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THE USE OF JIGSAW COLLABORATIVE LEARNING METHOD IN IMPROVING STUDENT'S READING COMPREHENSION AT MA-ALMUNAUWARAH LOLEOJAYA

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Abstract

The aim of this research is to improve students' reading comprehension using jigsaw collaborative learning method. This research used a pre-experimental research design. The sample consisted of 24 class XI students at Ma-Almunauwarah Loleojaya. Participants in this research were selected using purposive sampling technique. The instrument used in data collection in the pre-test and posttest is multiple choice. The researcher found that the pre-test data was lower than the posttest. It means that the results are included in the positive category. The research results obtained a sig value 2-tailed=0.001<0.05. Therefore, Ho was rejected and Ha was accepted. It showed that the learning outcomes of class XI students using jigsaw collaborative learning method are higher than those using conventional method at Ma-Almunauwaraha Loleojaya. So that users of the jigsaw collaborative learning method can improve students' reading comprehension. The use of the jigsaw in collaborative learning model in English subjects implicated to improve student learning achievement. The students are interested in the learning provided and students do not get bored with learning activities so that student learning outcomes can improve well.

Keywords: *Reading comprehension, jigsaw, collaborative learning.*

INTRODUCTION

Reading comprehension is the ability to read text, process it and understand its meaning. This relies on two interrelated possibilities namely word reading (being able to decode symbols on a page) and comprehension (being able to understand the meaning of words and sentences). Reading comprehension is the main pillar in reading activities where a reader builds an understanding of a text. It combines logical thinking with a collection of letters, words and sentences in the text. Reading comprehension in English texts is not only about how to read well, which includes accurate pronunciation and loud sounds.

Reading comprehension may seem easy, but there are difficulties in reading and understanding a text in English, especially experienced by Ma-Almunauwarah Loleojaya students. First, in an English text, there is a lot of vocabulary that students do not understand, thus hindering understanding of the text itself. Second, reading comprehension requires a process. This is not an ability that students usually get instantly. To obtain good comprehending skills, students must continue to be trained to be able to participate actively in the learning process so that later they can think critically. Critical thinking involves first reviewing what they receive and changing their mentality rather than just accepting something at face value. When this mentality is present, students can be smarter in capturing an idea from the text. Therefore, researcher used collaborative learning methods in teaching reading.

Collaborative learning is a group learning process in which each member contributes information, experience, ideas, attitudes, opinions, abilities and skills, to jointly improve the understanding of all members. The aim of collaborative learning is so that students are good at actualizing their thoughts and improving their mental abilities so that students can actively work together in groups to create a student-centered learning environment.

There are some steps in collaborative learning the first, before the teacher presents this collaborative learning method, students are first given an explanation and instructions about

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the collaborative learning method and the things that students must do. Than the teacher divides the students into several groups consisting of 4-5 people. After that, the teacher gives worksheets to each group, then they solve problems together. Each group is responsible for providing understanding to fellow group members. Then, each group that already understands presents it in front of the class explaining to the group that doesn't understand. If there is a group that does not understand. the task given, then the group that can complete the task explains it to the group that does not understand. At the end of the study session students are given assignments to each group to understand the material that will be taught at the next meeting. The next meeting, if someone doesn't understand, then a friend who understands or understands explains it to a friend who doesn't understand.

In this research, researcher chose to use a collaborative learning model because one of the strategies that needs to be emphasized in learning includes learning that involves collaborative forms of cooperation among students. Collaborative learning requires a modification of learning objectives from simply conveying information to constructing knowledge by individuals through group learning. Choosing a model or learning method is a solution to problems related to the success of the teaching and learning process. The right model that will be able to foster student activity in class is the collaborative learning model which can be formulated as a learning model that can develop active student participation. One of types collaborative learning is jigsaw.

