THE USE OF TEACHING READING COMPREHENSION THROUGH QUESTION GENERATION STRATEGY

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Abstract

This study aimed to explore a question generation strategy for teaching reading comprehension. It was quasi-experimental. The research population used in this study was the whole ninth-grade students of SMP Walisongo Pontianak in the academic year of 2021/2020. This study utilized cluster random sampling to take and choose the sample. The samples were the students from B Class becoming the experimental group and D Class becoming the control group. It applied the measurement technique in this study. The tool of the data collection was a reading test. This study analyzed the data obtained through an independent samples test. The research result showed that the Sig value < 0.05 (0.004 < 0.05), meaning Ha accepted. It proved that the question generation strategy could increase the students' reading comprehension and make them actively motivated and involved in the learning process. Besides, the significant effect in teaching reading comprehension had a strong effect (0.727). Therefore, it is proposed to use in teaching the reading comprehension context. It could develop students' thoughts about understanding the text, encourage them to be active and smart readers, increase their understanding of the text they read, and help them catch essential ideas.
Keyword: Teaching Reading Question Generation Strategy

INTRODUCTION

Reading comprehension is an essential thing for people or students. Students cannot live and develop their knowledge and skill without it, and a lot of information can be found and provided on the Internet (Kaya, 2005, p. 37). Reading comprehension is the process of understanding and comprehending the texts being read. It will give the students the opportunity to absorb as much useful knowledge for their lives and develop the students' ability to think creatively, critically, analytically and imaginatively. Through reading, the students will form the ability to think through the process of capturing understanding, imagining, implementing and expressing ideas and information.

Reading comprehension is a series of processes to comprehend what the readers are reading that derives meaning from the printed word (McShane, 2005, p.73). Mikulecky and Jeffries (1996, p.14) define reading comprehension as the ability to construct meaning from a given written text. Therefore, the students should have a good ability in order to be good readers who can comprehend the text that they read. In addition, reading comprehension is a set skill that involves understanding and comprehending what the text is read by the readers and extracting meaning from the texts (Linse & Nunan 2005, p.69). When students often read texts, journal, article, books and so on, they will have vocabularies and learn grammars from the text. This expansion of language skills seems to increase confidence in the general language

and influence and improve skills in other areas of the language (Mozayan, Fazilatfar, Khosravi, & Askari, 2012, p. 2423).

The purpose of reading a text is to catch and get the meaning in the texts or what it talks about (Woolley, 2011, p. 15). Students should understand a written language because it communicates messages (Duffy, 2009, p. 14). Besides, in reading a foreign language such as English, the students should think in English to make them easy to understand it, but they think others will be hard to understand it because a language has a strong connection with thinking in that language (Kaya, 2005, p. 38).

Based on the researcher's observation by giving the students a reading test, the researcher found out that the students' reading test where their achievements were under standard or low. It was proved when the researcher discussed with the school teacher because she said many students got confused in learning reading comprehension and got low achievement on it. Therefore, the researcher concluded that the students got difficulties with reading comprehension. The difficulties had by students in understanding the reading text were finding the main idea, inference, reference, supporting detail, and the meaning of vocabulary. The possible causes that made them have some difficulties in reading comprehension were the students felt bored; the students made a noise in the learning reading comprehension. It can be the strategy used is not comfortable and suitable with the student's learning style, or it does not encourage the student to become active during the learning process especially learning reading comprehension.

Moreover, English is a foreign language in Indonesia, meaning the students learning it seldom practice it. Regarding the problems above, the researcher tried to use a strategy to solve this problem. The appropriate strategy helped the students learn effectively. The strategy that was used in this study was the question generation strategy (AQS). It is a system that can generate questions automatically from text or documents using certain patterns. It is expected students can make questions after being given a text. They can make questions because they can understand the text given and based on the knowledge they have.

AQS is a strategy encouraging and demanding on students asking and answering questions (Look, 2011, p. 18). This is a kind of cognitive strategy that focuses on key ideas while ensuring that the content is understood. Davey and McBride (1986, p. 256) define question generation as questions that come from reading text that has been read by the students in order to remember the information got. Brown in García, García, Berbén, Pichardo and Justicia (2014, p. 385) defines question generation as literature of comprehension-fostering cognitive strategy. In short, question generation is a strategy helping the students to comprehend many texts. Students learn to create and answer questions about situations, facts, and ideas while understanding the texts.

Previous studies also showed that AQS gets a significant positive effect of increasing the students' reading comprehension (Rosenshine, Meister & Chapman, 1996). Dorkchandra (2013, p. 34) concluded in his research finding that AQS is an effective manner to involve the students as readers in active process of reading texts. This is a strategy that helps students understand the text. Students can learn how to create and answer questions about situations, facts, and ideas while working to understand the text.

From those theories, it can be concluded that AQS is an appropriate tool or thing to increase the students' reading achievement because it can improve students' understanding of the text read, increase students' awareness of whether or not they can understand what they are trying to read and find essential points of the texts (Look, 2011,

p.11). The reason for conducting this study is very little information on AQS in teaching reading comprehension in Indonesia or Pontianak City. Therefore, this study is important to be conducted. The aim of this study is researcher wanted to investigate how the question generation strategy could increase reading comprehension to the ninth grade students of SMP Walisongo in the academic year of 2021/2020.

