence. By implementing CSR in reading class, this study intends to unveil the effectiveness of CSR in reading comprehension improvement. The results of this research can further help lecturers understand the best strategy to use for reading comprehension in EFL classrooms.

II. LITERATURE REVIEW

A. *Reading Comprehension*

Reading is, for Manoharan and Ramachandran (2023), a distinct mode of communication that acts as a link between the writer's ideas and the reader's comprehension. A further definition of reading is given by Alqarni (2015) who describes reading helps to cultivate learners' thinking while also offering them relaxation and enjoyment. Accordingly, readers may have diverse objectives when they read, including reading for pleasure, acquiring information, work-related purposes, personal development, and achieving successful learning. Indeed, reading provides an avenue for communication, language acquisition, and interaction. It also plays several roles in the life of humans such as getting information, retorting to text, and following instructions to perform a certain task. According to Bermillo and Merto (2022), reading is considered an interactive process between the reader and the text which results in comprehension. In other words, comprehension is the fundamental objective of reading (Hu & Zhang, 2023).

Turning now to reading comprehension is defined as the process of extracting or taking meaning from a written text that depend on the reader's cognitive skills and prior knowledge, the characteristics of the text, and the reading context (Nasir et al., 2019; Taharat et al., 2022; Starling-Alves & Hirata, 2023). It is a complex interactive process of extracting information from a text and constructing new understanding based on the reader's background knowledge (Lailatul et al., 2022).

Generally speaking, reading comprehension refers to the capability to grasp the information in a text and interpret it correctly (Akbari, 2014). Barrett's taxonomy proposed five levels to create reading comprehension questions: literal comprehension, reorganization, inferential comprehension, evaluation, and appreciation (Purnamasari & Trisno, 2022).

B. *Reading Strategies*

The main goal of teaching reading comprehension is to aid students in grasping the author's intended message, interpreting its meaning and implications, and applying it meaningfully, enhancing students' reading skills often depends on their ability to comprehend sentences or passages. Simple sentences are straightforward, but understanding compound and complex sentences requires strategies to discern the author's intent. Therefore, to make reading easier, students need to use certain strategies, and good readers use a wide range of reading strategies and learn how to use them deliberately (Gani et al., 2016). Consequently, teachers of reading must select an appropriate teaching strategy that helps their students to improve their reading comprehension (Zagoto, 2016).

According to Savolainen (2016, p. 1156; as cited in Modreanu & Sarbu, 2021), the word "strategy" comes from the Greek term "strategos", which denotes military officers and suggests the planning that commanders employed in directing their troops (Savolainen, 2016, p. 1156). The word "stratego" means a plan to destroy enemies by effectively using the available resources. To Athapaththu (2016), a strategy is defined as a series of decisions within an organization that establish goals, objectives, and purposes, and develop the main policies and plans necessary to achieve those goals. Accordingly, it can be synthesized that reading strategy is a formula or a plan used by the reader to ease them to grab the message's meaning from the reading.

C. *Collaborative Strategic Reading (CSR)*

The term Collaborative Strategic Reading (CSR) was developed by Klingner and Vaughn in 1996 and 1998 (Jafre & Abidin, 2012; Anwar, 2020; Bermillo & Merto, 2022). However, CSR is a proven beneficial reading strategy that has been used since 1980 (Susanti et al., 2020). According to Pahlawan and Tambusai (2022); Alqarni (2015); Zagoto (2016), CSR is an excellent strategy whose purpose is to improve students' reading comprehension through working in groups.



Figure 1. The Stages in Using the CSR Strategy

Basically, CSR is a set of strategies designed to maximize students' engagement and help all students improve their reading comprehension, increase their content area learning, enable their access to higher-level texts and encourage their engagement in reading (Sulistiyani et al., 2022). The notion of CSR is to engage students to work in small cooperative groups of three to five members and employ four comprehension strategies as shown in Figure 1 (Riani, 2015; Lailatul et al., 2022; Sulistiyani et al., 2022). The strategies are explained as follow.

