

IMPROVING ENGLISH VOCABULARY MASTERY OF GRADE VIII STUDENTS THROUGH STUDENT TEAM ACHIEVEMENT DIVISION (STAD) METHOD

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Abstract

The objective of this research is to find out whether the application of STAD method can improve the English vocabulary mastery of grade VIII students of SMP Negeri 19 Palu. This research applied quasi experimental research design in which the two groups had posttest. The population was Grade VIII students of SMP Negeri 19 Palu. The samples were Class VIII D as the experimental group and VIII A as the control group which contained 17 students for each. Experimental group was given the treatment, while the control group was not. The technique of data collection was test. The data were analyzed descriptively and statistically. Having analyzed the data, the researcher found that there were different score obtained from the control group and the experimental group. In other words, the t-counted (6.6) was greater than the t-table (2.0). In this case, the research hypothesis was accepted. Hence, the use of students team achievement division method can improve the students vocabulary mastery of the grade VIII students of SMP Negeri 19 Palu.

Key words: Improving, Vocabulary, Students Team Achievement Division

INTRODUCTION

Studying a language cannot be separated from studying the components. One among the other components of a language is vocabulary. Vocabulary is association of letters that have meaning and can be used to the human in the language. As a matter of fact, it contains the words that someone knows or uses or all the words in a particular language. We know that words support the speakers in communication to express their ideas. Having a good knowledge of vocabulary supports students to master English.

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Many students cannot read and understand a text which is written in English because they did not have a good mastery of vocabulary, or they doubt to express their idea in English because they have limited vocabulary in their mind. According to researcher's preliminary research at SMP Negeri 19 Palu, the ability of grade VIII students in learning the language was still low especially in memorizing, spelling, pronouncing the words that have been taught by their teacher. Besides, when the researcher asked some of the students about English words such as how to say "*papan tulis*", "*penghapus*", "*kamus*" in English, they did not know the answer. One of factors that caused the problem is the students usually do not pay attention to the lesson because they think that English is difficult lesson and it is not interesting to be studied.

To solve these problems, the researcher used STAD method. Based on the problem above, the researcher tried to solve by using students team achievement divisions (STAD) method. It is the simplest method of cooperative learning method (Slavin, 1995: 12). By STAD method, the researcher believes that it can motivate the students in order that they can support and help each other. In STAD methods, students are assigned to four or five member learning teams that are mixed in performance level, gender, and ethnicity. The teacher presents a lesson, and then students work within their teams to make sure that all team members have mastered the lesson. Finally, all students take individual quizzes on the material, which they may not help one another. Students quiz scores are compared to their own past averages and point are awarded on the basis of the degree to which students meet or exceed their own earlier performance.

The subject of this research was grade VIII students of SMP Negeri 19 Palu. Based on that problem, The researcher formulated the problem of this research as follows: "*can the use of students team achievement division method improve the English vocabulary mastery of grade VIII students of SMP Negeri 19 Palu?*" The objective of this research was to find out whether the application of students team achievement division method can improve the English vocabulary mastery of grade VIII students of SMP Negeri 19 Palu.

METHODOLOGY

The design of this research was quasi experimental research design. It is constructed from the situations which already exist in the real world, and probably more representative of the conditions found in educational context (Seliger and Shohamy, 1989:148). In this research, there were control and experimental groups. The experimental

group was given treatment, while the control group was not. The researcher used formula that is proposed by Seliger and Shohamy (1989:149) as follows:

$$\begin{aligned} \text{Experimental group} &= O1 \ X \ O2 \\ \text{Control group} &= \frac{O3 \ O4}{\quad} \end{aligned}$$

Where:

- O1 and O3 = pre-test
- O2 and O4 = post-test
- X = treatment

The researcher chose the grade VIII students at SMP Negeri 19 Palu as the population of the research. There were 74 students that were divided in four classes. The distribution was in the following table:

Table 1
Class Distribution

No.	Classes	Number of Students
1.	VIII A	17
2.	VIII B	20
3.	VIII C	20
4.	VIII D	17
Total		74

Sample is a small number of population that are selected by researcher. Like Best (1981:8) explains, “sample is a small proportion selected for observation and analysis”. In taking sample of this research, the researcher used a purposive sampling technique. She applies that sampling technique because it is appropriate to the design of the research. Furthermore, the teacher of English at SMP Negeri 19 Palu recommended to conduct the research in those two classes because they still have problems in learning English vocabulary.

