THE EFFECTIVENESS OF JIGSAW TECHNIQUE IN TEACHING READING AT THE SECOND GRADES STUDENT OF SENIOR HIGH SCHOOL

Ahmad Zuhri Rosyidi[1*], M. Wahyu Hadi[1]
[1]Program Studi Pendidikan Bahasa Inggris, Institut Pendidikan Nusantara Global, Indonesia
*Corresponding author email: rosyidiahmad08@gmail.com

ABSTRACT

The purpose of this research is to find out the effectiveness of Jigsaw technique in teaching reading. This study used an experimental design. The population of the research was 29 students and the sample was taken 29 students from all of the population. To take the sample the present researcher used purposive sampling technique. In collecting data, the present researcher used instrument to measure students' effectiveness of Jigsaw Technique in reading. To analyze data, the present researcher used paired-samples t-test to find out the effectiveness of the technique. The result of data analysis that there was a significant difference in the scores between the pre-test and the post-test, was significance at p = 0.000, meaning that the null hypothesis is rejected (Ho) and alternative hypothesis is accepted (Ha).It means that there was a significant effectiveness of Jigsaw Technique in teaching reading for the tenth graders of MA NW Sikur in the academic year 2023-2024.

Keywords: Jigsaw Technique, Student's Reading Achievement, Eleventh Grade Students.

INTRODUCTION

Language is a medium used by humans to communicate. Language has existed since humans were born into this world. This means that language goes hand in hand with human existence. So, it can be concluded that language and humans are elements that cannot be separated from each other. Each language in this world has a construction in the human brain that is used by humans based on the need to communicate. Noam Chomsky (2002) stated that language is a reflection of thought. This means that when we want to express or think about something, someone will use language as a tool to convey it (Burhanudin, et al. 2020).

In acquiring language process there are three ways how to learn Language those are imitation, practice and reinforcement. Imitation is a process by which individuals learn to perform a behavior pattern as a result of observing another animal performing a similar action (Laland & Bateson, 2001). In this step the student try hears and imitates word or sentence in the target language and keep it in their brain (Speidel, & Nelson, 2012). Gintings (2008), states that the practical is a learning method in which learners or students carry out training or practical activities in order to have greater assertiveness and skills than the theory they have learned. In this case the students try to utterance the word or sentence. Reinforcement is a process how the student tries to use word or sentence in their society.

In teaching learning process, teacher has important roles to support the process of learning such as teacher as controller, teacher as prompter, teacher as participant, teacher as resources, and teacher as tutor. When teachers act as the controller they are in charge of the class and of the activity taking place and are often leading from the front. Teachers always guide their students in the nature of teaching learning process and their charismatic will give obvious advantage to control their students effectively. Teacher as prompter when students lose the thread of what is going on or they are lost for words in a role-play activity, teacher should involve and encourage student to think creatively. The teacher as participant when the teachers have time to join in an activity not only as teacher but also as participant, Student will be enjoy if teacher comes into their activity as participant. Teacher as resources is when teacher help the student have a trouble about unknown knowledge. Teacher should prepare time and patient in directing student with their knowledge, materials and etc. The last one is Teacher as tutor. It is essential for us to act as tutors time to time. Teachers can combine another role and in exact composition.

Nowadays, English has become an international language and every country persuades their citizens to learn English as tool of communication among people around the world (McKay, 2018). It means that we have to master English if we don't want to be isolated people.

English will be useful when we want to talk, make business relation and so on. So, English is the basic language for international communication. There are four basic skills in English competency. They are listening, Speaking, reading, and writing (Rosyid, 2018). Reading is one of important language skills which help students in the process of learning English (Rosyid & Darmanto 2020). In teaching and learning English the teacher usually find students difficulties in reading English text, because

the student should be understand all the contents of reading materials such as; Topic sentences, theme, main idea, and answer the question that related with the text. From the statement we can conclude that reading is not only read the text or passage but also how to understand and give a meant the message from the text.

The problem above was found also at the eleventh grade students of *MA NW Sikur* in the academic year 2023-2024. In order to encourage the students reading, English teachers should be provided an interesting method that can improve students' reading achievement so they become active learners. A method that can help teachers to develop student's skill in reading is jigsaw technique. Aronson (1978) jigsaw is a cooperative learning strategy that enables each student could learning at home by group specialize in one aspect of a leaning unit. In jigsaw technique, teacher divides students into several groups. Every group consists of 5 students. They will read one text and each member of group must present their opinion about the point of reading text. After that, they will share their opinion about particular text and it usually follows by discussion in the intensive class. Students will be active because of the discussion. Teacher directs students in order they still in the right side of the method nature. Teacher also gives an instruction regarding the rule of the discussion and help students in anyway. From the explanation above about the problem in reading and the benefit of using jigsaw technique, this paper was decided to focused on using jigsaw technique in teaching reading.

