

THE CIRC TECHNIQUE AND LEARNING MOTIVATION FOR IMPROVING STUDENTS' READING COMPREHENSION SKILLS

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Abstract: This research aims to know the effect of the CIRC technique and learning motivation on reading comprehension skills at State Senior High School in Pandeglang Regency. The research method which is conducted is an experimental study with two-way ANOVA. The samples were 30 students of SMAN 6 and 30 students of SMAN 8 taken by cluster. The technique of collecting data on each variable was acquired from the test. The data was analyzed by using a two-way analysis of variance (ANOVA 2x2). The research results show no interactive effects of teaching technique and learning motivation toward reading comprehension skill State Senior High School in Pandeglang Regency with the value of sig $0.01 < 0.05$ and $F_0 = 5.872$.

Keywords: teaching technique, learning motivation, and reading comprehension skill

Introduction

Language plays a very significant role in the interaction between one country and another. The distance between one country and another is very close by using the same language. It proves that a language is a communication tool used by the world community, not only between individuals or between people, formal or informal, but also between individuals and texts.

In the 2013 curriculum of senior high school, English is one of the compulsory subjects given to students starting from class X. It includes four skills: listening, speaking, reading, and writing, which are integrated into several types of texts, such as exposition, discussion, recount, descriptive, news item, explanations, and narratives. In addition, the students are also given linguistic elements such as the types of tenses and vocabularies.

The ability to understand a text or comprehend the text is a skill that students need. It is an essential skill for the development of science and is used as a communication tool. By comprehending the text, the students will get new information, knowledge, and experiences. All things that are obtained by reading will enable students to enhance their thinking and broaden their horizons. Thus, the reading ability is needed by students if they want to improve themselves.

Moreover, comprehending during the text for senior high school is urgent since reading comprehension is one aspect tested in the national examination. Therefore, the role of teachers in providing learning reading comprehension skills and elevating the ability to comprehend the student in the classroom is significant. The teacher must have a variety of learning techniques to improve the students' comprehension skills.

Of course, the ability of a teacher to choose and apply learning techniques will affect the ability to understand the text. Regardless of student characteristics, a particular learning method cannot achieve optimal learning outcomes. Suppose students who have high motivation and students who have low motivation certainly need different learning techniques. Based on observation conducted in Public Senior School in Pandeglang, learning technique which used by teachers are less varied. Teachers tend to teach using traditional learning techniques and often apply teacher-centered learning. The teaching and learning process in the classroom tends to be passive and tends to be individual.

In addition, students' learning motivation factors are needed in the teaching and learning process. When the teaching and learning process does not involve students' motivation to learn, the teaching process seems like the teacher acts on the stage without interacting with the audience (students). The show looks bored, and the audience busy with their activities. Therefore, when it happens in the classroom, lessons cannot be accepted well, affecting student learning outcomes.

Learning motivation is needed to foster student interest in the lessons taught by the teacher. While learning techniques are also one factor that determines the success or failure of the teaching and learning process, the suitable method can foster student motivation in learning and automatically support learning goals. The two factors that influence learning achievement have a significant contribution in learning teaching and learning activities. Learning is an activity that requires motivation. Based on these facts, the research on learning technique and motivation is fundamental to conduct. The students can explore what information is involved in the reading material that students read. It greatly helps students to achieve better results in the teaching and learning process. Therefore, the writer will conduct the study under the title, "The Effect of Teaching Technique and Motivation on reading comprehension skill (an experiment at SMA Negeri Pandeglang)."

Definition of Reading Comprehension

Reading is an activity that needs interrelated aspects so that no one can explain clearly and satisfactorily. Some experts state about reading from different views. Reading is a complex cognitive activity crucial for adequate functioning and obtaining information in current society and requires integrating memory and meaning construction. According to this definition, it can be said that reading is to gain information through building meaning in an understanding text in society. In this process, there is an integration between the memory of the reader and the construction of meaning.

Guthrie (as cited in Thompson, 2006) said that "reading comprehension consists of the processes of constructing conceptual knowledge from a text through cognition interaction and motivational involvement with the text." When readers pick up the newspaper and read about the latest election results, call up a website and read directions on installing a new light switch, or grab a novel on the local bookstore shelf, readers are using their reading comprehension skills to gather information from text. In this process, there is a change in readers' conceptual knowledge as a consequence of reading. It shows the knowledge before and after the reading process. Moreover, Block, Rodgers, & Johnson (2004) stated that comprehension process instruction focuses on teaching how to get the main idea, drawing conclusions, understanding sentences, and gaining meaning.

