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# The Effect of Collaborative Strategy Reading and Guided Reading Peer Questioning Strategy on Students' Achievement in Reading Comprehension 

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| Keywords: |
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## Kata Kunci:

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#### Abstract

The purpose of this study was to describe the influence of students in determining collaborative reading strategies and integrated reading questions and answers from class VIII SMP Swasta Nusantara Lubuk Pakam. This research was conducted using Two-Way ANOVA. The research subjects were students of class VIII of Lubuk Pakam Nusantara Private Junior High School which consisted of 30 students. The instrument used to collect data is multiple choice. The population is 30 students. The results of this study, obtained using ANOVA analysis, the comparison of Fcount and Ftable at a significant level is the learning strategy used by Nusantara Private Junior High School Lubuk Pakam Fcount p $=0.320$ > 0.05 or Fcount $=1.154$ < Ftable $=3.10$, not significant.


## Introduction

The ability in mastering the English language is a crucial need since language has an important role as a means of communication among others. In Indonesia, English is used
as a foreign language that is taught in schools. It is not only given as the main subject which is examined in the national final examination but also it is given to prepare students facing the global era for now and their future life (Herman et. al., 2020). English is used as a means of communication both oral and written. Here, to communicate means to comprehend and convey information, thought and feeling by using English. Language is expected to help students knowing themselves and others. Sinaga et. al. (2020) explained that English as a foreign language is needed not only in academic field but also in the development of science and technology, many work fields and life activities, such as in the process of getting knowledge, transferring information from the text books and mass media (newspaper, magazine, radio, TV and internet).

Reading comprehension become more important as student progress through the educational system (Silalahi et. al., 2022). It important is realized as very substantial because it opens up new knowledge for individual. The goal is to enrich his/her experiences and to improve his/her intellectual ability.

In English, a student must master four skills, they are: listening, speaking, reading, and writing. Among those skills, reading is one of the most important skills in learning language. Reading skill becomes a part of language skill that the students have reading skill has an important role in education field. Reading is one of a ways for the students to get the information needed in their education field, such as transferring information and knowledge from text book.

English plays an important role nowadays. It becomes an international language. Therefore, in this modern era it is necessary for us to learn it. English also has been taught in many countries in the world as a second foreign language such as in Japan, Malaysia, China, Germany and Indonesia in those countries students always make many efforts to make the teaching English as a second or foreign language better and better. Many skills in English subject is reading that also has an own passion to make the students really more learn about English. There are four language skills that must be achieved by the students in learning a language, in this case English. They are listening, speaking, reading and writing.

Based on writer observation on SMP Swasta Nusantara Lubuk Pakam, the writers find out that the VIII Grade students understand on reading comprehension still low, although it has been taught in the first semester. The writer also found that the way the teacher taught reading to the students is boring. The explanation above, this is conduct to see the students' achievement in reading comprehension by Collaborative Strategy

Reading (CSR), Collaborative Strategic Reading (CSR) is a set of instructional strategies designed to help students with diverse abilities acquire and practice comprehension strategies for use with informational test (Klingner and Vaughn, 1996; Rajagukguk et. al., 2020). The goals of CSR are to improve reading comprehension and increase conceptual learning in ways that maximize student involvement. CSR is a reading comprehension practice that combines two instructional elements (a) modified reciprocal teaching (Palinscar\& Brown, 1984), (b) cooperative learning (Johnson \& Johnson, 1987) or student pairing. In reciprocal teaching, teachers and students take turns leading a dialogue concerning key features of text through summarizing, questioning, clarifying and predicting. Reciprocal teaching was developed with the intention of aiding students having difficulty with reading comprehension. Guided Reading Peer Questioning Strategy (GRPQ) is a structured approach to peer interaction focusing on the cognitive processing of participants (O’Donnell, 1999). It emphasizes the role of teachers and generic question stems in guiding peer interaction. Through reciprocal peer-questioning, students learn from each other by giving and receiving help, by recognizing and resolving contradictions between the individual student and other students' perspectives, and by internalizing problem-solving processes and strategies that emerge during group work (Manullang et. al., 2022).

