
The Use of Drilling Technique in Teaching English Vocabulary to the Seventh Grade Students of SMP Negeri 2 Tanggulangin

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Abstract

This study aims to identify whether there is any difference between seventh grade students' English vocabulary mastery taught using drilling technique and those taught without using drilling technique. Harmer (2007) stated that drilling is a technique that has been used in foreign language classrooms, which emphasises on repeating structural pattern through oral practice to demonstrate students' ability in using specific language items in a controlled manner. In this study, the language items are lexis (lexical items). The respondents of this research are 72 students of the seventh grade of SMP Negeri 2 Tanggulangin. The writer assigned class VII-A to the Experimental group and class VII-B to the control group. The data of this research were collected by giving pre-test and post-test. The collected data were analyzed by using t-test formula. The results of the data analysis showed that: the mean score of post-test of experimental group was 70.22, the mean score of post-test of control group was 65.75, the t-value was 5.15 with degree of freedom (*df*) 1.960. Based on the data analysis above, the alternative hypothesis was accepted because the t-value was higher than t-table ($5.15 > 1.96$). This research indicates that the use of drilling technique can improve students' vocabulary mastery to the seventh grade students of SMP Negeri 2 Tanggulangin.

Keywords: drilling, technique, vocabulary mastery, adolescent

Introduction

English language becomes the most important language to learn for communication. Therefore, mastering English mastery can help people ready to face global competition. In Indonesia, English language has been taught as one of the compulsory subjects for students from the Junior High School up to the Senior High School and it may be the necessary to pass an examination in English to enter a university. As Haycraft (1978, p.8) states, there are various skills in mastering of language: listening (understanding the spoken language), reading (understanding the written language), speaking and writing. To support the mastery of the four language skills the students have to learn vocabulary first before understanding other skills.

Vocabulary is a very basic element to learn English because it is the foundation to learn other skills. Richard and Renandya (2002, p.255) state that vocabulary is a core component of language proficiency and provides much basis of how the learners speak, listen, read, and write well. As a foreign language, learning English vocabulary mastery is very important to support other English language skills, especially for students of junior high school. However, many students do not seem to find themselves comfortable with the foreign language in the classroom. They think that English is a hard subject to study because their limited vocabulary and poor knowledge or mastery of the language component. The problems make them difficult to understand the words.

One of the reasons for the students' low vocabulary mastery is the teachers tend to rely on conventional method which does not challenge the students to learn vocabulary independently. Teaching and learning English in junior high school is different from teaching and learning English in kindergarten and elementary school in term of the teaching methods and the materials. Teachers should consider the age of their students since different ages have different characteristics. Because of the characteristics, they need a particular treatment in learning process. According to Harmer (2007, p.83), teenager students often have

an acute need for peer approval, too or they are extremely vulnerable to the negative judgements of their own age group.

One technique that can be used to teach vocabulary is drilling. Drilling technique could increase junior high school students' mastery of English vocabulary. It can also enhance student's vocabulary to help them understand English better and the students could have a stronger motivation in learning English. This study was conducted to find out whether that is any difference between seventh grade students' English vocabulary mastery taught using drilling and those taught without using drilling.

Drilling Technique

Drilling technique is a technique for teaching language through dialogues which emphasize on the students' habit formation by repetition, memorizing grammatical structures, and tense transformation, using the target language and the culture where the language is spoken (Setiyadi, 2006, p.54). In addition, drill is part of audio-lingual method (ALM). On the other hand, drill means forcing the students to use the target language. There are several types of drilling techniques in ALM (Setiyadi, 2006, p.63-66), which are repetition drill, substitution drill, transformation drill, replacement drill, response drill, cued response drill, rejoinder drill, restatement, completion drill, expansion drill, contraction drill, integration drill, and translation drill. In this study, the writer chose three of them: repetition drill, substitution drill, and translation drill.

They are the types of drill that are, in the writer's opinion, needed by students. The drills can be adjusted to the classroom dynamics during the teaching and learning process. Using drilling techniques, the teacher should drill the students to use the target language and make it familiar in order that the students can remember and understand new vocabulary. During the teaching learning process, the students are dependent on the teacher. The teacher can also use more than one drill to improve the teaching and learning process.