(a). *Previewing the Text or Examining the Text*

Previewing is a strategy to motivate learners' prior knowledge and to produce informed predictions of the topic to be read (Syafii, 2022). Meanwhile, Susanti et al. (2020) argued that previewing a text allows students to activate prior knowledge, connecting what they already know with the new information they are about to read. In the initial stage, students engage in previewing the passage, a process that enhances their understanding by activating background knowledge, making predictions, and identifying key elements such as headings, underlined words, pictures, tables, and graphs. This helps in creating associations and making the content more relatable and understandable. Additionally, previewing can also assist in setting a purpose for reading, whether it is to gather specific information, answer particular questions, or simply comprehend the overall message or argument presented in the text. Moreover, previewing serves to pique students' interest in the topic and encourages active engagement in reading right from the start.

(b). *Click and Clunk*

Click and Clunk are the strategies used by students to monitor themselves as to whether or not they already understand the words, concepts, and ideas of the text. In the Click and Clunk activities of the collaborative reading strategy, students identify what they understand well ("Click") and what they are confused about or do not understand ("Clunk"). This strategy encourages discussion and mutual support among students by allowing them to share strengths and uncertainties in their understanding. This facilitates a deeper understanding of the text by working together to clarify confusing points (Alqarni, 2015).

(c). *Get the Gist*

This strategy is used by the students to identify the main ideas from reading the text to confirm their understanding of the information. According to Alqarni (2015), in this stage, students develop the ability to grasp the essence of a passage by identifying its main idea. They restate this main idea in their own words to ensure comprehension. The teacher prompts students to articulate the significant places, individuals, and events from what they have read using their own interpretations.

(d). *Wrap Up*

This stage asks students to draw conclusions from the text. In the wrap-up stage, students generate questions and answers based on the key ideas they have just learned. The primary objectives of this stage are to enhance students' knowledge, understanding, and retention of the material (Susanti et al., 2020). Additionally, students create open-ended questions using "who", "what", "why", "when", "where", and "how".

D. Statement of the Problem

Empirical evidence from standardized tests and educational studies consistently indicates a troubling reality: a significant proportion of children have extremely low levels of reading comprehension. Among the hurdles, Qrgez and Rashid (2017) reported that students at a university in Jordan often struggle with reading comprehension due to encountering ambiguous words, unfamiliar vocabulary, and limited time to effectively process the text cognitively.

Second, students in a basic reading class at an English Education Program at the University of Indraprastha PGRI in South Jakarta, Indonesia, found difficulty in distinguishing between the main ideas and supporting details, getting the

main idea of each paragraph, recognizing the topic of the texts from other cultures, relating the topic and their background knowledge, understanding vocabulary, and recognizing inferences (Ramadhianti & Somba, 2023).

Third, Kasim and Raisha (2017) discovered that fifth-semester students from the English Department of the Teaching Faculty at Syiah Kuala University found that the participants' reading comprehension was primarily hindered by linguistic issues such as unfamiliar meanings of new vocabulary, complexity of words, compound-complex and conditional sentences, word derivation, word order, complex and compound sentences, reduced relative clauses, passive voice, and tenses. Non-linguistic challenges included lack of cultural knowledge, text length, unfamiliarity with reading strategies, difficulty distinguishing main and supporting ideas, problems with working memory, challenges in connecting ideas, and inability to engage in speed reading.

These complex challenges collectively impede students' progress in attaining proficient reading comprehension levels, underscoring the need for lecturer intervention in selecting appropriate teaching strategies. As claimed by Kasim and Raisha (2017), employing effective reading strategies can significantly aid students in comprehending texts. By using these strategies adeptly, students can mitigate reading difficulties and enhance their overall reading comprehension skills. Thus, the study sought to answer this research question: Is CSR effective in enhancing second-semester students' reading comprehension?

III. METHODOLOGY

A. *Research Design*

The current study applied a pre-experimental one-group pre-test/post-test design. It is called pre-experimental because the researchers only used one sample (Ardianto et al., 2022) in which the researchers administered two tests to one class group. The research sought to uncover the effectiveness of CSR in enhancing second-semester students' reading comprehension.

B. *Participants*

Data for this study was gathered from 30 students consisting of 21 (70%) females and 9 (30%) males ranging in age from 18 to 21 years old and enrolled in the second semester of the English Education Department in a private university in Bekasi, Indonesia, during the 2021/22 academic year.