Definition of Teaching Technique

In the education process, teaching has a vital role in achieving the aim of learning. Its unique function to impart knowledge, develop understanding and skill. School is one institution that has been entrusted with the responsibilities of young ones. Teaching is the main activity through which schools discharge their duties and attain their objectives. If teaching is done effectively, schools successfully achieve their goals. The following are the definitions of teaching from some experts.

A learning activity depends on the technique or strategy applied by the teacher, following the theory of technique according to some experts. Thus, it can be stated that technique depicts a step by step to do plan. It is a procedure in detail to complete what must be achieved. By applying detailed steps, the process of learning becomes to focus on goal achievement.

1. Cooperative Integrated Reading and Composition

Cooperative Integrated Reading and Composition (CIRC) technique is a learning technique based on cooperation and designed to develop reading, writing, and other language skills. It was first developed by Slavin et.al (1995). This technique can be categorized as an integrated learning method. Here, each student is responsible for group assignments. Each group member thinks of ideas to understand a concept and complete a task, so a long understanding and learning experience is formed. This learning process educates students to interact with the environment. The main elements of the CIRC model are as follows (Slavin et al., 1995, pp. 4–5):

- a) Reading group. If using a reading group, students are divided into groups of two or three based on reading ability, which the teacher can determine.
- b) Team. Students are divided into pairs (or trios) in their reading groups. The pairs are divided into teams consisting of pairs of two different reading groups; for example, a group may consist of two students with high reading skills and two people with low reading skills. Members receive points based on their work on all quizzes, essays, and report books, and these points form the team's score. Teams that meet the average criteria of 90% on all activities are called the Super Team and are entitled to receive attractive certificates. In comparison, the team that meets the average criteria of 80% is called the Excellent Team and receives more minor certificates. (Abidin 2014)
- c) Activities. There are many student activities related to reading. Students use reading material. Some texts are introduced and discussed in reading groups directed by teachers, taking approximately twenty minutes each meeting. In these groups, the teacher determines the purpose of reading, introduces new vocabulary, repeats old vocabulary, introduces main ideas, details information after reading it. After the text is introduced, students are given a retell package, consisting of a series of activities for them to do on their team when they are not working with the teacher in the reading group.

Brophy (2013, p. 4) stated that motives are hypothetical constructs used to explain why people are doing what they are doing”. It can be stated that motives are a shared drive that encourages people to lead to purposeful action in achieving their needs. Brown (2000, p. 85) stated that “motivation is the extent to which you make choices about (a) goals to pursue and (b) the effort you will devote to that pursuit. Moreover, Brown stated two perspectives of motivation: anticipation or reward, which can drive to acquire positive reinforcement. Students are involved in the activity repeatedly because of the previous reward. In this case, motivation occurs because of the external drive such as teacher, parents, peers, educational requirements, job specifications.

Method

An experimental research method is used in this study since this study concerns investigating whether there is a significant effect of teaching technique and motivation towards students’ reading comprehension skills (Arikunto, 2013; Sugiyono, 2016). In this study, there are two independent variables and one dependent variable. The two independent variables are the CIRC learning techniques and motivation. The research that will be conducted in the study is ANOVA with the design of 2 X 2. Table 1 shows the design of this current research.

Table 1. Design of the Research Factorial 2 x 2

teaching technique (A) Learning Motivation (B)	Teaching technique (CIRC) (A1)	Conventional technique (A2)	Σ
High motivation (B1)	YA1B1	YA2B1	YB1
Low motivation (B2)	YA1B2	YA2B2	YB2
Σ(X1)	YA1	YA2	ΣT

Notes:

A1: CIRC technique

A2: Conventional technique

B1: High motivation

B2: Low motivation

YA1B1: Students mark for high motivation students and treated by cooperated, integrated, read, and composition (CIRC)

YA2B1: Students mark for high motivation students and are treated by conventional technique.

YA1B2: Students mark for low motivation students and treated by cooperated, integrated, read, and composition (CIRC)

YA2B2: Students mark for low motivation students and are treated by conventional technique.