Research Method

This study was quantitative. According to Aliaga and Gunderson (2000, p.1), quantitative research is 'Explaining phenomena by collecting numerical data that are analyzed using mathematically based on methods (in particular statistics)'. The subjects of this study were students of SMP Negeri 2 Tanggulangin. The writer used all the students in the two classes as the sample of the study. The writer assigned class VII-A to the Experimental group and class VII-B to the control group.

Techniques of data collection

In order to collect data about students' vocabulary mastery improvement between the two groups and to find out whether or not drilling technique would give any difference to the mastery of the teenager learners in learning vocabulary, the writer used pre-test and post-test to both groups. The pre-test and post-test were made the same in order to show the differences of teenager learners' vocabulary mastery in the two different groups. The form of the pre-test and post-test were multiple-choice, gap-filling with a 'pool' of answer, and translation. The use of multiple-choice, gap-filling with a 'pool' of answer, and translation was based on the example of vocabulary-testing technique by Penny Ur (1999, p.70).

During the experiment, the experimental group was taught by using drilling technique, while the control group was taught by using word-listing as a conventional method. After the experiment, the post-test was given to find out any improvement in the scores of the experimental and the control group.

Treatment

In order to compare the use of drilling technique and word-listing in improving students' vocabulary mastery, the writer gave several treatments to the experimental group in each meeting by using drilling techniques which are repetition drill, substitution drill, and translation drill. The control group was given a treatment by using word-listing as conventional method. The writer gave the same materials to both groups.

The first treatment was given on Thursday, 14th April 2016. The topic was about "expressing likes or dislikes." In this treatment the writer was taught by using repetition drill. The second treatment was given on Monday, 18th April 2016. The topic was about "asking for and giving facts." The writer taught the

students using substitution drill. The third treatment was given on Thursday, 21th April 2016, and the topic was about “procedure text.” The writer applied translation drill in the learning process. The fourth treatment was given on Monday, 25th April 2016, and the topic was about “descriptive text.” The writer applied all techniques given before. Time allocation for each treatment was 50 minutes.

Techniques of data analysis

The data were analyzed by using statistical procedures. Best and Kahn (1998, p.450) stated that there are three statistical procedures, which are mean, standard deviation, and significance of the difference between means, that is t-test.

Mean values of the pre-test and post-test scores for experimental group and control group were counted to measure the gain in both groups. The following formula was applied:

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

In which,

\bar{X} = means

Σ = sum of

x = scores in a distribution

N = total number of score

However, the standard deviation should be computed before counting the t-test. The formula of standard deviation is as follows:

$$SD \bar{dx} = \sqrt{(SD \bar{x}_A)^2 + (SD \bar{x}_B)^2}$$

In which,

$SD \bar{x}_A$ = the deviation average of the Experimental group.

$SD \bar{x}_B$ = the deviation average of the Control group.

SD_A = standard deviation of the Experimental group.

SD_B = standard deviation of the Control group.

$SD \bar{dx}$ = the different average of Standard Deviation in both groups.

To find out the t-value of the significant difference between the two means of the pre-test and post-test, the formula is as follows:

$$t_{value} = \frac{M\Sigma (A_2 - A_1) - M\Sigma (B_2 - B_1)}{SD \bar{dx}}$$

In which,

t –value = the value of t or t-score.

$M\Sigma (A_2 - A_1)$ = refers to the mean of the increase score in the Experimental group.

$M\Sigma (B_2 - B_1)$ = refers to the mean of the increase score in the Control group.

$SD \bar{dx}$ = the different average of Standard Deviation in both groups.

Results and Discussion

Pre-test results

A pre-test was held at the beginning of the study. It had a purpose to know the early condition of the students' vocabulary mastery before receiving treatments. A pre-test was conducted on Monday, April 11th 2016 for experimental group and on Wednesday, 13th 2016 for control group. The students had to answer 15 items of multiple choice, 5 items of gap-filling, and 5 items of translation in 35 minutes. The result of the pre-test can be seen in the following table:

Pre-Test Score		
	Experimental group	Control Group
Σ (the total score)	1,985	2,128
N	36	36
Maximum Score	85	85
Minimum Score	32	33
Mean	55.14	59.11

The table shows that the pre-test total scores of the experimental group was 1,985. The mean score of the students' result was 55.14. The control group's total scores of the pre-test was 2,128, and the mean score of this group was 59.11. The pre-test result of the control group was slightly different from the experimental group, but both groups were assumed to have equal level vocabulary mastery before receiving the treatment.