C. *Material*

The reading comprehension ability pre-test is designed to test students' reading comprehension ability before learning Collaborative Strategic Reading (CSR) strategies. The post-test is designed to examine whether students' reading comprehension ability increases after learning CSR strategies. The reading proficiency pre-test and post-test each comprise eight reading passages and a set of 50 multiple-choice questions. A multiple-choice test is commonly used to collect quantitative data where the central idea is one question and four answer choices consisting of one correct answer and three distractors.

Barrett's taxonomy is utilized to evaluate students' cognitive and affective levels of reading comprehension, encompassing both cognitive and emotional dimensions of understanding (Krisnadayanti & Zainil, 2022). Barrett's taxonomy is intended to aid the teacher in the construction of comprehension questions. Therefore, the reading comprehension tests were designed based on the five indicators of Barrett's taxonomy: literal comprehension, reorganization, inferential comprehension, evaluation, and appreciation. The test was an unpublished test which was constructed by the researchers themselves. Each test is scored out of 100, with each question worth 2 points. Students must complete each test within a 90-minute time limit. The pre-test and post-test papers maintain identical structures and difficulty levels, as outlined in Table 1:

TABLE 1
 READING COMPREHENSION COMPETENCE PRE-TEST PAPER AND READING COMPREHENSION COMPETENCE POST-TEST PAPER

<i>Indicator</i>	<i>Descriptions of sub indicator</i>	<i>Item numbers</i>
Literal comprehension (focusing on ideas and information explicitly stated in the text)	• students' recognition of details	1,11,27
	• students' recognition of main ideas	2,12,28
	• students' recognition of sequence	3,13,29
	• students' recognition of comparison	4,14
	• students' recognition of cause-and-effect relationships	15,30
	• students' recognition of traits	16,17
Reorganization questions	• classifying	6,18,31,48
	• outlining	7,19,32,33
	• summarizing	5,20,34
	• synthesizing	8,9,21,35
Inferential	• students' recognition of details	10,22
	• students' recognition of main ideas	23
	• students' recognition of sequence	24,36
	• students' recognition of comparison	25
	• students' recognition of cause-and-effect relationships	26
Evaluation	• judgment of reality or fantasy	37,38
	• judgment of fact or opinion	39,40
	• judgment of adequacy or validity	41
	• judgment of appropriateness or worth	42
	• judgment of, desirability, acceptability.	43
Appreciation	• emotional response to the content	44,49
	• sensitivity to ideas	45
	• sympathy for and empathy with the character	46,50
	• reactions to the author's use of language	47

D. Procedures

(a). Stage 1 - Preparation

In the preliminary phase of research, several crucial tasks form the backbone of a comprehensive study. First, compiling and refining the pre-test and post-test items or instruments used for data collection set the stage for accurate and reliable measurements or assessments within the research framework. Additionally, constructing a well-defined scoring rubric or evaluation criteria ensures consistency and objectivity in assessing and interpreting research findings. These foundational steps establish a robust foundation for rigorous and systematic investigation, fostering credible and insightful outcomes within the research domain. Lastly, the researchers designed the lesson plan based on the CSR stages.

(b). Stage 2 – Implementation of the CSR

The second stage encompassed the active implementation of this collaborative approach within the classroom setting. In these meetings, the researchers taught students using the Collaborative Strategic Reading (CSR) strategy which included guiding students through explicit reading strategies such as predicting, clarifying, questioning, and summarizing. The researchers facilitated group discussions, encouraged peer interaction, and modeled effective reading strategies to enhance students' reading comprehension skills. Moreover, this stage emphasized the application of these strategies across various texts and genres, fostering a deeper understanding of the material while promoting active engagement and critical thinking among learners. The implementation of CSR in this phase aimed to create an inclusive and collaborative learning environment conducive to improving students' reading comprehension abilities. Stage 2 was completed within two months.

(c). Stage 3 – Data Collection

In Stage 3, the focus shifts towards the meticulous implementation of data collection techniques utilizing pre-tests and post-tests alongside observation sheets as integral tools within the educational framework. This stage involves administering pre-tests to establish a baseline of students' knowledge or skills prior to the instructional intervention. Following the teaching phase, post-tests are conducted to evaluate the effectiveness of the intervention and measure the progress made by students.