In this study, the researcher used a post-test-only control group design. In this design, one group received an experimental treatment while the other got a different treatment (Nunan, 2002). Here, the experimental group was treated by the CIRC technique, while the control group was treated using conventional techniques. The population of this study is the twelfth graders of State Senior High School in Pandeglang in the academic year of 2019/2020. The total number of the twelfth graders of State Senior High School in Pandeglang in 2019/2020 is 580 students from two schools. Then, 60 students were the volunteered writers for data collection process. In this case, the Cluster Random Sampling technique was used to determine the two groups of the sample. To obtain the data, the researcher used a questionnaire of learning motivation, a reading test consisting of 25 questions.

Results and Discussion***Description of Research Data***

This research is experimental research with two factors: the analysis factor on teaching technique (A) and the analysis factor in motivation (B). Each factor consists of sub-factors which are called levels. There are two levels for teaching technique (A). First, CIRC teaching technique (A1), second, Conventional teaching technique (A2). The subsequent analysis factor is motivation (B) with two levels, namely: high motivation (B1) and low motivation (B2). The summary of the result of the calculation is shown in the table as follow:

Table 2. Dependent Variable on Reading Comprehension

Descriptive Statistics				
Dependent Variable: Reading Comprehension				
Teaching Technique	Motivation	Mean	Std. Deviation	N
CIRC Technique	High	78.93	8.481	15
	Low	67.20	5.281	15
	Total	73.07	9.154	30
Conventional Technique	High	74.67	9.759	15
	Low	53.33	6.355	15
	Total	64.00	13.534	30
Total	High	76.80	9.242	30
	Low	60.27	9.093	30
	Total	68.53	12.334	60

From the data description above, the researcher continued to analyze the variance and hypothesis test. In addition, to test the hypothesis of the research, some requirements are done. The research stages are statistic descriptive, which describe each variable—in addition, using normality and homogeneity test. Suppose the result is valid, then the hypothesis test using two ways ANOVA.

The total score of reading comprehension of the students who were taught using the CIRC teaching technique was obtained from 30 items test, so the theoretical frame score is 0-30 respondents. The respondents for the experimental group are 30 respondents, taught by using the CIRC teaching technique

with different levels of motivation. While another 30 students (control group) are taught using the conventional method with different motivation levels.

Table 2 shows that the lowest score is 60, the highest score is 92; moreover, the average score is 73,07, the median is 72, the mode is 76, and the standard deviation was 9,154—the complete result gained from the calculation. The student achievement on reading comprehension who were taught conventional technique shows that the mean of low motivation is 53,33, and the mean of the high motivation is 74,67. Therefore, the result shows that the learning process on experiment class is better than control class.

Prerequisite Test for the Data Analysis

Normality test

Normality test for all groups is done on the dependent variable, and or covariate variable is required, significantly to determine whether the following analysis approach uses parametric or non-parametric statistics. If the data follows a normality test or other theory distribution test, the analysis can be continued with parametric statistics. In this case, this research will be continued with parametric analysis, namely analysis of variance (ANOVA) or using general linear model analysis (GLM). The calculation is done by computer through application program 20.00 with the criterion of normality data is “if *p-value* (*Sig*) > 0,05 so H_0 is accepted “. It means that the sample distribution is normal. The p value (*Sig*) score is the number in the sig column inside the result/output table of the normality test calculation from the SPSS program application. We use the Kolmogorov-Smirnov method. The result can be seen in Table 3 below:

Table 3. The Result of Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Reading Comprehension
N		60
Normal Parameters ^{a,b}	Mean	68.53
	Std. Deviation	12.334
Most Extreme Differences	Absolute	.094
	Positive	.093
	Negative	-.094
Kolmogorov-Smirnov Z		.730
Asymp. Sig. (2-tailed)		.661
a. Test distribution is Normal.		
b. Calculated from data.		

Based on the table above, it can be seen that the score on the sig column of the Kolmogorov-Smirnov method is more than 0,05. From Table 3, we can see that Kolmogorov-Smirnov Z = 0.661 and Sig =n 0.730, so H_0 is accepted, in other words, that the samples of this research have the normal distribution.

