

PQ4R and Collaborative Strategic Reading: The Effectiveness on Reading Skills

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Abstract—The aim of this study is to identify the most effective strategy used for teaching reading skills, especially reading comprehension for students who had difficulty in comprehending reading texts. This study was designed as a quasi-experimental research. There were two groups in this study namely control and treatment groups. There were three variables which were used to be tested in study, namely PQ4R, Collaborative Strategic Reading, and Direct Instruction. The participants were Grade X of 1 Godean Senior High School who were selected by using cluster random sampling who has homogenous reading skills level. The qualitative data were collected by doing interview to the English teacher and observation in the class during the teaching and learning process. The quantitative data were collected by conducting pretest and posttest in the students' reading skills, especially in reading comprehension. The result of the pretest and posttest analysis showed that there was difference in the participants' reading comprehension achievement in those taught using PQ4R, Collaborative Strategic Reading, and Direct Instruction. The mean of pretest score of PQ4R group was 61,75 and the mean of posttest score was 71,63. The mean score of the Collaborative Strategic Reading group was 63,32 and the mean score of posttests was 75,50. The mean score of pretests of participants taught using Direct Instruction was 62,5 and the pretest was 68,38. Among the three teaching strategies, there was differences in the effectiveness in the students reading skills. Students taught using CSR showed more understanding in comprehending the text for they worked in small groups.

Keywords—reading skills, CSR, PQ4R

I. INTRODUCTION

All four language skills, Listening, Speaking, Reading, and Writing, are necessary for learners when learning language especially learning English. Even though all those language skills are important, the reading skills receive more attention to most teachers. Some teachers thought that reading skill is the most needed skill for the learners. That perspective is not entirely wrong. In learning language, the students need to learn the written text to understand the information obtained and delivered. In learning reading, the teacher needs to consider the way it is delivered. Thus, the teacher should use suitable teaching strategy in delivering the reading materials. The use of strategy makes the learning be more effective. Oxford in [1] states that learning strategy is important for language learner because it can be a means for active, self-directed participation, which is needed for improving the communication competence. She adds that suitable language can affect the proficiency and develop self-confidence. Besides, the teacher will also have clear procedures in conducting the teaching and learning process.

The use of strategy can be beneficial for both the teacher and the learners because strategy can provide a structured lesson activities that make the learning becomes more comprehensible.

There is no doubt that in the teaching and learning process of reading, the constrains can be found anytime and anywhere. They can comes from the teacher, the learners, the materials, or the learning process. However, the problems in this study that will be discussed are related to the learners and the reading activities. In more definite way, the problems are in the form of the learners' lack of vocabulary, low motivation of learners, and also the monotonous activities. The main point of learning is that both the teachers and the learners must understand what they teach and learn. Thomson and Kongsberg in [2] states that if the learners do not understand, they cannot learn. The problems may be encountered by the teacher when the teacher teaches reading skills. In the effort of reducing the problems, the teacher may use some strategies such as Collaborative Strategic Reading and PQ4R. Those strategies are suitable for solving the problems in teaching reading.

Slavin in [3] states that PQ4R is a strategy which aims in aiding the students to concentrate in formulating information in their minds and make it significant. This strategy consists of some steps. The steps are as follow.

- **Preview:** In preview, the activities are related to the students' skill to observe or scan the materials briefly and gain the ideas of general construction and the topic and the subtopic.
- **Questions:** In this second step, the students build up some questions using the information about the text when they do the preview. Besides, they also can predict about the text that may be answered in this step.
- **Read:** The students read the whole text to get the answers of the questions from previous step, that is Questioning. In doing this, the students can take notes and also underline or give other sign to the important information that may answer their questions.
- **Reflect:** In this step, the students combine and connect all the information that they get. The students then need to construct the meaning and understand to make them comprehensible for them to intake the information.
- **Recite:** This step is similar to summarizing, that is the students wrap up the main ideas, the detail information, and other ideas from the text. Then they are asked to tell their summary or to write it down.

- Review: The students make sure that the questions and prediction they made from previous steps are answered. The students also have to get the message or the purpose of the writer in this step. they should highlight the essential point from the text.