## Method

## 1. Research Design

This research deals with the experimental research by using Factorial Design 2x2. The reasons to choose this design are: 1 . To prove the hypotheses in one experimental, 2. To recognize the interaction between the dependent and independent variables. There were two variables in this study, they were two variables in this study, they were: independent variables: collaborative strategic reading Strategy and Guided Reading Peer Questioning Strategy. There were three groups of students in this research namely Experimental Group (I) that was taught by using collaborative strategy reading and Experimental Group (II) that was taught by using guided reading peer questioning strategy.

## 2. Population and Sample

The population of this study is all students of VIII grade of SMP Swasta Nusantara Lubuk Pakam with consist of 36 students. Total numbers of the students in population were 360 students.

The sample of this research was taken by using the cluster random sampling technique. The researcher took three classes from the three classes by using lottery technique. The steps were: 1) wrote the name of the class in a small piece of paper, 2) put the paper in the box, 3) shook the box, 4) took two papers, 5) the first selected paper was taught by using collaborative strategic reading strategy and one the second paper was taught by using guided peer questioning strategy. Then, after the classes selected, the researcher gave questionnaire about strategy to all students of the two classes.

## 3. The Instrument of Data Collection

The instrument was design to collect the data. The instrument is a tool used in collecting the data (Ivantara et. al., 2020). There were also mention that the instrument is a tool used to detect the data, measure the frequency and magnitude of the phenomenon. Thus it can be said that the data needed a device to detect. In this study the instrument that the writer used in this research was give multiple choices in comprehending reading text by using reading test, to measure their understanding of the passage and used to measure students' achievement in reading comprehension.

## 4. Technique of Data Collection

The data analysis is the last step on the procedure of this experiment and data analysis is very important in a research because a researcher was got the result of the data obtained to make a conclusion from the research. To get the result of this research, the researcher uses ANOVA technique as the technique in analyzing the data. According to Cohen (2007:543), ANOVA is used to discover whether there are statically significant differences between the means of three groups, using parametric data drawn from random samples with the normal distribution.

## a. Pre-Test

There are three groups, the experimental groups and the control group. The pre-test was administered before treatment. The function of pre-test is find out the homogeneity in the mean score students. Through this test, the writer wanted to know whether they were in the same level of knowledge in reading comprehension. If the difference of the level of knowledge is significant, the group was arranging to similar the level. If it could not be made same, at least the difference was not significant.

## b. Treatment

After doing the pre-test, teacher continue the subject with giving treatment. In this occasion, the teacher was giving more deeply the explanation of material for the students. Treatment, which were experimental groups and control group that taught by using same material but different method. In this phase, the experimental group was taught by Collaborative Strategy Reading and Guided Reading Peer Questioning Strategy and control group was taught by conventional method in the classroom.

## c. Post-Test

The post-test was giving to both experimental group and control group. The one of groups received treatment. After giving the test to class which one teach in Collaborative Strategy Reading and one teach in Guided Reading Peer Questioning Strategy then will collect their score. The data was analyzed by using ANOVA formula by comparing the scores of the three groups. The groups were compared to know how significant the effect of applying Collaborative Strategy Reading and Guided Reading Peer Questioning Strategy in teaching reading comprehension.

Table 1. Factorial Research Design 2x2

| Group | Pre-test | Treatment | Post-test |
| :---: | :---: | :---: | :---: |
| Collaborative Strategy <br> Reading | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Guided Reading Peer <br> Questioning | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Control | $\checkmark$ |  |  |

## 5. The Technique of Analyzing Data

The data analysis is the last step on the procedure of this experiment and data analysis is very important in a research because a researcher will get the result of the data obtained to make a conclusion from the research. According to Cohen (2007:543) t-test is used to discover whether there are statically significant differences between the means of two groups, using parametric data drawn from random samples with the normal distribution.

To get the result of this research, the researcher uses $t$-test technique as the technique in analyzing the data and Two Way ANOVA through Statistical Package for Social Science (SPSS) version 16 for window. The researcher used the level of significance 0.05 in which the hypothesis was approved if $\operatorname{Sign}<\alpha$. It means that the probability of error in
the hypothesis will only $5 \%$. Technically, the analysis of the data performed in this study through two stages namely the normality and homogeneity test are needed to be conducted as the requirement for parametric testing. Normality test is conduct to know whether or not the data has normal distribution. Then, homogeneity test is conduct to assure that the data populations were homogenous or not. Furthermore, for calculating the normality test, this study used Kolmogorov-Smirnov technique.