The pre-tests and post-tests are structured as comprehensive assessments, each comprising 50 multiple-choice questions. The carefully curated questions cover a range of reading strategies, including identifying main ideas, making inferences, understanding vocabulary in context, and drawing conclusions from the text. Administered prior to and following the instructional intervention, these tests serve as critical benchmarks, allowing educators to assess students' initial understanding and measure the progress made in their reading comprehension skills. The multiple-choice format provides a diverse array of inquiries, enabling a thorough evaluation of students' comprehension abilities within the context of the material presented, and facilitating a comprehensive assessment of their reading proficiency.

(d). Stage 4 – Data Analysis

The collected data for the research question was processed and analyzed by using a paired t-test which consists of several statistic formulas. There is a normalizing gain score by Hake (1999; as cited in Coletta & Steinert, 2020) were used to measure the improvement in students' reading comprehension following the learning activity. Additionally, calculations included mean scores, variance, standard deviation, combined variance, and hypothesis testing as proposed by Wan et al. (2014) to support the formulation of normality test steps. Finally, there was also a normality test by Coletta and Steinert (2020) which was used to determine whether the data were normally distributed or not.

IV. FINDINGS

As explained earlier in the methods section, the participants included 30 students enrolled in the second semester of the English Education Department at a private university in Bekasi, Indonesia, in the academic year 2021/22. Observation and tests were applied to gather the data. What follows is a presentation of the research findings.

A. *The Finding of Students' Reading Comprehension Before Implementing of CSR Strategy*

TABLE 2
THE STUDENTS' READING COMPREHENSION BEFORE THE IMPLEMENTATION OF CSR STRATEGY

Raw Score	Interval Score	Frequency	Percentage
85 - 100	3.40 - 4.00	0	0.0
70 - 84	2.80 - 3.39	3	10.0
60 - 69	2.40 - 2.79	8	26.7
50 - 59	0.99 - 2.39	19	63.3
0 - 49	0.00 - 0.99	0	0.0

Table 2 provides a comprehensive overview of the students' reading comprehension levels before teaching them the Collaborative Strategic Reading (CSR) strategies. Notably, three students demonstrated a vigorous understanding of the material, securing scores within the 70-84 range. This showcases a commendable level of comprehension and proficiency among these individuals. Additionally, a cohort of eight students fell within the 60-69 score range, indicating a moderate level of comprehension. Moreover, 19 of the students achieved scores in the 50-59 range, signifying a basic understanding of the subject matter with room for improvement. These findings underscore the varying levels of proficiency among students before the implementation of the CSR strategy, highlighting both strong areas and those areas that focused attention and support. The distribution across these intervals informs educators about the diverse spectrum of comprehension levels, guiding the targeted application of instructional methodologies to address specific learning needs and enhance overall reading comprehension skills.

B. *The Finding of Students' Reading Comprehension After Implementing of CSR Strategy*

TABLE 3
THE STUDENTS' READING COMPREHENSION AFTER THE IMPLEMENTATION OF THE CSR STRATEGY

Raw Score	Interval Score	Frequency	Percentage
85 - 100	3.40 - 4.00	11	36.7
70 - 84	2.80 - 3.39	19	63.3
60 - 69	2.40 - 2.79	0	0.0
50 - 59	0.99 - 2.39	0	0.0
0 - 49	0.00 - 0.99	0	0.0

Table 3 defines the outcomes of students' reading comprehension after the implementation of the Collaborative Strategic Reading (CSR) strategies. Remarkably, a substantial advancement in comprehension is evident with 11 students achieving scores falling within the impressive 85-100 range. This substantial increase in high scores signifies a notable enhancement in students' understanding and application of reading strategies after engaging with the CSR methodology. Furthermore, 19 students demonstrated significant progress, securing scores within the 70-84 range. This range reflects a commendable improvement in their comprehension skills compared to their pre-intervention levels, underscoring the effectiveness of the CSR strategies in fostering a deeper understanding and application of reading comprehension techniques among a considerable portion of the student cohort.