In this study, the researcher had two hypotheses. The null hypothesis is a prediction that there is no phenomenon or influence between the independent and dependent variables, or no difference between the independent or groups of dependent variables (Creswell, 2012, p. 126). The null hypothesis of this research was QGS was not effective in teaching reading comprehension to the ninth grade students of SMP Walisongo Pontianak in the academic year of 2021/2020. Alternative hypothesis contradicts the null hypothesis because the researcher assumes that there is an influence in the independent and dependent variables or they are different between groups of an independent variable or a dependent variable (Creswell, 2012, p. 127). The alternative hypothesis of this research was QGS was effective in teaching reading comprehension to the ninth grade students of SMP Walisongo Pontianak in the academic year of 2021/2020.

The study also had two variables. The dependent variable is what the researcher is trying to measure with a fancy technique. The independent variable is something that can influence or affect the dependent variable (Creswell, 2012, p. 116). The independent variable of this study was QGS. The independent variable is a variable believed to affect the dependent variable, Creswell (2012, p. 115 and the dependent variable was the students' reading comprehension.

The study is expected to help the development of reading comprehension, such as the students' reading comprehension could improve after being implemented QGS in the learning and teaching process of reading comprehension through QGS, the teachers get help and information to implement QGS in their teaching context and other researchers find references and to increase the depth of knowledge in education.

Based on the explanations above, the researcher formulated the problems; does the use of question generation strategy affect a teaching of reading comprehension to the ninth grade students of SMP Walisongo Pontianak in the academic year of 2021/2020? and If it does, what is the effect size?.

METHOD

In the research Method, a researcher always tries to find questions given systematically and find out all the answers until they conclude. If a research is not carried out systematically on the problem, it will be challenging to figure out the final result. To find or explore research questions, the researcher will face various issues that can only be solved effectively if using the proper research method. In this study, the researcher applied and utilized quasi-experimental research. It is a study to investigate the causal relationship between the independent variable and the dependent variable, whether the dependent variable can be affected by the independent variable (Loewen & Plonsky, 2016). In short, Quasi-experimental studies are experiments using treatment, efficacy measurements, and test units, but do not use random assignments to make comparisons to infer treatment-related changes.

The population is the entire research subject. In research terminology, the population can be described as a group of individuals, institutions, objects, and others with the same characteristics that interest a researcher. Differences in population and sample must be clearly understood to not be mistaken when researchers conduct research.

Ary, Jacobs, Sorensen, and Razavieh (2010, p.316) define the population refers to an entire group of individuals, people or things to whom the findings of a study apply. It is often difficult or even impossible for the researcher to study very large populations. Hence, the researcher selected a smaller portion. The sample is part of the population. It is an adequate reflection from the population. The sample should have the same characteristics in the population because it is representative of the population (Rasinger, 2013, p.45). To have the sample, the researchers used a cluster random sample. The sample selected is essentially a group of people, not an individual (Ary, Jacobs, Sorensen & Razavieh 2010, p. 316). Finally, the researcher had the students of B Class becoming the experimental group and D Class becoming the control group.

In this study, the researcher had measurement to collect data and a test to collect data. Measurement is the process of assigning meaningful numbers to people or things based on the degree to which they have certain characteristics (Blerkom, 2009, p .6). The test determines the students' progress or ability taught by a teacher or researcher in a particular subject (Cohen, Manion, & Morrison, 2007, p.431). The test was used to evaluate the effect of question generation strategy as treatment of teaching and learning process before and after experiment from both experimental and control group. It was done twice for both the experimental and control groups.

In a study, a test used should be valid and reliable so that the researcher tried to examine the validity and reliability of the test before being used. The validity refers to the ability of this research instrument to measure what will be measured (Yount, 2006, p.1). The reliability of quantitative research is consistent over time, between devices, and across groups of respondents (Cohen, et al., 2007, p.146).

RESULTS AND DISCUSSION

This study could benefit the teachers, students, and others because it contributed to developing and increasing the students' reading comprehension achievement. This study focused on teaching reading comprehension as compulsory subject through the question generation strategy. The researcher had B Class as the experimental group with twenty-nine students and D Class as the control group with thirty-two students. Both groups were given pre-test and post-test. The students of the experimental group were trained reading comprehension through the question generation strategy. The students of the control group were trained the reading comprehension through a common strategy used that was directed reading thinking activity strategy. It is a comprehension strategy encouraging students to make questions about a text and make predictions so that the students become. Question generation strategy can promote, extend and increase the students' reading comprehension by asking students to make and answer questions before, during, and after reading. In other word, students will be able to recognize and get understanding texts in depth.

