



## IMPROVING STUDENTS' VOCABULARY THROUGH JIGSAW TECHNIQUE

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### ABSTRACT

*Mastering English vocabulary is crucial for students when they want to speak or write well in English. This pre-experimental study employed pre-post tests design which was aimed at finding out whether or not jigsaw technique improved students' vocabulary mastery. The population was the Eighth Grade of SMP Negeri 1 Bajeng Gowa in academic year 2016/2017 that consisted of 36 students. There were two variables; they are independent and dependent variables. The independent variable is the use of Jigsaw Technique and dependent variable is the students' vocabulary mastery. The result of the data showed that there was a significant difference between students' post-test and pre-test. The mean score of post-test was 75.11 which is greater than the mean score of pre-test that was only 55. Furthermore, it is found that the value of t-test (11.83) was greater than t-table (2.030) at the level of significance .05. It means that there is a significant difference between the result of the students' pre-test and post-test. Therefore, the alternative hypothesis was accepted while the null hypothesis was rejected. This finding indicated that using Jigsaw Technique improved the students' vocabulary.*

**Keywords:** *improving, vocabulary, and jigsaw technique*

### INTRODUCTION

Language is a means of communication for people to use. Among language in the world, English is placed in highest priority to choose since people from many countries use it to communicate each other orally or written.

There are four skills to learn in English as well as four language components to teach such as grammar, pronunciation, spelling and vocabulary. Of those components, vocabulary is the crucial one in requiring and understanding a language. A good vocabulary goes hand in hand with an ability to think logically and to learn easily and quickly. A good deal range of vocabulary and an ability to use words correctly and effectively can be a passport to worlds of interesting and exciting information. The tense of English can be in the past, present and future depending on the time when the people speak.

Based on the interview of the English teacher at Eighth grade students of SMP Negeri 1 Bajeng, it is found that the vocabulary mastery of students in 2015 - 2016 academic year is very low, it is about 6.0 mean score while the target score is 7.5. Another problem that students faced in using vocabulary is that most of them had lack of vocabulary. They are not interested to learn English, as they think English is difficult to study like Mathematics. This way becomes bored and there is no fun in the learning process. In this case the students have to use vocabulary critically and the teacher must select the suitable technique or strategy to teach it. Even though, some techniques and approaches have been employed in teaching vocabulary, but the students' vocabulary mastery is still low.

From those problems mentioned previously then the writer considered to use jigsaw as one of techniques in teaching vocabulary. She considered teaching

vocabulary by using jigsaw technique is good to enrich vocabulary mastery of the students. By using jigsaw technique the students are facilitated to memorize the words easier and better than the students work in groups, jigsaw technique has great potential to increase and stimulate the students in learning vocabulary.

### **What is Jigsaw?**

Jigsaw is technique that will give the students good feel in learning and teaching process, but in Aronson (1978: 16) argued that jigsaw is a cooperative learning strategy that enables each students could learning at home by group specialize in one aspect of a leaning unit. Students meet with members from other groups who are assigned the same material, and after mastering the material, return to the home group and teach the material to their group members. Just as in a jigsaw puzzle, each piece each student's part is essential for the completion and full understanding of the final product. If each student's part is essential, then each student is essential. That is what makes the Jigsaw instructional strategy is effective.

Clarke (1994 : 3) states “The jigsaw structure is somewhat complex. It may be best suited for when the students are comfortable with group work. There are high expectations and responsibilities placed on the students. Teaching the students in the original group can be having experience for each student. This situation will be increased if the jigsaw structure both of two or more group members share the same material and then join with another pair of students, if the section are more open-ended so there is no single right answer, or if students are encouraged to take notes during the focus groups to provide a support when the original groups reassembles”. When the students are in their original groups, they discussed the material to increase the chances that each report will accurate,

Jigsaw is a technique that make students work together. This technique allows students to know each other, and make a good relationship in learning process. Thus, they can feel good and enjoy to study.

### **The purpose of jigsaw**

Jigsaw technique in learning, is to allows students to be introduced material and maintain a high level of personal responsibility. The purpose of Jigsaw is to develop teamwork and cooperative learning skills within all students. In addition it helps develop a depth of knowledge not possible if the students were to try and learn all of the material on their own. Finally, because students are required to present their findings to the home group, Jigsaw technique in learning will often disclose a student's own understanding of a concept as well as reveal any misunderstandings of each student in group.

### **How to adapt jigsaw**

Students will be creative in learning process and the students will have good relationship of each other. Aronson et al (1978:112) stated that limitless ways of adapting the jigsaw structure in terms of the size of the groups, the range of topics and the demonstration of mastery of those topics. Teachers have developed many variations.