Jigsaw is a type of active learning which consists of heterogeneous learning teams consisting of 4-5 people (the material is presented by students in text form) and each student is responsible for mastering a part of the learning material and is able to work on that part with other members. Jigsaw type learning is a technique that is widely used which has similarities to the exchange technique with an important difference, namely that each student teaches something, in this technique students learn with a group, where the group consists of one person. experts who discuss certain material. (Silberman, 2002).

There are several in steps in learning jigsaw the first, selection of material that can be divided into several segments/parts, the teacher divides students into several small groups according to segments/sections of material. In this jigsaw method there are home groups and expert groups. Each group gets the task of reading and understanding different material or sub-topics. Each original group sends its members to another group or expert group within the expert group, students discuss the same part of the learning material. Then, each member plans how to teach the sub topic to which members of their original group (home group) belong. After the discussion is finished, the group members then return to their original group and teach their group friends what knowledge they have gained during the meeting in the expert group. Next, each group makes a presentation or draws one of them to present the results of the group discussion that has been carried out so that the teacher can equate perceptions of the learning material that has been discussed.

There are several advantages that can be obtained through collaborative learning, the advantages of collaborative learning according to Hill (1993), namely: Higher learning achievement, deeper understanding, learning is more fun, developing leadership skills, increasing positive attitudes, inclusive learning, feeling of belonging to each other, develop future skills. Collaborative activities are directed at instilling habits to understand what is learned, an attitude of wanting to do something, and skills on how to do something.

In this research, researcher examined class XI Ma-Almunauwarah Loleojaya students using a jigsaw collaborative learning method. It is because according to field observations, it shows that some teachers especially English teachers still use learning methods that do not increase the students' active participation. then makes teaching and learning process become boring especially for the students. As a result, the learning outcomes achieved by students are not optimal and some are even below the minimum learning completeness criteria. Beside many

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students feel bored because the teacher only uses method so that students are unable to understand the material being presented.

METHODOLOGY

This research used pre-experimental with a quantitative approach. According to Sugiyono (2010), quantitative is a research method based on the philosophy of positivism which is used to research certain populations or samples, the technique is generally carried out randomly, using research data collection instruments for quantitative or statistical data analysis to determine whether to test the hypothesis that has been determined. This research aims to discuss teaching reading comprehension using the jigsaw collaborative learning model. This research method is a quantitative method. Quantitative research is the systematic empirical investigation of observable phenomena through statistical, mathematical, or computational techniques (Jhon, 2010).

This research conducted in Madrasah Aliyah Almunauwarah Loleojaya and focused on class XI students. The population in this study were 24 students class XI students of Madrasah Aliyah Almunauwarah Loleojaya. The sample in this research was class XI students at Madrasah Aliyah Almunauwarah Loleojaya, totaling approximately 24 students. The instrument in this research is in the form of multiple choice, the researcher gave 30 multiple choice questions. The test aims to obtain effectiveness data based on students' answers before and after treatment. The researcher gave pre-test in the first meeting and followed by treatment. The researcher taught eight meetings which included a pre-test and post-test. In its treatment, this research was conducted in class XI to teach reading to students. The treatment was given after the pretest where at this stage the researcher provided learning material using the jigsaw collaborative learning model. And at last, the researcher gave a post-test to students after the learning process is complete to measure how well students understand the material they have studied.

Before analyzing the data, the researcher conducted normality test, homogenity test, and hypothesis test. Analyzing data is the final step in the procedure to determine the use of jigsaw collaborative learning to improve reading comprehension. The data analysis technique used in this research are as follows:

1. Calculate the score$= \frac{\text{students correct answer}}{\text{total number of items}} \times 100$

2. Tabulating the score:

Table 1. tabulating score

Classification	Score
Excellent	86-100
Good	71-85
Fair	56-70
Poor	41-55
Very poor	<40

3. Then, after tabulaty the same, the data were analysis by using SPSS.

FINDINGS AND DISCUSSION

The findings include a description of the results from the data through test. The result presents the interpretation as follows:

Findings

Findings consist of students score of pretest and posttest, descriptive statistics, and

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hypothesis test.