There were two variables: they were dependent variable and independent variable. Related to the title of this research which is improving English vocabulary mastery of grade VIII students of SMP Negeri 19 Palu through STAD method, the dependent variable in this research was vocabulary of grade VIII students of SMP Negeri 19 Palu, while the independent variable was STAD method.

The researcher used test as a research instrument. There were two kinds of tests; they were pre test and post test. Pre test was conducted before the treatment, and post test was given after treatment. The researcher got the data after conducting the test. In this research the data were collected through observation and test (post-test) as the research instrument. The data obtained from the observation are explained descriptively. The post-test are analyzed statistically. The first, to count the individual score, the researcher used the formula stated by Sutomo (1985:123) as follows;

$$\text{Individual score} = \frac{\text{obtainscore}}{\text{maximumscore}} \times 100$$

The second, to know the mean score of students, the researcher utilize the formula as proposed by Hatch and Farhady (1982:55) as follows:

$$\bar{X} = \frac{\sum x}{N}$$

Where:

X = mean score in pre-test or post-test

$\sum x$ = students' gained score

N = total number of students

The third, after getting the mean score, to calculate the deviation between students score in experimental class and students' score in control class, the researcher used the formula written by Hatch and Farhady (1982:55) as follows:

$$Md = \frac{\sum d}{n}$$

Where:

Md = mean deviation between pre-test and post-test

$\sum d$ = total deviation between post-test and pre-test

N = total number of students

After got the mean score of both experimental and control groups, the researcher computed squared deviation. She wanted to find out the significant difference between them. The researcher used t-test formula proposed by Arikunto (2006:312) as follows:

$$\sum x^2 = \sum x^2 - \frac{(\sum x)^2}{N}$$

$$\sum y^2 = \sum y^2 - \frac{(\sum y)^2}{N}$$

Where:

$$\sum x^2 = \text{deviation score of experimental group}$$

$$\sum y^2 = \text{deviation score of control group}$$

$$N = \text{number of students}$$

Then researcher analyzed the data in order to find out the significant difference or testing hypothesis by using t-count formula as proposed by Arikunto (2006:311) as follows:

$$t = \frac{Mx - My}{\sqrt{\left[\frac{\sum x^2 + \sum y^2}{n_x + n_y - 2}\right] \left[\frac{1}{n_x} + \frac{1}{n_y}\right]}}$$

Where:

$$Mx = \text{Mean of experimental group}$$

$$My = \text{Mean of control group}$$

$$\sum x = \text{Sum of squares on experimental group}$$

$$\sum y = \text{Sum of squares on control group}$$

$$n_x = \text{Number of experimental group}$$

$$n_y = \text{Number of control group}$$

If the t-counted is higher than t-table, the hypothesis is accepted or there is significant influence. In other words, the use of STAD method is effective in teaching English vocabulary. In contrast, if the t-counted is lower than t-table, the hypothesis is rejected or there is no significant influence of using the method in teaching English vocabulary.

FINDINGS

In collecting the data, the researcher used test as the instrument of the research. It means the collected data of the research was in form of numeric data. There were two kind of tests in this research; pretest and posttest. The pretest was administered before the researcher applied treatment to know the students' achievement. The posttest was administered after the researcher applied the treatment. The results of each test were

compared to measure whether the use of STAD method was effective in teaching vocabulary mastery of grade VIII of SMP Negeri 19 Palu.