### **Definition of vocabulary**

There are some definitions of vocabulary. Some of them are quoted in the following:

Hornby (1973: 1425) defined vocabulary as follows:

- 1) Vocabulary is the total number of words that make up a language.
- 2) Vocabulary is the body of words known to a person or used in particular book, subject, etc.

- 3) Vocabulary is the first of words with their meaning, especially on which accompanies a textbook in a foreign language.

Ur (1996:60) stated that vocabulary can be defined, roughly, as the words we teach is the foreign language. However a new item of vocabulary may be more than a single word which is made up of two or three words but express a single idea. There are also multiword idioms where the meaning of the phrases cannot be defined from an analysis of the component word.

Meanwhile, Asmah (2009:12) stated that vocabulary is very important in a language when we learn in language including English it always mean that we learn the word of the language.

According to Davis in Jenet (1999: 5-6) “vocabulary knowledge is related to and affects comprehension. The relationship between word knowledge and comprehension is unequivocal”. Recent research showing the connection between word knowledge, concept development, and prior knowledge and the impact these have on reading comprehension indicates that some drastic changes in our teaching methods are warranted.

From the statement above, it can be concluded that vocabulary is a group of words that create a language. Vocabulary is very important because without learning vocabulary we are difficult to communicate with others.

### **Kinds of Vocabulary**

Vocabulary is necessary to give students something to hang on to when learning any kind of subject. Vocabulary also has many classifications as suggested by some experts namely:

Harmer (1991:159) divides vocabulary into two types, they are:

- 1) Active Vocabulary  
It refers to vocabulary that has been learnt by the students and can be used in speaking and writing. They are expected to be able to use it.
- 2) Passive Vocabulary  
It refers to word which students will recognize when they met them, but they will probably not be able to produce.

Good (1973:462) divided vocabulary into four kinds they are follows:

- 1) Oral Vocabulary  
The oral vocabulary is refers to words that a person employs them in expressing ideas orally and actively. It is consisting of word actively used in speech used that comes readily to tongue of the one’s conversation.
- 2) Writing Vocabulary  
The writing vocabulary refers to words commonly used in writing, it is stock of words that come readily to one’s vocabulary it commonly in writing.
- 3) Listening Vocabulary  
The listening vocabulary refers to a person who can be understood when they are heard.
- 4) Reading Vocabulary  
The reading vocabulary refers to someone who can recognize them when he finds them in written form.

### **RESEARCH METHOD**

This study applied a pre-experimental method with one group pretest and posttest. Before the treatment, the students gave a pretest then, at the end of the treatment the students gave posttest to get the data of the research question “Is Jigsaw Technique effective to improve students’ vocabulary at the eighth grade of SMP Negeri 1 Bajeng, Gowa?”

**FINDINGS AND DISCUSSIONS**

**The Effectiveness of Jigsaw in Improving Students’ Vocabulary**

To find out the answer of the research question, pre-test was administrated before the treatment and post-test was administrated after doing the treatment which aimed to know whether there was a significant difference of the students’ vocabulary before and after the treatments by using Jigsaw Technique.

The application of Jigsaw Technique was effective in increasing students’ vocabulary at the Eighth Grade Students of SMP Negeri 1 Bajeng, Gowa.

After calculating the result of the students’ score, the mean score of students’ vocabulary in pre-experimental class was presented in table :

**Table 1.** The Students’ Mean Score on vocabulary

Indicators	Students’ Mean Score		Improvement
	Pre-test	Post-test	
Vocabulary	55	75,11	36,56 %

Table1 shows that the students’ mean score in pre-test was 55 and the students’ mean score in post-test was 75,11. Thus, the improvement of the students’ mean score of pre-test and post-test was 36,56%. It means that, the mean score of post-test was higher than pre-test.

**The Classification of Students’ Pretest and Posttest**

**Table 2.**The Rate Percentage of Students’ vocabulary Score in Pre-test

N o.	Classificatio n	Score	Freque ncy	Perce ntag e
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1.	Excellent	96 – 100	0	0%
2.	Very Good	86 – 95	0	0%
3	Good	76 – 85	2	5,56%
4.	Fairly Good	66 – 75	9	25%
5.	Fair	56 – 65	8	22,22%
6.	Poor	36 – 55	13	36,11%
7.	Very Poor	00 – 35	4	11,11%
Total			36	100%

Table 2 shows the rate percentage of the 36 students’ pretest namely; none of the student are in excellent and very good category, 2 or 5.56% of the students are in good category. There are 9 or 25% students got fair, and 13 or 36,11% students are in poor category, and the last 4 or 11.11% students are in very poor category.