Interestingly, following the implementation of the CSR strategies, there were no recorded scores within the 60-69 or 50-59 ranges. The absence of students within these score ranges suggests a distinct shift in the distribution of comprehension levels. This could indicate that the intervention notably impacted students' abilities, leading to a more concentrated distribution among higher-ranged scores. The absence of scores within these lower intervals post-implementation may suggest an overall elevation in the general competency and comprehension skills of the student body, showcasing the efficacy of the CSR strategies in significantly raising reading comprehension levels across the majority of the students.

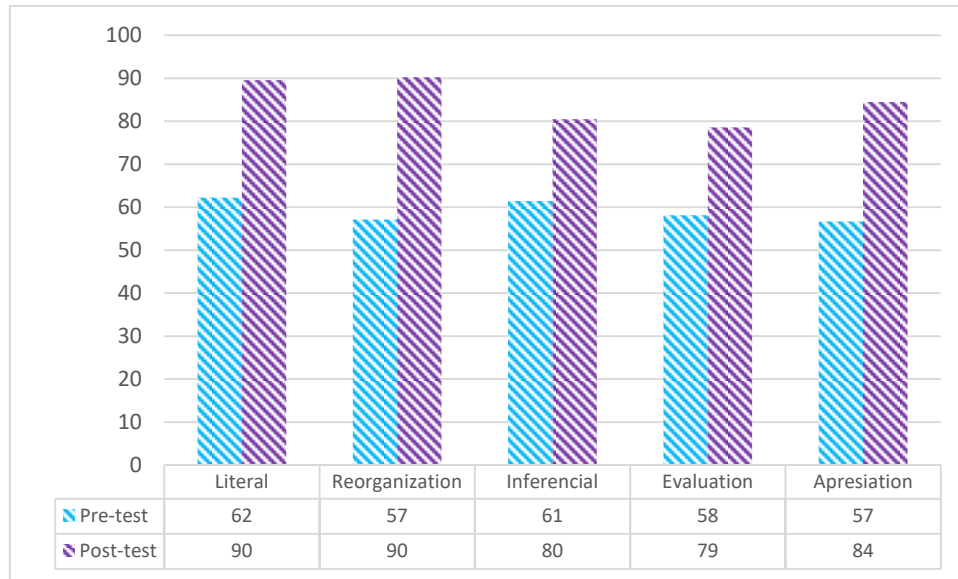


Figure 2.

Figure 2 illustrates the results comparison of the reading comprehension test average between pre-tests and post-tests for each reading comprehension level. In lateral comprehension, the average score increased sharply from 62 on the pre-test to 90 on the post-test. In reorganization comprehension, it increased dramatically from 57 to 90. Then, on the inferential level, the average score increased strikingly from 61 to 80. Meanwhile, the evaluation level also improved from 58 to 79. The last level was appreciation. This level also shows an improvement from 57 to 84. Overall, we can see that there is an improvement in the students' reading comprehension for each level of reading comprehension.

C. Data Normality Test

The Shapiro-Wilk data normality test was used in this study. This is because the size of the research data is small, namely less than 50, so it is more appropriate to use Shapiro-Wilk. The decision-making criterion is If the significance value (Sig.) is less than 0.05, it indicates that the data is not normally distributed. Conversely, if the significance value is greater than 0.05, it suggests that the data follows a normal distribution. These results obtained from conducting a data normality test using SPSS software are presented in Table 4.

TABLE 4
DATA NORMALITY TEST

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre-Test	0.106	30	0.200	0.959	30	0.297
Post-Tests	0.154	30	0.068	0.955	30	0.232

In Table 5, it can be seen that the normality test using the Shapiro-Wilk value of Sig. for pre-test data is 0.297 which is greater than 0.05. Therefore, the pre-test data is normally distributed. Likewise for the post-test data, the value of Sig. = 0.232 > 0.05, so that the post-test data was normally distributed. Thus, the prerequisite test for conducting the paired sample t-test has been fulfilled, so the data analysis step to answer the problem formulation can also be carried out.

D. Description of Research Data

The description of the research data used is presented in Table 5 below:

TABLE 5
DESCRIPTION OF RESEARCH DATA

	Mean	N	Std. Deviation	Std. Error Mean
Pre-test	59.1000	30	6.04209	1.10313
Post-Tests	84.6000	30	4.44584	0.81170

Notice in Table 5 that the average pre-test value is 59.1 while the average post-test value is 84.6. Moreover, in column N, information is obtained that the sample size used was 30 people. The standard deviation of the pre-test data is 6.04209 while the post-test data is 4.44584. The value of this standard deviation measure describes how widely the research data was distributed.