Before giving treatment, the researcher administered a test (pretest) to find out the basic knowledge of the students' vocabulary mastery. The researcher conducted pre test on October 21th 2015. The researcher computed the students' mean score by using formula below:

$$x = \frac{\sum X}{n} = \frac{890}{17} = 52.35$$

The mean score of experimental group in pre- test was **52.35**

$$x = \frac{\sum X}{n} = \frac{1140}{17} = 67.05$$

The mean score of control group in pre- test was **67.05**

$$x = \frac{\sum X}{n} = \frac{1185}{17} = 69.70$$

The mean score of experimental group in post- test was **69.70**

$$x = \frac{\sum X}{n} = \frac{1165}{17} = 68.52$$

The mean score of control group in post- test was **68.52**

The researcher continued counting deviation and square deviation of students' score. The results of the deviation are presented in table as follow:

Table 2
The Result of Deviation on Pretest and Posttest of Experimental Group

<u>Score</u>					
No	Initial	Pre-Test	Post-Test	Deviation (D)	Square Deviation (D²)
1	FL	60	75	15	225
2	FS	50	70	20	400
3	IN	60	75	15	225
4	JF	75	80	5	25
5	MU	60	70	10	100
6	M	30	60	30	900
7	NA	35	65	30	900
8	OV	50	70	20	400
9	PN	50	75	25	625
10	TS	60	70	10	100
11	TSU	70	70	0	0
12	R	40	70	30	900
13	RA	60	70	10	100
14	WR	50	75	25	625
15	YY	60	70	10	100
16	YT	50	60	20	400
17	MD	30	60	30	900
TOTAL				$\sum x = 305$	$\sum x^2 = 6925$

Based on the result of the table above, the deviation of pretest and posttest of experimental group was 305. Then, the researcher counted the deviation of pretest and posttest of control group, as follow :

Table 3
The Result of Deviation on Pretest and Posttest of Control Group

No	Initial	Score		Deviation (D)	Square Deviation (D ²)
		Pre-Test	Post-Test		
1	AJ	70	75	5	25
2	AR	75	75	0	0
3	BY	80	85	5	25
4	FN	60	65	5	25
5	HL	65	75	10	100
6	IR	70	70	0	0
7	LN	60	65	5	25
8	MA	50	55	5	25
9	MAI	70	75	5	25
10	MF	75	75	0	0
11	MI	65	55	-10	100
12	MJ	60	55	-5	25
13	MR	75	70	-5	25
14	N	55	60	5	25
15	RA	60	65	-5	25
16	RK	80	85	5	25
17	S	70	70	0	0
Total				$\sum y = 25$	$\sum y^2 = 475$

Based on the result of the table above , the deviation of pretest and posttest of control group was 25. It means that the use of students team achievement division can improve students' vocabulary mastery.

From the calculation of mean deviation in pre-test and post-test of experimental group and control group, the researcher continued counting deviation score of pre-test and post-test in both groups. The results of the deviation score are presented below:

$$\sum x = \sum x - \frac{(\sum x)}{n}$$

$$\sum x = 305 - \frac{305}{17} = 17.9$$

The deviation score of experimental group in pre-test and post- test was **17.9**

$$\sum y = \sum y - \frac{(\sum y)}{n}$$

$$\sum y = 25 - \frac{25}{17} = 1.4$$

The deviation score of control group in pre-test and post- test was **1.4**

After that, the researcher continued to find out the significant score of both groups by using t-test formula as follows:

$$t = \frac{Mx - My}{\sqrt{\left(\frac{\sum x^2 + \sum y^2}{Nx + Ny - 2}\right) \left(\frac{1}{Nx} + \frac{1}{Ny}\right)}}$$

$$t = \frac{17.9 - 1.4}{\sqrt{\left(\frac{1453 + 438.3}{17 + 17 - 2}\right) \left(\frac{1}{17} + \frac{1}{17}\right)}}$$

$$t = \frac{16.5}{\sqrt{\left(\frac{1891.3}{32}\right) \left(\frac{1}{17} + \frac{1}{17}\right)}}$$

$$t = \frac{16.5}{\sqrt{\left(\frac{1891.3}{32}\right) \left(\frac{2}{17}\right)}}$$

$$t = \frac{16.5}{\sqrt{(59.1)(0.11)}}$$

$$t = \frac{16.5}{\sqrt{(6.5)}}$$

$$t = \frac{16.5}{2.5}$$

$$t = 6.6$$

DISCUSSION

The results of this test show that the use of STAD method is effective in teaching English vocabulary to the students. After getting the result of post-test, the researcher found that the ability of grade VIII students of SMPN 19 has improved.