a. Pre-test

At this stage the researcher gave students a test in the form of multiple choice, to measure their understanding ability based on the text. The pre-test was carried out to determine students' reading comprehension. The result of the pre-test can be see in the table below:

Table 2. The Data of Students' Pretest Results

Number	Students	Pre-test	Category
1	FU	40	Very poor
2	RM	13	Very poor
3	RL	30	Very poor
4	SA	34	Very poor
5	RJ	24	Very poor
6	SR	24	Very poor
7	GK	40	Very poor
8	NK	30	Very poor
9	HT	33	Very poor
10	AI	13	Very poor
11	NJA	30	Very poor
12	NFD	30	Very poor
13	TL	23	Very poor
14	AHJ	20	Very poor
15	SS	37	Very poor
16	AS	43	Poor
17	NRHS	27	Very poor
18	NSM	17	Very poor
19	R	10	Very poor
29	ET	23	Very poor
21	FA	20	Very poor
22	FI	30	Very poor
23	LL	33	Very poor
24	NJ	37	Very poor

Based on the table 2, in the pre-test there were 23 students who got very poor scores (40), and one students got poor scores (41-55). It the average student's score on pre-test is 27,5. In the pre-test there were no students who got very good scores. It means that the students has low reading comprehension. After gave the pre-test, than the researcher gave treatment until six meetings. The researcher did the treatment by teori learning comprehension using jigsaw collaborative learning.

b. Post-Test

After treatment, the researcher gave the posttest. Then, the result of the posttest can be see in the table below:

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Table 3. The Data of Students' Posttest Results

Number	Student	Posttest	Category
1	FU	57	Fair
2	RM	67	Fair
3	RL	50	Poor
4	SA	77	Good
5	RJ	77	Good
6	SR	60	Fair
7	GK	57	Fair
8	NK	77	Good
9	HT	47	Poor
10	AI	77	Good
11	NJA	50	Poor
12	NFD	67	Fair
13	TL	50	Poor
14	AHJ	53	Poor
15	SS	77	Good
16	AS	40	Very poor
17	NRHS	50	Poor
18	NSM	63	Fair
19	R	70	Fair
20	ET	60	Fair
21	FA	73	Good
22	FI	60	Fair
23	LL	67	Fair
24	NJ	78	Good

Based on the table 3,In the post-test, 1 students got very poor scores (40), 7 students got good scores (77-78), 10 students got fair scores (67-70), and 6 students got poor score. the pre-test there were no students who got an good score. the average student score on the pre-test is 62,67 and this is included in the far category. Based on the data table 2-3 above, it shows that the lowest pre-test score is 10 and the highest pre-test score is 40. Meanwhile, the lowest post-test score is 40 and the highest post-test score is 78. It means that there are a siginificant improvement.

c. Descriptive statistics

There are some stepst that have been used in analyzing data. Those an descriptive statistic, normality test, homogity test, and result statical.
Descriptive statistics are used to describe the data that has been collected as used in this research. Based on SPSS data processing which includes pre-test and post-test results the maximum value, minimum value, mean and standard deviation of each variable can be determined. The description of those data processing can be seen in the the following tabe 4.

Table 4. The result of descriptive statistical

[inimum	**[aximum**	**[eans**	**[d devation**

	10	43	27.54	9.046
	40	78	62.67	11.533

Based on the table 4. It can be seen that the minimum score in the pre-test was 10 and the maximum score was 43. Then, the avarange score was 27.54 with the standard devation was 9.046. Meanwhile, the minimum score in the posttest was 40 and the maximum score was 78. Then, the avarange score was 62.67 with the standard devation 11.533.