E. Correlation of Pre-Test Data and Post-Test Data

The results of the correlation or relationship between the two data, namely the pre-test and post-test are presented in Table 6 below.

TABLE 6
CORRELATION OF RESEARCH DATA

	N	Correlation	Sig.
Pre-test & Post-Test	30	-0.031	0.873

The basis for decision-making is if the value of Sig. < 0.05, there is a significant correlation or relationship between the pre-test and post-test data. Conversely, if the value of Sig. > 0.05, there is no significant correlation or relationship between the pre-test and post-test data. From the test results in Table 6 it can be seen that the Sig. = 0.873 where this is greater than 0.05, it can be said that there is no significant relationship between the pre-test and post-test data in this study.

F. Paired Sample T-Test

Furthermore, to find out whether there is a significant difference between the results or data of the pre-test and post-test, a paired t-test was employed. The basis for the decision is:

- (a). If the significance value (Sig. 2-tailed) is less than 0.05, it indicates a statistically significant difference between the learning outcomes in the pre-test and post-test data. This implies that the changes observed are not likely due to random chance but are meaningful and significant.
- (b). If the significance value (Sig. 2-tailed) is more than 0.05, it indicates a statistically no significant difference between the learning outcomes in the pre-test and post-test data. The results are presented in Table 7 below.

TABLE 7
PAIRED T-TEST RESULTS

Mean	Std. Deviation	t	df	Sig. (2-tailed)
-25.500	7.610	-18.353	29	0.000

The result of the analysis shows that the mean of pair differences is 25.5, and there is a standard deviation of 7.61. This means that there is a significant difference between pre-test and post-test. This finding is supported by the results of statistical analysis. Based on the test results, it was found that the Sig. (2-tailed) value was 0.000 < 0.05. Therefore, based on the decision-making criteria, it can be concluded that there is a significant difference between learning outcomes in the pre-test data and post-test data.

G. N-Gain Tets

Furthermore, to measure the effectiveness of a particular method or treatment in a one-group pre-test/post-test design study, an N-Gain (Normalized Gain) test is conducted. The criteria used to interpret the N-Gain score obtained are typically presented in a scale or guideline that categorizes the level of improvement achieved by participants. This scale can range from minimal to high gains, indicating the degree of effectiveness of the method or treatment used which are presented in Table 8 and the results of data processing are presented in Table 9.

TABLE 8
CATEGORIES OF N-GAIN EFFECTIVENESS INTERPRETATION

Percentage (%)	Interpretation
< 40	Ineffective
40 – 55	Less effective
56 – 75	Effective enough
> 76	Effective

Source: Hake, R.R. (1999; cited in Coletta & Steinert, 2020)

TABLE 9
N-GAIN SCORE

	Rata-Rata	Min	Max
N-Gain Score	61.38	22.43	90.29

From Table 9, it can be seen that the average N-gain score is 61.38. If it is adjusted to the criteria used, it can be concluded that the implementation of CSR is quite effective in increasing the students' reading comprehension competence.

V. DISCUSSION

The present study aimed to unveil the effectiveness of CSR as a reading strategy for increasing student reading comprehension competence by comparing the results of a pre-test and a post-test. Both tests contained questions based on the five indicators of Barrett's taxonomy – one of the most well-known taxonomies in education. It is supported by Purnamasari and Trisno (2022) who stated that Barrett's taxonomy is suitable for analyzing reading comprehension questions. It has five levels to create reading comprehension questions. They are literal comprehension, reorganization, inferential comprehension, evaluation, and appreciation.

Before the CSR was implemented in reading class, the teacher needed to know the student's reading competence, so everything needed in the research was carefully chosen. This was supported by Anwar (2020) who explained that before

the teacher applied CSR in the teaching and learning processes, the researcher needed to know the students' capability in reading an English text, so the teacher prepared everything that was needed for the research.

