



Progressive outcomes of collaborative strategic reading to EFL learners



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ARTICLE INFO

Article history:

Received 1 January 2015

Received in revised form 3 January 2016

Accepted 7 January 2016

Available online 24 September 2016

Keywords:

collaborative strategic reading

group work

reading comprehension

teaching reading

ABSTRACT

This study aimed to discover the effects of using Collaborative Strategic Reading (CSR) in teaching reading to EFL learners. The method used in this study was experimental research which referred to the true experimental design through tests and a questionnaire as data collection instruments. The questionnaire consisted of items to gain the students' responses toward 3 categories of Collaborative Strategic Reading (CSR) implementation on their reading ability, namely: instruction, procedure, and impact. In total, 67 students in a senior high school in Banda Aceh were involved as participants (32 students in the experimental group and 35 students in the control group). The data were analyzed using the mean, standard deviation, and Z-test percentage. The Z-score between the experimental group and control group was 2.37. The critical value of the Z-score for 68 degrees of freedom was 2.01 at the .05 significance level. Therefore, the critical value of the students' Z-score (2.37) was significant at the .05 level. This indicated that the students who were taught reading using CSR achieved better scores than those who were taught using the non-CSR approach. The results of the questionnaire further showed that more than 80 percent of the students gave vastly positive responses in relation to CSR classroom implementation. This approach not only helped them to develop their reading skills, but also produced positive outcomes in their social relationships and interactions in the classroom.

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Introduction

Reading is a learned skill that begins when children understand that letters form words, and words convey decoded meanings. Ruddell (2005) asserts that reading is the act of constructing meaning while transacting with the text. The reader makes meaning of the words through the combination of prior knowledge and previous experience, information available in the text, the stance he or she takes in relationship to the text, and immediate, remembered, or

anticipated social interaction and communication (Ruddell, 1993). Moreover, teaching reading comprehension aims at making students understand the author's intended message, interpreting the message's meaning and implication, and applying the message in meaningful ways. Improving reading skill sometimes depends on the ability of the reader to handle a sentence or passage. Simple sentences are easy to understand, but compound and complex sentences need strategies to understand the author's message. Good readers use a wide range of reading strategies, and they learn how to use them deliberately (Afflerbach, Pearson, & Paris, 2008).

Most students, especially EFL learners, find difficulties in learning the skills required for effective reading (Barrionuevo & Pico, 2006). From our students, we found

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Peer review under responsibility of Kasetsart University.

these difficulties included finding the main idea in the text, inference in the text, specific information in the text, and understanding the unfamiliar English vocabulary or content terms used in the text. The students struggled even more when instructed to work individually. Therefore, we were interested in studying the implementation of the Collaborative Strategic Reading (CSR) approach in our class, as this approach is known to be effective in developing learners' reading skills in group work. This approach was found and developed by Klingner and Vaughn (1996a, 1996b). It was introduced as a strategy for monitoring comprehension, reviewing and synthesizing information, asking and answering question, and taking steps to improve students' understanding (Klingner, Vaughn, Boardman, & Swanson, 2012). It is divided into three phases: before, during, and after reading activities. These phases aim to activate students' background knowledge, to identify the most important idea in the passage, and to monitor students' comprehension and identify confusing words or concepts (Klingner et al., 2012). Furthermore, this reading approach can help students improve their reading strategy in large class settings and provide opportunities for them to take more responsibility for their own learning (Klingner, Vaughn, & Schumm, 1998).

To support the issues raised in this research, several CSR studies were considered. Wang (2008) examined the effect of CSR on sixth-graders' reading comprehension and learning attitudes in Taiwan. Sixty-two pupils from two intact classes were divided into a control group receiving the teacher-led reading instruction and an experimental group of CSR instruction in combination with storytelling strategy training for 15 weeks. Based on the results, the modified CSR was effective in fostering the students' overall reading comprehension, and understanding the meaning of the stories. This further led to an increase in their English-learning motivation. Another study by Fitri (2010) investigated the effectiveness of CSR towards the students' reading comprehension achievement by using a quasi-experimental research design with 56 intact college students in Indonesia. The result showed that the mean scores between CSR and conventional reading activities were significantly different. This indicated that CSR was effective in increasing the students' reading comprehension.

Based on the discussion above, two research problems were posed for this study. First, this research tried to answer the following question: "Is there any significant difference in reading comprehension ability between students who are taught using CSR and those who are taught through the teacher-led reading approach?" Second, "What are the students' responses toward the implementation of a collaborative strategy in teaching reading comprehension?" It was expected that the results of this study can benefit teachers in teaching reading to their students.