The normalization test is used to determine whether the samples obtained are truly normally distributed or not. In this study, the normalization test was determined using statistical tests with the SPSS program, namely Kolmogorov-smirnovatest. The normality results of this research can be seen in the following table:

Table 5. Test of Normality

Test of Normality

	Class	Smigron colmography			Sharpiro-Wilk		
		Statistics	Df	Sig	Statistics	Df	Sig
Student's learning outcomes`	Pre-test	0.149	24	0.182	0.969	24	0.635
	Post test	0.143	24	0.2	0.925	24	0.077

a. Liliefors significance correction

The normality test above is used to find out whether the distribution is normal or not. The condition used is if p (Asymp. Sig.> 0.05 then the results are said to be normal. On the other hand, if p < 0.05 then the results are said to be abnormal. From the normality test results above, the pretest (sig=.182) and the posttest items obtained (sig= .200) show that the test is normality. Based on instrument trials that have been carried out in the pre-test and post-test, the respective results are presented in the form of the following table.

Table 6. Homogity Test

Test of Homogity

		Leavane Statistics	Df1	Df2	Signature
Student learning outcomes	Based on average	2.484	1	46	0.122
	Based on media	2.452	1	46	0.124
	Based on median with Df adjustment	2.452	1	45.999	0.124
	Based on trimmed mean	2.495	1	46	0.121

From the output of the homogeneity test results above, it shows a sig of 0.281. It can be explained that the sig value is >0.05, so it can be concluded that the test results show that the data is homogeneous. Hypothesis testing in this study used the t test. The sample size was 24 students divided through tests in the form of pre-test and post-test. To find out whether or not there is an influence in this research, can be see the table below. The basis for making t-test decisions is as follows:

1) If the significance value (2-tailed) is >0.05 then Ho is rejected and Ha is accepted.

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2) If the significance value (2-tailed>, then Ho is accepted and Ha is rejected. In the t test used is the independent sample t-test with the help of SPSS

Table 6. Results statical

Statistics group									
	Class XI	N	Mean	Std deviton	Std error deviton				
	Pre-test	24	27.5417	9.04568	1.84644				
Student's Learning Outcomes	Post-test	24	62.6667	11.53319	2.3542				
	Independent sample test								
	Levene's test for equality	Variance	(t-test for Equality of Means)						
The same variation is assumed	F	Sig	T	Df	Sig.(2-tailed)	Mean Difference	Std. Error Difference	95% confidence of difference	
								Up	Low
Equal variances – assumed	2.484	0.122	-11.74	46	0	-35.125	2.99193	-29.1026	-41.1474
Equal variation is not assumed			-11.74	43.529	0	-35.125	2.99193	-29.0933	-41.1567

Based on the research results above, the data from test 1 in the table shows that there is a significant effect of enriching students' scores on reading comprehension with the posttest (M=62.6667 SD=11.53319), t count =-11.740, sig value (2=tailed) =0.001<0.05, then Ho is rejected and Ha is accepted, can be concluded that there is a significant difference between student learning outcomes using the jigsaw collaborative learning model in class XI. Students' skills are higher than those using the conventional method. Thus, there is an effect of using the jigsaw collaborative learning method to improve students' reading comprehension.

Discussion

In this study, researcher gave a pre-test before treatment. At this stage the researcher asked students to read the text aloud and carefully. In the pre-test, researcher gave students a test of 30 question in the form of multiple choice, which contain marks based on students' answers. From table 1, it shows that in the pre-test there were 23 students who got a very bad score (40), 1 student got a bad score (41-55). No students got good grades. This means that students' reading comprehension before and using the jigsaw collaborative learning method is still low.

Posttest given after treatment, in the posttest, researchers gave 30 multiple choice questions, which contained values based on the answers. Based on table 2, it shows that in the posttest there was 1 student who got a very bad score (40), 7 students got a good score (77-78), 10 students got a fair score (67-70), 6 students got a good score. In the posttest, no student scored very well. Although no student got an excellent score, the average score also increased. Based on research, the value of sig (sig-tailed) = 0.001 <0.05, then Ho is rejected and Ha is accepted, this shows that student learning outcomes in reading comprehension using the jigsaw

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collaborative learning model in class XI are higher than using conventional techniques. This research is based on the use of the jigsaw collaborative learning model for class XI students learning reading. This research was conducted based on a preliminary study which showed that students had difficulty learning English due to a lack of comprehension in reading, and the methods used by teachers to teach reading comprehension in a conventional way. The aim of this research is to improve students' reading comprehension and knowledge using the jigsaw collaborative learning method. The research results concluded that this research was positive, because the test value increased below the number on the graph. In their research, it was stated that several factors contributed to these positive results.