The pre-test was conducted in this study to know the students' initial competence in reading comprehension. This test was given to participants to measure how much they already knew about reading comprehension before they were taught CSR strategies. This is in line with Taufik et al. (2019) who stated that the general function of a pretest is to evaluate an activity or program before their implementation. Moreover, the pretest is also a medium that measures the level of intelligence and understanding of learning activities that have not been implemented. Therefore, the pre-test in this research was carefully administered.

When the researchers obtained the pretest results, they were apprehensive about the scores of the students. Of the 30 participants, there were only 3 (or 10%) students who passed the standard competence test while the rest or 27 (90%) students failed. It proved that most of the students had obstacles in reading comprehension. The low learners' achievement scores were caused by most of the students who could not grasp the Literal Comprehension of texts with an average score of 62. Reorganization had an average core of 57, Inferential Comprehension had an average core of 61, Evaluation had an average core of 58, and Appreciation had an average core of 79.

After the researcher applied the collaborative strategic reading, students' achievement scores improved immensely. The post-test scores revealed that 11 students got scores ranging from 85 to 100 and 19 students got scores ranging from 70 to 84. Not one student scored below those scores. That means that all 30 students passed the reading test.

From that finding it proved that CSR is effective in increasing students' reading comprehension skills. In line with this finding, Sulistyani et al. (2022) found that, after being taught CSR strategies, students' reading comprehension scores on the post-test were higher than those on the pre-test. Further, there was an increase in the mean score from 63.14 to 84.57.

To support the finding, the researchers used a paired t-test. The test hypotheses regarding the effectiveness of using Collaborative Strategic Reading (CSR) techniques are acquired by looking at the effectiveness weights. This is to find out the effectiveness of using Collaborative Strategic Reading to improve students' reading comprehension competence.

According to Klinger and Vaughn (1998), CSR techniques aim to improve reading comprehension and enhance conceptual learning. The results of the study showed that this strategy was able to improve the English reading skills of the students in the second semester of the English Education Study Program at a private university in West Java.

Based on the test results, it was found that the Sig. (2-tailed) value was $0.000 < 0.05$. Therefore, based on the decision-making criteria, it can be summarized that there is a significant difference between learning outcomes in the pre-test data and post-test data. After learning CSR techniques in reading class, the students' reading comprehension improved significantly. This result is in line with Anwar (2020) who reported that there is a significant difference in students' reading skills before and after giving the Collaborative strategic reading lessons. This finding is also supported by Zagoto (2016) who reported that the CSR strategies help students find the main idea. Other evidence came from Sulistyani et al. (2022) who found that the stages of CSR helped students immensely in comprehending the text. Students can obtain greater assistance from the steps that CSR offers. In addition, Aritonang and Swondo (2021) claimed that the CSR strategy helped the students with four things: it made reading comprehension easier for students, it increased students' curiosity about the content of a passage, it increased students' ability to use their higher critical thinking skills (connecting), and it enriched students' vocabulary. In short, it means that the use of the CSR strategy had a significant effect on the student reading comprehension.

More evidence was provided by the result of the research of Syakur and Paisun (2021) who stated that the study demonstrated that implementing Collaborative Strategic Reading (CSR) led to improvements in students' reading comprehension. This was evidenced by increases in average scores and the percentage of students achieving mastery in reading comprehension for descriptive texts across three cycles (72% to 77% in the first cycle, 74% to 82% in the second cycle, and 78% to 86% in the third cycle). These results indicate that CSR was effective in enhancing students' reading comprehension skills. In short, several studies proved the effectiveness of CSR strategies in helping students to be better in reading comprehension competence. Those findings support the finding of the current study which found that the average N-gain score is 61.38. If it is adjusted to the criteria used, it can be concluded that the implementation of CSR is quite effective in increasing the students' reading comprehension competence.

VI. CONCLUSION

The current study presents CSR as an efficient strategy that can be successfully applied in teaching reading comprehension in a foreign language. This study proved that the CSR strategy was effective in increasing Indonesian students' reading comprehension competence. The students were able to answer the reading comprehension questions on the five levels of reading comprehension; literal comprehension, reorganization, inferential comprehension, evaluation, and appreciation. Thus, CSR can be highly useful for improving the students' competence in comprehending English texts. The results of this research can be input for lecturers so that they can further understand the best strategy in EFL classrooms, especially in reading classes.

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