Homogeneity Test

In addition to the normality test, one of the conditions needed to analyze data using ANOVA is the variance homogeneity test. While the purpose of the homogeneity test is to know whether the population variance according to the group designed is homogeneous or not. Homogeneity data testing on the teaching technique data was carried out with Levene's test at a significance level of 5%.

Table 4. Homogeneity Test of Variable Y

Levene's Test of Equality of Error Variances ^a			
Dependent Variable: Students' Reading Comprehension Skill			
F	df1	df2	Sig.
1.939	3	56	.134
Tests the null hypothesis that the error variance of the dependent variable is equal across groups.			
a. Design: Intercept + A + B + A * B			



Table 4 shows that the data $F_0 = 1.939$ and $Sig. = 0.134 > 0.05$. This uses the understanding that data comes from homogeneous samples. Thus, the null hypothesis is accepted. This means the sample comes from a population that uses the same variance (homogeneous). This is true from the normality and homogeneity tests above, and it can be concluded that the requirements that must be met by research data that ANOVA techniques will process have been fulfilled.

Testing of the Hypothesis

After testing the normality and homogeneity has been done, and the results indicate that the research sample comes from a normal distribution population and homogeneous sample variance, hypothesis testing using two-way ANOVA can be conducted. The calculation is processed using SPSS 20.00. The ANOVA test results were then continued with the *F test* to significantly determine the significance of each group's differences (simple effect). In other words, the *F test* is used in order to see which sample group has the highest reading comprehension on motivation. The summary of the data analysis using two-way ANOVA can be seen in Table 5.

Table 5. The Statistic of Hypotheses Test Using two-way ANOVA

Tests of Between-Subjects Effects					
Dependent Variable: Reading Comprehension					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	5678.933 ^a	3	1892.978	32.162	.000
Intercept	281809.067	1	281809.067	4788.018	.000
A	1233.067	1	1233.067	20.950	.000
B	4100.267	1	4100.267	69.665	.000
A * B	345.600	1	345.600	5.872	.019
Error	3296.000	56	58.857		
Total	290784.000	60			
Corrected Total	8974.933	59			

R Squared = .633 (Adjusted R Squared = .613)

Based on the table above, the hypothesis that is proposed can be answered. The description of the discussion is as follows:

1. Hypothesis I:

There is an effect of teaching techniques on students' reading comprehension based on Table 5 above. The summary of the ANOVA (SPSS output) shows that the score $Sig. = 0,000 < 0.05$ and $F_{count} F_0 = 32.162$, then the null hypothesis (H_0) is, therefore, rejected, and the research hypothesis (H_1) is accepted. There is a significant effect of teaching technique on State Senior High School Six students' reading comprehension in Pandeglang. In other words, there are significant differences in students' reading comprehension skills that use CIRC teaching techniques with those using conventional teaching techniques.

2. Hypotheses 2

There is an effect of learning motivation on students' Reading Comprehension. The summary of the ANOVA (SPSS output) shows that the score $Sig. = 0,000 < 0.05$ and $F_0 = 69,665$ then the null hypothesis (H_0) is rejected, and the research hypothesis (H_1) is accepted. It means that the difference of the average (mean) of the reading comprehension test outcomes of students who have high motivation with motivation who have low motivation is significant. Therefore, it can be concluded that there is an effect of motivation on State Senior High School Six students' reading comprehension in Pandeglang. In other words, there are significant differences in students' reading comprehension skills between students who have high and those who have low motivation.

3. Hypothesis 3

There is an interactive effect of teaching technique and motivation towards students' reading comprehension. The summary of the ANOVA (SPSS output) shows that the score Sig. = 0,000 < 0.05 and $F_0 = 5.87$, so the null hypothesis (H_0) is rejected, and the research hypothesis (H_1) is accepted. It means there are significant interactive effects of teaching technique and motivation towards students' reading comprehension. Meanwhile, Adjusted R. Squared value of 0.6.13 means that the variability of reading comprehension test outcome can be explained by the variable of teaching techniques, motivation, and the interaction of both the subject of reading comprehension is 61,3%.

Conclusions

From the explanation above, we can conclude that there are effective teaching techniques on students' reading comprehension at State Senior High School in Pandeglang Regency. That is proven by the value of Sig 0.000 < 0,05 and $F_{count} = 20,950$. There is a significant teaching technique for students' reading comprehension that CIRC and conventional teaching techniques.

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