As stated by Emzir above, inferential statistic will be used to analyze the variance or ANOVA (One Way Analysis of Variance) formula. In this study, ANOVA was used to test the significant differences presented among students' reading comprehension score.

The formula of ANOVA is:
$\mathrm{F}=\underline{\mathrm{MSa}}$
MSw
To describe the analysis, a table of ANOVA is provided as follow:
Table 2. Formula of ANOVA

| Source of Variance | Df | SS | MS | F |
| :---: | :---: | :---: | :---: | :---: |
| Among <br> Groups | $\begin{aligned} & d f \mathrm{a}=\mathrm{k} \\ & -1 \end{aligned}$ | $\begin{gathered} \mathrm{SS}_{\mathrm{a}}= \\ \frac{\left(\sum X_{1}\right)^{2}}{f_{1}}+\frac{\left(\sum X_{2}\right)^{2}}{f_{2}}+\frac{\left(\sum X k\right)^{2}}{f k}+\frac{\left(\sum X t o t\right)^{2}}{\sum f} \end{gathered}$ | $\begin{gathered} M S \mathrm{a} \\ = \\ \underline{\mathrm{SSa}} \\ \mathrm{k}-1 \end{gathered}$ | $\begin{aligned} & \underline{M s \mathrm{a}} \\ & M S_{\mathrm{w}} \end{aligned}$ |
| Within <br> Groups | $\begin{aligned} & d f \mathrm{w}= \\ & \mathrm{n}-\mathrm{k} \end{aligned}$ | SSw= SStot -Ssa | $\begin{gathered} M S \mathrm{w} \\ = \\ \underline{\mathrm{SSw}} \\ \mathrm{n}-\mathrm{k} \end{gathered}$ |  |
| Total | $\begin{aligned} & d f \mathrm{tot}= \\ & \mathrm{n}-1 \end{aligned}$ | $\sum x t o t^{2}-\frac{\left(\sum x t o t\right)^{2}}{n}$ |  |  |

Note :
F : Analysis of Variance
MS : Mean Square
MSa : Mean Square among groups
MSw : Mean Square within groups
SS : Sum of Square
SSa : Sum of Square among groups

SSw : Sum of Square within groups
SStot : Total Sum of Square
df : Degree of Freedom
$d f \mathrm{~b} \quad:$ Degree of Freedom among groups
$d f \mathrm{w}$ : Degree of Freedom within groups
dftot : Total Degree of Freedom
n : Number of sample
k : Number of groups
f : Frequency of sample
ftot : Total of Frequency
Significant critical value : 5\% (0.05)

## Results and Discussion

After the writer analyzed the students' ability, the findings of this study were presented as follows:

1. The highest score in Collaborative Strategy Reading and Guided Reading Peer Questioning 92 and the lowest score Collaborative Strategic Reading and Guided Reading Peer Questioning Strategy structure 54.
2. The highest score in Collaborative Strategy Reading and Guided Reading Peer Questioning Strategy on SMP Swasta Nusantara Lubuk Pakam is 92 or >54. The unable to answer Collaborative Strategic Reading and Guided Reading Peer Questioning able because they only get mean 60 .

The result of Two Ways ANOVA reveals that both Collaborative Strategy Reading and Guided Reading Peer Questioning Strategy affect students' achievement in reading comprehension. From the data analysis it is found that, experimental group 1: 3.467, experimental group 2: 8.867, control group : $6.8 \mathrm{p}=0,320>0,05$ atau F hitung $=1.154<$ F Tabel $=3.10$, not significant. The results of the two groups ANOVA above concluded that the first and second techniques did not produce a significant score. The benefit of this researcher to the learning process is, the students can learn about reading with this strategy

## Conclusion

Based on the data analysis, hypothesis testing, research finding and discussion, it can be concluded that:

1. Collaborative strategy reading and guided reading peer questioning strategy significantly affect students' achievement in reading comprehension, narrative text. The students' achievement in reading comprehension narrative text taught by Collaborative strategic reading is higher than that of the students taught by guided reading peer questioning strategy.
2. Students in class VIII-2 significantly affects students' achievement in reading comprehension, narrative text. A student in class VIII-2 achievement in reading comprehension is higher than that of class VIII-1 and VIII-3.

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