Literature Review

Reading comprehension is a complicated, cognitive, meaning-constructing process which involves the interaction of the reader, the text, and the context. According to Burns and Roe (1984), the basic comprehension units in

reading are words, sentences, paragraph, and the whole selection. These units combine to form all written material that students encounter. Furthermore, Olson and Dillner (1982) described reading comprehension as a term to identify the skills such as decoding ability and having knowledge of the vocabulary presented. From this definition, it can be concluded that reading comprehension is an interactive process involving the reader, the text, and the activity or purpose for reading in comprehending a text or passage, such as decoding the writer's words and using background knowledge to construct an understanding of the writer's message or the process of constructing meaning in the text. The state of reading refers to looking at the way the author organizes and connects ideas in writing. Seeing this relationship helps students get a better understanding of what they read. There are some essential or key reading comprehension skills as suggested by Moore (2003), such as the main idea, details, and critical reading. The main idea is the point that the author makes in the writing, details are supporting sentences that reinforce the main idea, and critical reading is when the reader creates a meaningful link with the author by discovering unstated ideas that the author expects the reader to know and understand (Moore, 2003). This is done by making predictions, drawing inferences and conclusions, and generalizations. At this point, the reader becomes skillful at investigating, interpreting, and evaluating what is read.

Collaborative Strategic Reading in Teaching Reading Comprehension

Collaborative strategic reading combines reading comprehension strategy instruction and cooperative learning. In CSR, students read and discuss text through a combination of teacher-led activities and student-led cooperative group work. Klingner et al. (2012) divided CSR into before reading (Preview), during reading (Click and Clunk, and Gist strategies), and after reading (Wrap up), which are explained below.

1. Before Reading: Preview

The teacher and students preview the text together to activate background knowledge, make connection between the day's topic and prior learning, predict what might be learned, and set a purpose for reading. During this phase, the teacher guides students to scan the title, heading, pictures, and charts or tables in the passage(s). The teacher prompts students to brainstorm what they already know about the topic and invites them to share ideas with their classmates.

2. During Reading: Click and Clunk, and Get the Gist

During reading, students use a strategy called Click and Clunk to monitor comprehension and identify confusing words or concepts. When the text makes sense, it clicks; when it does not, it clunks. Once students have finished a section, they apply various fix-up strategies to the unknown words and concepts: (1) re-read the sentence with

the clunk in it and determine if they can find a meaning from contextual clues; (2) re-read the sentence with the clunk and the sentences before or after, looking for clues to help figure out the clunk; (3) break the word apart and look for a prefix, suffix, or a root word; and (4) look for cognates that makes sense. In order to ensure the accuracy of the definition they have generated, students return to the text and insert the new definition to confirm that it makes sense. After students repair their clunks, they move on to the Get the Gist phase, where they determine the main idea in the section of the text they have just finished reading.

3. After Reading: Wrap Up

After reading, students wrap up. 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.

Methodology

This research used the experimental research methods, which is referred to as true experimental design. Two groups were observed (experimental and control) at two points of experimentation: one was before the treatment (pre-test) and the other was after the treatment (post-test). The experimental group was taught using the Collaborative Strategic Reading (CSR) approach and the control group was taught using the teacher-led reading approach as usually used by school teachers in reading classes.

The samples were two classes selected randomly from eight classes at *Madrasah Aliyah Negeri (MAN) Model Banda Aceh, Indonesia*. In selecting the sample, we used simple random sampling by draw to obtain the two classes. The experimental group contained 32 students, while in the control group, there were 35 students, resulting in a total sample of 67 students.

The data collection procedure was divided into three parts of the experimental study. The first was the pre-test that was given to both groups. Students were asked to read a descriptive paragraph entitled “Clean Water”. There were 20 questions in the form of closed questions (choice form). The paragraph was adapted from *Headlight: An Extensive Exposure to English Learning for Senior High School Grade X* by Lukman (2004). The second part of the procedure was treatment/experimental teaching which was conducted during five sessions with the experimental group using the CSR approach. The last part of the procedure was post-test which was used to measure the students' achievement after the treatment was applied. In this test, the students were also asked to answer 20 questions (choice form) in a descriptive paragraph entitled “Vocational School”. The major aim of the post-test was to determine whether the CSR approach had improved the

students' comprehension skill or not compared to the students who were taught using the teacher-led reading approach. Afterwards, a questionnaire was given to each student in the experimental group to gain their perceptions toward the use of CSR approach in teaching reading. It consisted of 25 close-ended questions with answers based on the Likert scale (Likert, 1932, as cited in McLeod, 2008). The questions were divided into three categories. The first category of the first five items inquired about the students' general perception of CSR instruction, the second category (the next seven items) inquired about their perception on the implementation procedure of CSR, and the last category (the next 13 items) inquired about their perception on the impact of CSR on English learning, especially reading. As Indonesia treats English as a foreign language, the items in the questionnaire were presented in Bahasa Indonesia to avoid any confusion by students regarding language.