RESEARCH METHOD

The method that used in this research was a pre-experimental design. It means that the present researcher performed the data by treating the subject which would be investigated.

In this case, the present researcher analyzed one variable that is teaching reading through jigsaw technique. The experimental design was used to test the hypothesis is "one group pre test- post test" design. It is shown in Table 1.

Table1: Research Design

Research Design			
Subject	Pretest	Treatment	Post test
S	Y_1	X	Y_2

(Ary, et al. 2010)

The population of this research is all the eleventh grade student of *MA NW Sikur* in academic year 2023-2024. The population of this research is 29 students, and the writer takes 100% from the total of population as the sample of the study. If the number of population of the research is less than 100 persons, it is better to take them all, but if the number of population is more than 100 persons, it is better to take 10 %, 25 %, 30 % of the population (Arikunto. 2016).

The data of this research was taken from the student scores in English reading texts. Reading test is taken from a text book for grade XI entitled English for Senior High School as researcher materials. Teacher used jigsaw technique to give instruction about the material then the group is tested twice by the same test. The test is constructed in multiple choices that consist of 40 items about reading comprehension. So, the highest possible score for students is 100, then, the individual scores of group are analyzed statistically as the consideration in drawing conclusion of the research.

In analyzing the data, this paper used three step of analyzing process those are:
1. Descriptive Statistics

Descriptive statistical analysis is the statistics used in analyzing data by describing or illustrating the data that has been collected with the aim of providing an overview or describing data in variables seen from the average (mean), minimum, maximum and standard deviation values (Sugiono 2013). In this paper the data has been calculated by using SPSS Statistics 22 for Windows.

2. Testing Hypothesis

This hypothesis test aims to test hypotheses related to the effective jigsaw technique in teaching reading to the eleventh grade students at *MA NW Sikur* in the 2023-2024 academic year. In measuring the collected data, researchers are currently using one measurement technique, namely SPSS Statistics for Windows. In this research, researchers used Paired-Sample T Test using SPSS Statistics for Windows to calculate data. The paired sample T test is used if we have measurements for the same variable on two different occasions for the same subject, or when we have values for the same variable for matched pairs of cases (Moedjito, 2014).

FINDINGS AND DISCUSSIONS

Descriptive Statistic

In this part, present researcher presents the description about the students reading for the eleventh grade students of *MA NW Sikur* after following the pre-test, treatment, and post-test. In collecting the data, the present researcher used multiple choice texts. To know the students' prior ability in reading; the present researcher gave the pre-test. After pre-test was done, jigsaw technique conducted during teaching and learning process. At the end of the research, the present researcher gave post-test to know the

students achievement after following the treatment.

Descriptive statistical analysis is statistics used to analyze data by describing or illustrating the data that has been collected. According to Ghozali (2009), this analysis aims to provide an overview or describe the data in variables seen from the average (mean), minimum, maximum and standard deviation values. Descriptive statistics are statistics used to describe data into clearer and easier to understand information that provides an overview of the research results.

The results of descriptive statistical analysis research can be seen in table 2 below:

Table 2: Descriptive statistic

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
PRE-TEST	29	26	37	31.52	2.627
POST-TEST	29	29	40	34.97	2.413
Valid N (listwise)	29				

Based on table 2 above, it shows that N or the number of data for each valid variable is 29, from 29 data the Pre-test results can be known; The minimum value is 26, the maximum value is 37. Furthermore, the mean value from the pre-test is known to be 31.52, and the standard deviation value is 2,627, which means the mean value is greater than the standard value so that the data deviation that occurs is low so the value distribution is even. .

Furthermore, from the table above it is also known that the lowest score from the post-test is 24 and the highest score is 40. The mean value from the post-test is known to be34,97, and the standard deviation value is 2,413, which means the mean value on the post-test is also greater than the standard

value. so that the data deviation that occurs is low so the value distribution is even.

Normality Test

The calculation of normality testing was used to check whether the distribution of pre-test and post-test was normal or not. Moreover, the data is said to be normal if the values of the significance level of pre-test and post-test are more than the values of the significance $(p) = 0.05$.

Table 3: Normality Test

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
PRE-TEST	.128	29	.200*	.979	29	.8...
POST-TEST	.172	29	.028	.950	29	.1...

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

According to the result of One-Sample K-S above, all of the values of Kolmogorov-Smirnov in pre-test and post-test were higher than the values of the significance $(p) = 0.05$. The value of Kolmogorov-Smirnov in pre-test was 0,822 while the value of significance in post-test was 0.185. It implied that the data was normal.