In conducting the research, the researcher gave treatment only for experimental group. In this case, she used students team achievement division for eight meetings. First, she taught the students during the treatment that focused on vocabulary to identify the nouns, verbs and adjectives cover the meaning and the use of words in the sentences. Second, she divided the students into five teams, the teams consisted of four to five students. Third, she explained the vocabulary material and asked the students to pay attention to the lesson, because they have mastered the lesson. Fourth, the students

answered the questions given by the researcher. Then, she corrected their answers and gave score for each team. Finally, she gave the reward for the winner.

After giving the score, the researcher asked the students to answer the questions individually based on what they understanding. Next, she corrected the answer of each student. Then, she corrected their answers. After that, she gave the reward for the students got higher score.

After conducting the treatment, she gave the post-test to experimental and control groups in order to measure the students' achievement after the treatment. The researcher found that most students got higher score than those of the control group. The mean score of the post test is 69.70 of the experimental group compared with the mean score of post-test of the control group is 68.52. It shows that the mean score of the post-test of the experimental group is greater than the post-test of the control group.

Based on the results of the pre-test and post-test, the researcher found the classical achievement in the pre and post test of experimental and control group. In the pre-test of experimental group, there were 58.82% of students got score less than 60, and 41.18% of students got score more than 60. Meanwhile, pre-test of control group was 35.30% of students got score less than 60, and 64.70% of students got score more than 60. The classical achievement in the post-test of experimental group was 82.35% of students got score more than 60, and 17.65% of students got score less than 60. Post-test of control group was 76.47% of students got score more than 60, and 23.53% of students got score less than 60. By seeing the data percentage above, the researcher compared the result score of pre-test and post-test. Score of experimental group was higher than control group, because they got the treatment, while in control group without treatment. It clearly indicated that the method given could improve the students' English vocabulary mastery.

Referring to the fact of the findings above, the researcher relates the findings to the previous studies done by Kaninda (2012) and Laelasari (2013). Kaninda found that teaching vocabulary through STAD (Student Teams-Achievement Divisions) Type Using Pictures was effective. The result showed that the vocabulary mastery of the eighth grade students of SMP 5 Dolo in 2012/2013 academic year before being taught through STAD type using pictures. Method used was categorized sufficient. The mean score and standard deviation are 64.6 and 7.15. Meanwhile, after being taught through STAD type using pictures the mean score and standard deviation are 78.27 and 7.31.

The improvement can be achieved based on the implementation of STAD. There are some factors of STAD can contributed to the improvement the students English

vocabulary. The factors are: firstly, the researcher explained the material briefly. Secondly, the leader of team repeated the materials to the members. Thirdly, they discussed the exercise and share ideas each other. Finally, they can help and support each other. So, they got words more, can share their ideas and opinions by using English to communicate and increase students' self confidence through social interaction.

By looking at the findings in this research and also in the previous researchers, the researcher shows that student team achievement division method is one of the effective methods in improving students' English vocabulary mastery.

CONCLUSIONS AND SUGGESTIONS

Based on the data of this research, the conclusions are: the use of STAD method can improve students' English vocabulary mastery. It could be seen by the mean score between the experimental group's post-test and the control group's pos-test and the t-counted value (6.6) is greater than the t-table (2.0). It shows that applying STAD method in teaching learning process is effective to improve the students' English vocabulary mastery.

Based on the result of the research, the researcher would like to provide suggestions to students and those who are actively involved in the English teaching learning process. Firstly, students should learn more words by beginning with words related to the things around them both at school and around their environment. They need to practice English words through student team achievement division method. Secondly, the teacher should always motivate and encourage the students to be active to use English in the English classroom without feeling shy and afraid of making mistakes.

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