The Effect of Discovery Learning Method on Students' Reading Comprehension

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Abstract: Reading comprehension is the ability of the students to interpret and understand the facts and information expressed in the reading. Discovery learning method is a strategy that encourages students to arrive at a conclusion based upon their own activities and observation. This study was aimed to examine the effect of discovery learning method on students' reading comprehension at the second grade of MAN 2 Parepare. The results of this study are useful for teachers and students because they can get information about learning methods that can be used in learning reading. The research use pre-experimental research design with pre-test, treatment and post-test design. The sample of this research was 26 students from 86 participants students who become population. The researcher used technique random sampling in this research to get data. The results showed that the discovery learning method can improve the reading comprehension at the second grade of MAN 2 Parepare. It was indicated by the students' mean score of post-test (77,88) was greater than the pre-test (46,54). Even, for the level significant (p) 5% and df = 25, and the t-table value is 1,708, while the value of t-test is 8,65. It means that the t-test value is greater than t-table (8,65 ≥ 1,078). Thus, it can be concluded that students' reading comprehension is significantly better after getting the treatment. Therefore, the null hypothesis (H0) was rejected and the alternative hypothesis (Ha) was accepted.

Keywords: Reading comprehension, discovery learning method, Teaching English, Learning Outcome

INTRODUCTION

According to Maxom, reading is one of the four skills which needs to be learned. The people should be active to read in english to make them costantly receive thoughts or ideas from what they have read. Through reading, people can also obtain information which can help them understand and solve various problems which come constantly in their lives. In addition, reading can also help students to expand their vocabulary to make it easier to express opinions in simple language, and can increase their confidence when talking to other people. It is therefore, important that students who want to develop their knowledge should have ability in reading and comprehending some books, magazines, newspaper and other reading materials in which they can enlarge their knowledge in many fields of science.

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Based on the observation and interview that had been done by the researcher at MAN 2 Parepare, there are several difficulties faced by students in reading activities. The first is the difficulty of students in decoding text. They cannot get the main ideas and answer the question based on the text. In addition, they have limited vocabularies which make them have low motivation to read the text. The second, they were hardly to cocentrate as they read and most of them are lazy to read the text. It is because they are failing to understand longer reading materials, after the students read the story most of them wer difficult to analyze the schematic structures of the story concerning orientation, complication, and resolution. The third, the teacher does not provide the right teaching strategy. The teacher only uses a monotonous strategy to teach all the texts. As we know, different materials have different difficulties. Therefore, teachers need certain strategies so that students can understand a text and enjoy the learning process.

Responding to the students' problem in reading comprehension above, Discovery Learning Method was proposed to be implemented.. According to van Joolingen, discovery learning is a type of learning where learners construct their own knowledge by experimenting with a domain, and inferring rules from the results of these experiments. The basic idea of this kind of learning is that because learners can design their own experiments in the domain and infer the rules of the domain themselves they are actually constructing their knowledge.

Balim said that discovery learning is a strategy that encourages students to arrive at a conclusion based upon their own activities and observation. Therefore, it can be concluded that discovery learning strategy is an active the strategy in which the facts or the contents of the topic are not given by the teacher in the beginning of the lesson directly, but it must be discovered by the learners through observing and experimenting activities as the rules of discovery learning.

In contrast to the learning model that tends to be conventional. The discovery learning method is student- centered while the conventional method is teacher-centered. In the conventional method, the teacher provides a detailed explanation of the material and conducts questions and answers. While in the discovery learning method students are encouraged to find answers to what makes them confused so that students become active and easily understand the material given by the teacher.

METHOD

In this research used quantitative approach. As Ary et al define that "Quantitative research deals with questions of relationship, cause and effect, or current status that researchers can answer by gathering and statistically analyzing numeric data".

This research was conducted in MAN 2 Parepare of XI. MIPA class. The total population for the second grade in there was 83 students. For sample, the researcher used XI. MIPA4 class with 26 students. The instrument is pre-test and post-test. In collecting the data, the researcher held six meetings. The test was conducted written test. The pre-test was held before the treatments and post test was held after the treatments.