The second strategy is Collaborative Strategic Reading (CSR). Bremer, *et al.* in [4] states that Collaborative Strategic Reading integrates two teaching elements. First is modified reciprocal teaching. In reciprocal teaching, the teacher and students use activities such as summarizing, questioning, clarifying, and predicting in order to have dialogue about the key feature of the text. It is aimed to help the students who get difficulty in reading comprehension. Some studies prove that reciprocal teaching is effective in enhancing the students' reading skills in junior and senior high school. The second element is cooperative learning. Cooperative learning facilitates the students in developing their reading skills in cooperative group work so that they can work together helping each other to solve the problems they have.

The CSR has four steps namely:

- Preview: The purpose of Preview is to activate the students' prior knowledge and to engage the students' interest in the reading materials. Besides, this step is also used to help the students predict in what they are going to read. To do so, the students are asked to do scanning, look to the reading passage quickly to search for the clues. The students are asked to discuss about the text to develop their predictions.
- Click and Clunk: The purpose of Click and Clunk is to teach the student to observe what they are reading whether they are following the information or not and think that they know about the information from the text before. Besides, it also provides the students with practice about the key words and principles they do not understand. Many students get difficulties in obtaining the information of the text because of their passive learning so there should be some strategies implementation to fix this problem. Here, the students identify while doing reading together their clunk, or difficulties in some words or ideas then clarify the difficulties together with the teacher.
- Get the gist: The purpose of Get the Gist is to teach the students to find out the main idea of a text. Getting the main idea is one of important factors in comprehending the text. Some teachers have difficulty in teaching their students how to figure out the main idea. Here, the teacher uses Get the Gist to teach them in find out the most essential point of the text then rephrase it using their own words. The important point in rephrasing is that the teacher asked the students to use few words as possible so that they can avoid to use the unnecessary details.
- Wrap up: Wrap up is similar to the preview and it is done only once during the teaching and learning process. What makes it different is that it happens at the end of the reading session. The purpose of wrap up is to provide a chance for the students to review what they have read to help them with understanding and remembering of what they have learned.

While doing the steps of CSR, they are required to keep a learning log individually. The learning log should be filled up before, during, and after the learning activity.

The last step of CSR is collaborative group. In this step, the students have their own role and work in small group. They have to be responsible for their own roles but still working together. The roles are as a leader of the group, clunk expert, gist expert, encourager, announcer, and reporter.

After understanding the main point of PQ4R and CSR, the problems in the teaching reading should be minimized by using those two strategies. The main problems that will be answered in the research are as follows.

1. Is the use of PQ4R strategy effective in the students' reading skills?
2. Is the use of CSR strategy effective in the students' reading skills?
3. Is there any significant differences between students taught using PQ4R, students taught using CSR, and those who are not?

Thus, the questions will be answered in the next sections.

The rest of this paper is organized as follow: Section II describes proposed research method. Section III presents the obtained results. Section IV presents the discussion and following by conclusion in Section V.

II. PROPOSED METHOD

A. Research Design

This study was a quantitative research using quasi-experimental study. According to Ref. [5], quasi experimental research is considered as a good research even though it is not a true experiment. However, the results obtained are similar to the results of true experiment. This type of study focuses on its treatment and its results. This study used two groups of subjects, namely treatment group and control group. Treatment group is a group in which the group is given the special treatment according to the strategies tested, while control group is the group which is taught using the conventional strategy.

B. Population and Sample

The population of the study was all students of 1 Godean Senior High School. After getting the population, the researcher took the sample of the population. The technique used in getting the sample of this study was cluster random sampling. According to Ref. [6], it is a sample which consists of a unity of group randomly taken [6]. Therefore, the sample of this study were three classes, X IPS 1, X IPS 2, and X MIPA 1.

C. Variables

This study used two types of variables, namely independent and dependent variable. The first independent variable is PQ4R strategy and the second is CSR strategy while the dependent variable is the reading skills.

D. Instrument and Data Gathering

The researcher used test as the data collection technique. Test was aimed to know the student reading skills especially in reading comprehension. The researcher used pretest and posttest.