The obtained data were analyzed using the mean, standard deviation, and Z-score (see Sudijono, 2006). They were also used to answer the second research question, in which the responses of the students toward the implementation of CSR were analyzed using the percentage.

Findings

Students' Scores from the Tests

Before the experiment started, it was also essential to execute normality and homogeneity tests to learn about the condition of the population and samples chosen, whether the subjects were normally distributed or not and whether the subjects came from a population that has a homogeneous variance or not. Table 1 illustrates the homogeneity of the subjects in this study.

In Table 1, at the .05 significance level, $F_{\alpha} (n_{1-1}, n_{2-1})$ is 32.35. Therefore, $F_{\alpha} < F_{obtain}$ is 1.58 < 1.61 indicating that the students' ability in the experimental class and the control class were homogenous.

Next, to answer the first research question of this study, we conducted pre-tests and post-tests with both the experimental and control groups. Based on the pre-test scores obtained from the students in both groups, the statistical results are summarized in Table 2.

Table 2 shows that the Z-score between the experimental group and the control group in the pre-test was -0.37 . The critical value of the Z-score for 65 degrees of freedom was 2.01 at the .05 level of significance. Therefore, the Z-score (-0.37) was lower than the critical value (2.01). Hence, the alternative hypothesis (H_a) was rejected and the null hypothesis (H_0) was accepted. In other words, the students' achievement in the experimental group and

Table 1
Statistical summary of the homogeneity for both experimental and control groups

	F_{obtain}	(n_{1-1}, n_{2-1})	F_{table}	
Experimental group	1.58	(32,35)	0.05	1.61
Control group				

Table 2
Statistical summary of pre-tests on both experimental and control groups

	Experimental group	Z-Score	Control group
N (number of students)	32	−0.37	35
R (range)	25		35
X (mean score)	67.63		69.47
S (standard deviation)	7.92		10.84

control group before the experiment took place was nearly similar.

Consequently, after the experiment was conducted and the treatment was given to the experimental group, the post-test scores were obtained from the students from both groups. The statistical results from the post-test scores are summarized in Table 3.

Table 3 shows that the Z-score between the experimental group and control group in the post-test was 2.37. The critical value of the Z-score for 68 degrees of freedom was 2.01 at the .05 level of significance. Therefore, the Z-score (2.37) was higher than the critical value (2.01). Hence, the alternative hypothesis (H_a) was accepted and the null hypothesis (H_0) was rejected. In other words, this indicated that the students who were taught reading using the CSR approach achieved better scores than those who were taught using the conventional teacher-led reading approach.

Students' Perceptions of CSR Instruction

Table 4 shows the results of the questionnaire which asked about the students' perception of CSR. The 25 items were divided into three categories.

Based on Table 4, it can be concluded that the students responded positively toward the use of CSR to help them increase their reading comprehension. This can be noted by the highest percentages being “strongly agree”.

From the first category (items 1–5) which inquired about their general perception of CSR instruction, it was found that the students responded positively toward the technique of CSR used in the experimental group. The data showed that 92.5 percent of the students responded with strongly agree, 5 percent responded with agree, and only 2.5 percent responded with disagree. These numbers illustrated that most of the students considered CSR to encourage their learning in reading. After learning through CSR, they were able to answer the questions related to some aspects in reading such as the main idea, detailed information, inference, and vocabulary.

For the questions related to students' perception on the implemented procedures of CSR in teaching reading (items 6 to 12), the students also responded positively. They

Table 3
Statistical summary of post-tests on both experimental and control groups

	Experimental group	Z- score	Control group
N (number of students)	32	2.37	35
R (range)	32		30
X (mean score)	80.06		74.43
S (standard deviation)	10.71		8.52

claimed that the use of CSR could create positive relationships among their group members. About 80 percent of the students responded with strongly agree, 12.5 percent responded with agree, and 7.5 percent responded with disagree. This indicated that most of the students found CSR helped them to share the responsibility to maintain the best group.

The results of the questions related to students' perception of the impact of CSR on English learning, especially reading (items 13 to 25) showed that the students responded positively and considered that CSR encouraged their motivation in learning and also improved their ability to comprehend the reading material. It was revealed that 82.5 percent of the students strongly agreed, 15 percent agreed and 2.5 percent disagreed. This suggested that most of the students were motivated in learning reading by using CSR.

Discussion

Based on the results of this study, the use of CSR was found to improve students' ability in reading skill which was successfully conducted with the experimental group. The mean score of the experimental group was 80.06 and the mean score of the control group was 74.42. Furthermore, the Z-score between the experimental group and control group in the post-test was 2.37. The critical value of Z-score for 68 degrees of freedom was 2.01 at the .05 level of significance and as the Z-Score (2.37) was higher than the critical value the alternative hypothesis (H_a) was accepted and the null hypothesis (H_0) was rejected. In other words, this implied that the students who were taught reading using CSR achieved higher scores than those who were taught using the conventional method. This finding was consistent with the research by Fitri (2010), where CSR also improved the reading comprehension of college students in Indonesia.