Students' reading comprehension increased after learning using the jigsaw collaborative method. The research results show that there is a significant difference between the results before and after the teaching and learning process using the jigsaw collaborative learning method. This is because students learn using the jigsaw collaborative learning method to increase their experience and new knowledge. For example: they can improve their ability in finding main detail information. The results of this study showed that there was an increase in scores after treatment. Similar to previous research conducted by Riyawi (2018), he concluded that learning using collaborative learning methods can improve students' reading comprehension abilities. There are significant differences in teaching reading using the jigsaw collaborative learning method.

Researcher use this method because the jigsaw collaborative learning method can be adapted to the researchers' needs. This research also aims to introduce students to interesting learning methods/models so that students take part in interesting learning without feeling bored because of the interesting methods. This jigsaw collaborative learning method can also improve students' reading comprehension as stated by (Arends, 1997). The jigsaw teaching technique was developed as a collaborative learning method. This technique can be used in several subjects, including language. This technique is suitable in all classes.

The jigsaw collaborative learning method is based on material as the core of learning which consists of several cycles, namely pre-test, task cycle and language focus. In the pre-test; The teacher only explains the learning topic. Then in the task cycle there is planning, in this planning in the form of, for example, dividing students into several groups, in these groups there is a home group and an expert group, after that each home group sends one of its members to the expert group to then discuss the same part of the learning material. Then the discussion is finished, the members return to their respective groups of origin and teach their group friends what they have learned from meeting in the expert group. Then the teacher asks students from each group to present the knowledge they have gained in front of the class. In the next cycle, namely language focus; The language focus itself is where the teacher looks at vocabulary where students are still confused in interpreting a word. The reason why this research was conducted was because when the researcher conducted interviews with several students and English teachers at the school, in the process of teaching and learning English, the students felt bored. Even during the learning process, students often play, enter and leave the room, and do not even want to participate in the teaching and learning process. Thus, using the jigsaw collaborative learning method can improve students' reading comprehension as stated in the data obtained by researchers in the research. This is line with the research conducted by Zagato (2016) which stated CSR is very helpful for students in determining the main idea and drawing conclusion from a text that is read. Furthmore, Sawitri (2019) also stated that the research the result of teaching reading comprehension utilizing a CSR were higher than using a collaborative technique.

Based on research conducted by Riyawi (2018). The results of this research show that the jigsaw collaborative learning method can improve students' reading comprehension. This means the class research was successful. Then the researcher concluded from this data, the

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jigsaw collaborative learning method is suitable to use because it makes students more active, student participation and grades increase students' reading abilities. Related to students ability to understand vovabulary in reading, the researcher found there were several words that difficult for students, such as adjective became they less know the mean of the words.However, based on the research, the students facts happy when learning reading comprehension using this method. Thus, this method can help teacher in teaching reading comprehension.

CONCLUSION

Regarding the data that has been collected through the pre-test and post-test, it can be seen that the students' reading comprehension scores before being given treatment were not good. However, after being given treatment, the value increased. This can be seen from the posttest scores which are higher than the pre-test.

The output, the data from the t test results in the table shows that there is a significant influence on the enrichment of class XI students' grades using the jigsaw collaborative learning model with posttest (M=62.6667SD=11.53319), t count =-11,740, sig value (2=tailed) =0.001<0.05. Then Ho is rejected and Ha is accepted. It can be concluded that there is a significant difference between learning outcomes using the jigsaw collaborative learning method. Students' skills are higher compared to using conventional techniques. Thus, there is an influence on the method to improve students' reading comprehension.

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