The pretest and posttest instrument were analyzed first in terms of the validity and the reliability. Using statistic from the try-out data, the instrument was valid to be used for pretest and posttest. The validity criteria was if the corrected item total correlation $> r$ table, it means valid. It used 95% validity level. Meanwhile, the reliability of the instruments was calculated by using statistic. It showed that the instruments were reliable. It can be seen from Table I.

TABLE I. RELIABILITY OF THE INSTRUMENTS

Cronbach's Alpha	N of Items
.923	53

Cronbach's Alpha was 0.923 greater than 0.6 which means the instruments were reliable.

E. Data analysis

The score of pretest and posttest was calculated using SPSS. To determine whether there was differences before and after the treatment, the researcher calculated the mean of the post test. The calculation used ANACOVA. However, the data should require test of normality distribution and test of homogeneity of variance.

III. RESULTS

Through experimental research process, the researcher gathered the data. The data was processed for answering the research questions. There are three research questions which each has different variable. The questions are "Is the use of PQ4R technique effective in the students' reading skills?", "Is the use of CSR technique effective in the students' reading skills?", "Is there any significant differences among students taught using PQ4R, students taught using CSR, and those who are not?".

In general, there was a difference in the students' score who were taught using PQ4R, CSR, and direct instruction. The result was shown in Table II in the mean of the score especially in the post test score.

TABLE II. MEAN SCORE OF POST TEST

Class	Mean	Std. Deviation	N
PQ4R	71.63	5.014	32
CSR	75.50	6.365	32
Contro l	68.38	4.233	32
Total	71.83	5.987	96

Based on the result of mean score in Table II above, the result of post test score of the students showed that those who were taught using CSR had the highest mean score. While PQ4R came after CSR.

In order to answer the first questions, the researcher conducted the research by using experimental process. The result of the post test showed in Table III that there was a difference in the mean score of post-test.

TABLE III. PRETEST AND POSTTEST SCORE USING PQ4R

No.	Technique	Pretest	Posttest
1.	PQ4R	70	80
2.	PQ4R	68	76
3.	PQ4R	64	70
4.	PQ4R	62	74
5.	PQ4R	66	72
6.	PQ4R	64	78
7.	PQ4R	66	78
8.	PQ4R	52	64
9.	PQ4R	56	64
10.	PQ4R	60	74
11.	PQ4R	60	78
12.	PQ4R	58	68
13.	PQ4R	68	72
14.	PQ4R	60	72
15.	PQ4R	60	78
16.	PQ4R	66	72
17.	PQ4R	64	70
18.	PQ4R	56	62
19.	PQ4R	54	66
20.	PQ4R	54	72
21.	PQ4R	68	78
22.	PQ4R	70	76
23.	PQ4R	56	62
24.	PQ4R	60	66
25.	PQ4R	60	74
26.	PQ4R	60	68
27.	PQ4R	62	72
28.	PQ4R	62	70
29.	PQ4R	58	68
30.	PQ4R	66	74
31.	PQ4R	66	76
32.	PQ4R	60	68

Based on the result of the pretest and posttest in Table III above, there was an increase in the students' score after given the treatment using PQ4R. Therefore, PQ4R technique is effective in teaching reading skills to enhance the students' understanding.

In the second research question, which is "Is the use of CSR technique effective in the students' reading skills?", the second group of the class was taught using CSR technique. In this technique, the students were required to work individually and in cooperative groups. Before applying the treatment, the students should have clear understanding of how to use CSR, for each of them had responsibility. The result showed that CSR was effective in helping the students understanding the text. It is proven from the students' score before and after the treatment in Table IV.