**Table 3.**The Rate Percentage of Students’ vocabulary score in Post-test

No.	Classificatio n	Score	Freq uenc y	Perce ntag e
1.	Excellent	96 – 100	5	13.89%
2.	Very Good	86 – 95	3	8.33%
3	Good	76 – 85	7	19.44%
4.	Fairly Good	66 – 75	6	25%
5.	Fair	56 – 65	12	33.33%
6.	Poor	36 – 55	-	0%
7.	Very Poor	00 – 35	-	0%
Total			36	100%

Table.3 shows the rate percentage of the 36 student’ score on the post-test namely; 5 or 13.89% students got excellent. There are 3 or 8.33% students got very good, and 7 or 19.44 % students got good, 6 or 25% students are in fairly good category and 12 or 33.33% students got fair., and none of the students got poor and very poor category. It means that the rate percentage in

posttest was greater than the rate percentage in pretest.

The significant score between the students mean score in Pre-test and Post-test can be known by using T-test. The result of T-test showed that Jigsaw Technique is effective to increase the students' vocabulary. This findings is in line with Arronson (1978:16) who propound that Jigsaw Technique enables each students could learning by group. In this technique, the students meet with members from others groups who are assigned the same material, and after measuring the materials they return to their group and teach the material to their group members. In a Jigsaw puzzle, each students part is essential for the completion and full understanding of the final product. Therefore, Jigsaw Technique will give the students good feel in learning vocabulary and the students can increase their vocabulary each other as a team. That is why Jigsaw Technique is effective in increasing the students vocabulary at the eighth grade students of SMP Neg. 1 Bajeng, Gowa. The result of T-test can be seen in the Table 4.

**Table 4.** Distribution the Value of T-test and T-table in Post-test

Variable	t-test value	t-table value
Vocabulary	<b>11,83</b>	<b>2.030</b>

Table 4 shows that t-test value was greater than t-table. The result of the test shows there was significant difference between t-table and t-test ( $2.045 < 11,83$ ), it means that, t-table was lower than t-test.

Seeing at the result, then it comes to the conclusion that the null hypothesis ( $H_0$ ) was rejected and while alternative

hypothesis ( $H_1$ ) was accepted. It means that teaching English through Jigsaw Technique is effective in improving students' vocabulary.

The description of the data collected from students' vocabulary in terms of noun, verb and adjective, as explanation in the previous section showed that the students' vocabulary had improved. It was supported by the mean score and percentage of the students' pre-test and post-test. Based on the findings above, the use of jigsaw technique made students to gain higher

In the first meeting, the pre-test is distributed. It seems that most of students did not know how to differentiate which one is noun, verb and adjective. This caused by students' lack of vocabulary. It could be seen in Table1 that the students' vocabulary achievement in pre-test was poor, it was only 55. While test had improved 75,11. It was higher than pre-test score.

It means that implementation of Jigsaw Technique in treatment of students' SMP Negeri 1 Bajeng was success to make students know kinds of noun, verb and adjective.

The result of the T-test statistical analysis showed that the students were easier to understand the material because they work together. It proved by the t-test value is 11,83 was higher than t-table value (2.030) at the level of significance 0,05 and the degree of freedom ( $N_1 - 1$ ) =  $36 = 36 - 1 = 35$ . It means that the null hypothesis ( $H_0$ ) was rejected and alternative hypothesis ( $H_1$ ) was accepted.

Jigsaw Technique could improve the students' vocabulary. It was proved by the result of students achievement in vocabulary. In line with Aronson (1978:16) propound that jigsaw technique enable each students could learning by group. In this technique, the students meet with members from other groups who are assigned the

same material, and after mastering the materials they return to their group and teach the material to their group members. In this technique each students part is essential for the completion and full understanding of the final product.

Jigsaw Technique can also develop teamwork and cooperation learning skill with all students. In addition I helps develop depth of knowledge for each students. Teaching students in a group can be having experience for each students, because the students will study together, sharing information by each groups. So they feel comfortable with group work. Therefore, jigsaw technique will gave the students feel good in learning vocabulary, because they study and help each other in mastering vocabulary. That is why Jigsaw Technique is effective in increasing students vocabulary.

Viewing the discussing above. It can be argued that the Eighth Grade Students of SMP Negeri 1 Bajeng, Gowa was effective in learning vocabulary by using Jigsaw Technique. Further, it can be concluded that using Jigsaw Technique in learning can make students more active and motivated in the teaching and learning process.

## CONCLUSION

Based on the research findings and discussions, then it can be concluded the use of Jigsaw Technique was effective to improve students' vocabulary at the Eighth Grade Students of SMP Negeri 1 Bajeng, Gowa. It was proved by the students mean score improves from Pre-Test to Post-Test. The students mean score of Pre-Test was 55 in Post-Test was higher than mean score of Pre-Test. The improvement was also proved by the value of t-test is 11.83 which is bigger than the ratio on t-table (2.030). The result of the t-test statistical analysis was also proved that the use of Jigsaw Technique

improve significantly students' vocabulary at the eighth grade of SMP Negeri 1 Bajeng, Gowa.

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