The researcher calculated and analyzed the data to find the mean score, standard deviation and others. Before the researcher estimated them, the researcher had calculated and seen the students' scores. The calculation can be seen as follow:

Table 1. Descriptive Statistics of Experimental Group

	N	Minimum	Maximum	Mean	Std. Deviation
Pre-Test	29	24	80	61.52	12.255
Post-Test	29	52	92	78.62	8.769

The output above defined the calculation from Descriptive Statistics, it explained within side the table, the minimum score of pre-test was 24, the maximum one was 80, the mean score was 61.52 and the Std. deviation was 12.255. From post-test, the minimum score of post-test was 52, the maximum score of post-test was 92, the mean score of post-test was 78.62 and the Std. deviation was 8.769. Besides, further table described to control group.

Table 2. Descriptive Statistics of Control Group

	N	Minimum	Maximum	Mean	Std. Deviation
Pre-Test	32	16	88	61.13	14.341
Post-Test	32	32	88	71.25	10.131

The Descriptive Statistics above described that the minimum score of pre-test was 16, the maximum of pre-test was 88, the mean score of pre-test was 61.13, and the Std. deviation of pre-test was 14.321. In addition, the minimum score of control group was 52, the maximum of control group was 32, the mean score of control group was 88, and the Std. deviation of control group was 10.131.

From those tables, it can e concluded that the mean score of pre-test from both experimental and control groups got the same score (61) while the experimental group got higher score in mean score than the post-test score of the control group had (78.62 > 71.25). It meant the question generation strategy can increase the students' reading comprehension achievement. Furthermore, the researcher wanted to verify the effectiveness of question generation strategy in teaching reading comprehension by using T-test. It can be seen this table below.

Table 3. T-Test

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Score	Equal variances assumed	.080	.779	3.023	59	.004
	Equal variances not assumed			3.045	58.885	.003

The table above described the effect of the question generation strategy in teaching reading comprehension to SMP Walisongo students and told the homogeneity among students. It was the test to determine the students' variants. The population with the same variant was called homogenous students. The students with the different variants were called heterogeneous students. If they were not homogenous, the researcher had to utilize equal variances not assumed, but they were homogenous, the researcher had to apply equal variances assumed. The hypotheses of homogeneity test were if the significant value

of Levene's Test for Equality of Variances was lower than 0.05, meaning the students were not homogeneous, and if the significant value of Levene's Test for Equality of Variances was higher than 0.05, it meant the students were homogeneous.

As mentioned the table above, the conclusion was the students were homogeneous because the significant value was 0.779, which meant bigger than 0.05. Homogeneity meant that the members of students were similar on the characteristic under study. After the students were homogenous the researcher should use the equal variances assumed. The statistic test of sig value of 2-tailed was 0.004, meaning it was lower or less than 0.05. It was interpreted that the reading comprehension of the students was different before and after the treatment.

From the data discussed above, the researcher finally decided that Null Hypothesis (Ho) was rejected and Alternative Hypothesis (Ha) was accepted. Researchers obtained the mean score of pre- and post-treatment scores from reading test, which showed a significant difference. It proved that the question generation strategies can improve students' reading comprehension and actively motivate them to participate in the learning process. The effect size score is 0.727, suggesting that the question generation strategy had a strong impact on reading comprehension teaching when it was used to teach whole ninth-grade students of SMP Walisongo Pontianak in the academic year of 2021/2020.

This study had five meetings where the researcher taught the students reading comprehension through question generation strategy. It was very suitable with the students' condition and interest. In the ends of each meeting, the researcher gave a test to make sure the students' improvement in reading comprehension. He also saw the class situation, the students' activities.

Students also showed improvements in the teaching and learning process. They were enthusiastic about learning reading comprehension with question generation strategy. They were energetic during the learning process of this study and were unable to pay attention to the teacher's explanations and practice reading comprehension in reading many kinds of texts through question generation strategy. In short, the use of question generation strategies has also succeeded in increasing students' motivation and enthusiasm for learning reading comprehension. The implementation of the question generation strategy has positively impacted the education-learning process for students. There was a positive impact on student improvement, attitude, class status, and test reading comprehension

As the discussion above, question generation strategy could give improvement to the students' reading ability as Davey and McBride (1986, p. 256) say question generation is questions that come from reading text that has been red by the students in order to remember the information got, Brown in Garcia, Berben and Justicia (2014, p. 85) question generation is as literature as comprehension-fostering cognitive strategy, and dorkchandra (2013, p. 34). Question generation strategy is effective and innovative tactic in making the students take part in the learning of reading subject. Question generation is one of active strategies that helps students understand the text. Students can learn to create and answer questions about situations, facts, and ideas while learning the textbook. It can be concluded that the question generation strategy was very suitable to use in teaching reading comprehension.

CONCLUSION

Students have shown improvements in the learning process. The students increased their interest and confidence in reading comprehension. Students are actively learning and many are actively involved in the learning

process using question generation strategies. Student behavior improved and seemed keen to learn to read. In short, the question generation strategies can improve students' reading comprehension and actively motivate them to participate in the learning process. The effect size value was 0.727. This means that the question generation strategy had a strong impact (0.727) on teaching reading comprehension subject to ninth-grade students of SMP Walisongo Pontianak in the academic year of 2021/2020.

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