TABLE IV. PRETEST AND POSTTEST SCORE USING CSR

No.	Technique	Pretest	Posttest
1.	CSR	64	74
2.	CSR	60	76
3.	CSR	64	80
4.	CSR	66	80
5.	CSR	74	86
6.	CSR	56	66
7.	CSR	52	64
8.	CSR	70	84
9.	CSR	66	82
10.	CSR	60	66
11.	CSR	66	78
12.	CSR	66	76
13.	CSR	60	72
14.	CSR	54	64
15.	CSR	62	74
16.	CSR	56	70
17.	CSR	72	82
18.	CSR	64	66
19.	CSR	66	80
20.	CSR	66	76
21.	CSR	56	74
22.	CSR	64	78
23.	CSR	72	86
24.	CSR	68	78
25.	CSR	56	66
26.	CSR	60	74
27.	CSR	62	78
28.	CSR	62	76
29.	CSR	68	78
30.	CSR	70	78
31.	CSR	70	84
32.	CSR	54	70

The increase range of the score was from 6 to 12. It could be the prove that the technique was effective for teaching reading skills especially reading comprehension. In the third questions, which is “Is there any significant differences among students taught using PQ4R, students taught using CSR, and those who are not?”, the researcher compared the result of the posttest of the three groups. The mean of the score showed the difference among the groups. See the Table V.

TABLE V. MEAN SCORE OF POSTTEST

Class	Mean	Std. Deviation	N
PQ4R	71.63	5.014	32
CSR	75.50	6.365	32
control	68.38	4.233	32
Total	71.83	5.987	96

The mean of the posttest was different. The highest mean was CSR technique, the second one is PQ4R and the lowest

mean was control group which was taught using Direct Teaching.

The difference can be seen from the Sig. Value. Sig < α (0.000 < 0.005). Therefore, the score of pretest affects the score of posttest as it can be seen in the Table VI.

TABLE VI. PRETEST AND TREATMENT CLASS

Tests of Between-Subjects Effects

Dependent Variable: post test

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2470.640 ^a	3	823.547	81.060	.000
Intercept	351.448	1	351.448	34.592	.000
pre_test	1656.307	1	1656.307	163.027	.000
class	679.012	2	339.506	33.417	.000
Error	934.693	92	10.160		
Total	498768.000	96			
Corrected Total	3405.333	95			

a. R Squared = .726 (Adjusted R Squared = .717)

In the group class, the posttest was affected by the class or the treatment give. If the Sig < α (0.000 < 0.05), the class affected the posttest. The difference in the treatment changed the result of the posttest.

IV. DISCUSSION

According to the result of the research, all three strategies have their effectiveness. It can be seen from the result of the pretest and posttest. Each group have improvement in the score of the test.

The first strategy, PQ4R, has several steps which is proven to be effective in helping the students comprehending the text. As Harmer in [7] says, reading requires some process as identifying the topic, predicting and guessing, reading and listening for general understanding, reading and listening for specific information, reading and listening for detail information, and interpreting text. It is in line with the steps of PQ4R. Therefore, the implementation of PQ4R is suitable with the process of reading. Each process of PQ4R represents the reading process which can enhance the students' comprehension of the text.

Teaching reading skills using CSR is also an effective way to understand texts better. It is seen from the mean score that CSR gets the highest mean score which indicates that the strategy is the most effective one. The students also learn how to work in group with thier own responsibility. The result shows that CSR is the most effective way to teach reading skills especially reading comprehension.

However, among all those three, the most effective strategy to be applied for teaching reading skills is Cooperative Strategic Reading (CSR) for it is proven in the result of the posttest. The posttest score of CSR shows the highest result among the two others. Therefore, applying CSR in the teaching reading will give great positive achievement for the students. However, it is also possible to apply other strategy, PQ4R, during reading activities, for it also helps the students improving their reading comprehension skill.

Both strategies have positive effect with different level of effectiveness for the students. Therefore, the teachers may choose the best or most appropriate strategy to be applied in the teaching reading.

V. CONCLUSION

This study has identified the most effective strategy used for teaching reading skills, especially reading comprehension for students who had difficulty in comprehending reading texts. Among the three teaching strategies i.e. PQ4R, Collaborative Strategic Reading, and Direct Instruction, there was differences in the effectiveness in the students reading skills. Students taught using CSR showed more understanding in comprehending the text for they worked in small groups.

ACKNOWLEDGEMENT

The writer would like to show her gratitude to Prof. Sugirin, MA., Ph.D. of Yogyakarta State University for providing the insight and expertise in helping the researcher writing the paper.

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