We believe that CSR does not only help students develop their reading skills, but it also has positive outcomes with regard to their social relationships and interactions in the classroom. CSR was seen as capable of producing positive outcomes with regard to society, attitude, and increasing the academic performance of the students. This technique is believed to offer chances for students to be involved in discussion, to augment their courage, to develop critical thinking and to extend their willingness to take responsibility for their own learning. In line with Klingner et al. (1998), working in groups can increase the students' self-confidence as each of them can take on important roles in their discussion. They feel that they have made important contributions during the learning process. For example, in this study, we could see this during the group learning activities in which students bravely expressed their ideas, learned to appreciate the ideas of others, and enjoyed the learning process. Klingner et al. (2012) noted that CSR can help monitor students' comprehension by working in groups. By and large, this process gave positive impacts to their achievement in learning reading.

Likewise, the results of the questionnaires from the experimental group revealed that the students were interested in learning reading by using CSR. They expressed

Table 4
Students' perceptions toward CSR

Category	Perception	Strongly agree	Agree	Disagree	Strongly disagree
1	Students' general perception of CSR instruction	92.5%	5.0%	2.5%	0%
2	Students' perception on the implementation procedure of CSR	80.0%	12.5%	7.5%	0%
3	Students' perception of the impact of CSR on English learning especially reading	82.5%	15.0%	2.5%	0%

positive opinions about the effects of this learning model to their achievement as was shown by the high positive percentages from the three categories of the questionnaire, namely: students' general perception of CSR approach, students' perception of the implementation procedure of CSR, and students' responses toward the impact of CSR on their ability in reading. It can be concluded that they found the application of the CSR approach to be profound because it organized them to form groups and to work together, not individually. Wang (2008) also found in his research that since CSR can effectively increase students' reading comprehension, it additionally increases motivation in learning. Its procedure provided a competitive atmosphere to encourage the students to read and understand the text more seriously. They gained positive relationships and constructed good interactions with their team members despite the teams consisting of students with different proficiency levels, sexes and family backgrounds. In this study, we found that students with higher proficiency had shared their knowledge with the less-proficient ones during the Click and Clunk, and Get the Gist activities. This helped tremendously those with less proficiency to follow the activities without feeling intimidated since identifying confusing words or concepts was done in their groups of a few members instead of in front of the whole class.

Accordingly, this research also concluded that teaching and learning reading using CSR can be applied effectively in an EFL classroom as had been proven in previous studies performed by other researchers and in the theories proposed by experts in the field. CSR is not only limited to teaching reading, as this approach can also be executed in other class subjects such as science, social studies, and the arts among others. To have CSR effectively implemented in the classroom, the teacher first provides direct instructions and models on how to use the approach. Next, students are provided with opportunities to practice on their own (individual accountability) and with other students (group accountability). When CSR is carried out operatively, it brings out the best in everyone involved. Teachers are able to circulate around the classroom and provide support on an as-needed basis; they have the time to provide individual assistance to students who are in need of feedback, to an entire small group, or to the whole class. Consequently, students are all actively involved in learning and supporting one another.

Conclusion and Recommendations

CSR was found to increase the experimental students' scores in reading comprehension from the beginning to the end of the experiment. It further ascertained that the

students from the experimental group gained higher scores than those from the control group who were taught using a non-CSR approach. Additionally, the students from the experimental group gave positive responses towards the implementation of CSR in their class. This approach fostered them with constructive effects not only on their academic achievement, but also on their social relationships among peers.

Therefore, we recommend that English teachers, especially in countries that treat English as a foreign language, use the CSR approach as a focal and alternative point in teaching reading comprehension to their students. This approach is realized as being a flexible set of strategies that lead students to work collaboratively alongside teachers as their guide. Furthermore, CSR helps students to grasp the content of their reading and to improve their understanding to assist them to become more thoughtful and purposive readers.

Due to the limitations of this study (that is, the number of students involved, the time limitation, and the number of treatments carried out), the writers suggest that other researchers who intend to conduct similar studies should opt for wider population samples, such as extending the subjects to more junior high schools in comparative studies or even to those at university level. More treatments could involve observations and in-depth interviews with every subject being advised to gain more concentrated data on the implementation of CSR in teaching reading.

Conflict of Interest

There is no conflict of interest.

Acknowledgments

The authors gratefully acknowledge the financial support from *Lembaga Penelitian dan Pengabdian Kepada Masyarakat* (Research Institute and Community Service) of University of Syiah Kuala, Banda Aceh, Indonesia, Grant No. 195/UN11.2/LT/SP3/2014.

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