Homogeneity Testing

This test was conducted to know that the data are homogenous. Moreover, the data was said to be homogenous if the values of the level significant is greater than $p = 0.05$.

Table 4: Homogeneity test

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
HASIL BELAJAR	Based on Mean	.457	1	56	.502
	Based on Median	.375	1	56	.543
	Based on Median and with adjusted df	.375	1	55.731	.543
	Based on trimmed mean	.458	1	56	.501

Based on the calculation of One-Way ANOVA, the value of $p = 0.007$ at Levene's test is 7.768. The value of $p = 0.007$ that more than 0.05, it meant that the data was homogeneous.

Hypothesis Test

Testing hypothesis was conducted to know whether null hypothesis was accepted or rejected. To analyze whether there was a significant difference in the mean score between the pre-test and the post-test, the present researcher used a paired-samples t-test to get answer of the hypothesis.

Table 5: Hypothesis test

Paired Samples Test

		Paired Differences							
					95% Confidence Interval of the Difference				Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	
Pair 1	PRE-TEST - POST-TEST	-3.448	2.861	.531	-4.537	-2.360	-6.491	28	.000

Related to table above, the result of paired-samples t-test shown that there was a significant difference in the scores between the pre-test and the post-test, because the Sig. 2-tailed from the test was = 0.000, meaning that the null hypothesis was rejected and alternative hypothesis was accepted. It meant that there was the effective of Jigsaw technique in teaching reading for the eleventh grade student of *MA NW Sikur* in the academic year 2023-2024.

Related to result of calculation above can be said that the use of Jigsaw Technique in Teaching Reading was effective. This finding relevant with Safkolam, et al (2023) They said that Jigsaw technique is one learning management that can improve learning achievement and learning retention. Besides that this method is characteristically carried out in small groups and takes advantage of the social aspect of learning through discussion, problem solving, and study with peers.

CONCLUSION

The result of obtained data from an experiment, it is found that jigsaw technique in teaching reading for the eleventh grade students of *MA NW Sikur* is effective. It can be proven by the result of the pre-test and the post-test, *because* the Sig. 2-tailed from the test was = 0.000. It is mean that the null hypothesis was rejected and alternative hypothesis was accepted.

REFERENCES

Arikunto, Suharsima. (2016). Prosedur Penelitian Pendekatan Praktek. Jakarta.Rineka Cipta.

Aronson, E., Blaney, N, Stephan, C, Sikes, I, & Snapp, M, 1978. The Jigsaw Classroom , Beverly Hills, CA: Sage.

Burhanuddin, B., Rosmiaty, R., & Fadilah, N. (2020). A Correlative Study on EFL Students' Binge Watching Behaviors and Their Vocabulary Mastery. ELT Worldwide, 7(2), 116-119.

Chomsky, N. (2002). *On nature and language*. Cambridge University Press.

Donald, A., Jacobs, L. C., Razavieh, A., & Sorensen, C. (2010). Introduction to research in education. New York: Nelson Education, Ltd.

Gintings, A. (2008). Essensi Praktis Belajar dan Pembelajaran. Bandung: Humaniora.

Laland, K. N., & Bateson, P. (2001). The mechanisms of imitation. *Cybernetics & Systems*, *32*(1-2), 195-224.

McKay, S. L. (2018). English as an international language: What it is and what it means for pedagogy. RELC Journal, 49(1), 9-23.

Moedjito. 2014. Basic statistic for research in language education. Unpublished Modul: STKIP Hamzanwadi Selong, Nusa Tenggara Barat, Indonesia.

Rosyidi, A. Z. (2018). The Effectiveness of Problem Based Learning (PBL) Method in Teaching Reading. *IJECA (International Journal of Education and Curriculum Application)*, 17-22.

Rosyidi, A. Z., & Darmanto, D. (2020). A Study on Students' Ability in Reading Descriptive Text; A Case Study at SMAN 1 Sikur. *Journal of Languages and Language Teaching*, *8*(3), 330-335.

Safkolam, R., Ahmad Zaky El Islami, R., & Sari, I. J. (2023). The Effects of Jigsaw Technique on Learning Achievement and Retention of Science Teacher Students. Shanlax International Journal of Education, 11(3), 37–42.

Speidel, G. E., & Nelson, K. E. (Eds.). (2012). *The many faces of imitation in language learning* (Vol. 24). Springer Science & Business Media.

Sugiyono, D. (2013). Metode penelitian pendidikan pendekatan kuantitatif, kualitatif dan R&D.