The technique of data analysis that the researcher used in this research was T-test. The researcher conducted the tests that consisted of 5 questions of essays. From this process, the researcher knew whether this research was has an significant effect or not by looking at the result of pre-test and post-test after being taught by discovery learning method

FINDINGS AND DISCUSSION

Table 3.1 The score of pre-test and post-test

No.	Category	Pre-test Score	Pre-test Classification	Post-test Score	Post-test Classification
1.	N	26	-	26	-
2.	Min Score	25	Very poor	45	Very poor
3.	Max Score	85	Good	95	Excellent
4.	Mean	46.54	Very poor	77.88	Good
5.	Median	42.5	Very Poor	80	Good
6.	Standart Deviation	17.53	-	11.77	-
Total		242.57		335.2	

The table shows in pre-test, the writer can conclude that the number of data (N) is 26, the min score 25, the max score 85, the mean is 46.54, the median score is 42.5, and the standard deviation is

17.53. Meanwhile, post-test number of data (N) is 26, the min score is 45, the max score is 95, the mean score is 77.88, the median score is 80, and the standard deviation is 11.77.

Table 3.2 the rate percentage of the frequency of the pre-test and post-test

No.	Classification	Scale	Pre-test F	Pre-test P	Post-test F	Post-test P
1.	Excellent	86-100	-	-	1	3.84%
2.	Good	71-85	2	7.69%	14	53.84%
3.	Average	56-70	3	11.53%	9	34.61%
4.	Poor	40-55	4	15.38%	1	3.84%
5.	Very Poor	<39	17	65.38%	1	3.84%
	Total		26	100%	26	100%

Based on the table above, the writer concluded in pre-test of experimental class there was 17 student (65.38%) belonged to very poor category, 4 students (15.38%) is belonged poor category, 3 student (11.53%) is belonged average, 2 student (7.69%) is belonged good, and was no student (0%) is belonged excellent.

In post-test that there was 1 student (3.84%) is belonged very poor, 1 student (3.84%) is belonged poor, 9 students (34.61%) is belonged average, 14 students (53.84%) is belonged good, and was 1 students (3.84%) is belonged excellent categories.

Table 3.3 The test of significant

Variable	T-test	T-table
Pre-test and Post-test	8.65	1.708

The t-test yielded a result of 8.65 whereas the value of the table was 1.708 at the level of significance (p) 5%. The t-test value (8.65 ≥ 1.708) was more than the t-table value, which is what it means. Thus, it can be concluded that the students' reading abilities have greatly improved after treatment. As a consequence, the null hypothesis (H0) was disproved and the alternative hypothesis (Ha) accepted. Therefore, the eleventh graders at MAN 2 Parepare found Discovery Learning Method to be helpful in improving their reading comprehension skills.

The data shows that the discovery learning method has a positive effect or can improve students' reading comprehension. This can be proven by the findings on students' reading comprehension related to main ideas and specific information, as well as making conclusions and students' activeness in the teaching and learning process.

As research conducted Balim found that using the discovery learning method, which is one of the various teaching methods in which the students are active and are guided by the teacher, is considered to increase students' success and inquiry learning skills more than the traditional teaching methods.

The other research was Sari concluded that discovery learning made the students more enjoyed learning in class because they are interested in the steps of learning that teacher used. It gave positive effect for the students. It can be seen from the result of post test which increased from pre test. However, the students should have self-esteem and high motivation in reading activity to improve their reading comprehension.

The writers found that the discovery learning method can make students more quickly understand the contents of the reading given by the teacher and students can interact well and be actively involved in the learning process.

By the explanation, the writer that the use of discovery learning method is to make the students being active, critic and creative thinking. So they can explore what they know into the new knowledge which is needed by them. discovery model learning is a learning process that provides incomplete material to students. Because, in discovery learning, students interact to be actively involved in learning to find their concepts or principles that have not been understood or have not been understood by students. This is in line with Agus N. Cahyo's theory who said that Discovery Learning is a teaching method that organizes pursuits in such a way that children gain knowledge that they did not previously know through it, but find it themselves.

CONCLUSION

In this research, the writer used quantitative study method the kind of quantitative study pre-experimental research intended to find out the effect of discovery learning method on student's reading comprehension after finishing her whole staps of the study the writer comes to the conclusion about using discovery learning method in teaching reading comprehension at the second grade of MAN 2

Parepare. The conclusion of the study for the english teacher and firther in term of reading competence. The conclusion as follow:

Based on the explanation in the chapter IV the means score of the experimental class in pre-test is 46.54 and mean score of post-test experimental class is 77.88. Therefore, the pre-test is more lower than posttest (46.54<77.88). It is belonged to good category. The testing of hypothesis also proved that discovery learning method gave 0,05 or 5% sinificance level, the result of analysis value is higher than t-table that is (8.65 ≥ 1.708). Short, the hypotesis was accepted. It can be concluded that using discovery learning method is effective to improve student's english reading comprehension at the second grade of MAN 2 Parepare

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