Treatments

The process of giving treatment was conducted to identify whether or not drilling technique could improve students' vocabulary achievement and to know whether drilling technique was effective to teach vocabulary compared to word-listing as conventional method.

In the first meeting, the students learnt vocabulary about "expressing likes or dislike". In the beginning of lesson, the writer explained the material in front of the class. She gave several examples of expressing likes such as 'I like music', 'she likes cookies', 'he likes camping', 'we like riding', and 'they like cooking'. Examples of expressing dislikes include 'I don't like music', 'she doesn't like cookies', 'he doesn't like hiking', 'we don't like riding', and 'they don't like climbing'. The writer used repetition drill, and she said all the examples, then the students repeated them. Next, she asked the students about the meaning of each word. Thus, in the first treatment the students not only learnt vocabulary, but also would know how to express "likes" and "dislikes" in different subjects.

In the second meeting, the students learnt vocabulary about "asking for and giving facts". The writer applied substitution drill to brainstorm their vocabulary related to the topic. Before starting this drills, the writer gave an example of how to ask for and give facts. When the writer said "In my bag", then the students made a question that related to what her said such as "where is your book?". Then, the writer said "where is your pencil?", the students answered "On the table". Next, the writer asked one of the student to gave another example how to ask for and give facts.

In the third meeting, the students learnt vocabulary about "Procedure text". The writer applied translation drill. The writer explained about the procedure text to the students. Then, she gave some examples of procedure text such as how to make a pineapple juice, how to make a kite and etc. Next, the writer asked the students to translate other examples that she gave about procedure text.

In the fourth meeting, the students learnt vocabulary about "Descriptive text". The writer applied all drilling techniques that were given before. The writer also showed the students some pictures that they had to describe. The writer asked the students to describe the profession of doctor, animals, and other things.

Different from the experimental group, the treatment to the control group used conventional method for teaching-learning process. The topics given were the same with those taught to the experimental group.

The treatment in the control group was also conducted for four meetings, each of which needed 50 minutes. In short, the process of conducting treatment between the experimental group and the control group were different on the teaching method. During the learning process, the experimental group was taught by using drilling technique while the control group was taught by using word-listing. In the last activity of the experiment, the writer gave a post test to both groups.

Post-test results

The post-test was used to measure the students' vocabulary achievement after receiving the treatment. The students answered 25 questions similar to the pre-test. The time allocation was also 45 minutes. The result of post-test of both groups is shown by the table below:

	Post-Test Score	
	Experimental group	Control Group
Σ (the total score)	2528	2367
N	36	36
Maximum Score	90	85
Minimum Score	58	40
Mean	70.22	65.75

Based on the result above, the experimental group obtained a total score of 2,528. The mean score of this group also increased, which was 70,22, showing there was an improvement in the post-test result than the pre-test. On the other hand, the result of control group was 2,367 and the mean score was 65,75. This means that the score of students of the experimental group was higher than that of the control group. In other words, there was a significant difference in mastering vocabulary between the experimental group and the control group students after they received the treatments.

Mean Score Difference

There is a significant difference in the students' vocabulary achievement, which can be seen through the difference in the mean scores of both groups.

- a) The mean score of pre-test of experimental group

$$M_A = \frac{1985}{36} = 55.14$$

- b) The mean score of pre-test of control group

$$M_B = \frac{2128}{36} = 59.11$$

- c) The mean score of post-test of experimental group

$$M_A = \frac{2528}{36} = 70.22$$

- d) The mean score of post-test of control group

$$M_B = \frac{2367}{36} = 65.75$$

Group	Pre-Test	Post-Test	Progress
Experimental	55.14	70.22	15.08
Control	59.11	65.75	6.64

The table above shows that the mean score of the pre test in the experimental group was 55.14. Meanwhile, the mean score of the post test was 70.22. The increase of the students' improvement of this

group was 15.08 points. Therefore, there was a significant improvement between the pre-test and the post-test scores achieved by the students of the experimental group. The mean scores of the control group also show an improvement. It was 59.11 in the pre test and 65.75 in the post test, which means increasing by 6.64 points. Thus, the control group's improvement was less than that of the experimental group. Therefore, the writer concluded that there was better improvement of the experimental group's achievement after they received the treatment by using drilling technique in learning English vocabulary. To show the significant improvement of both groups, the results need to be tested by using t-test.

Standard deviation

In order to show the improvement of both groups, the writer used T-test formula to examine the hypotheses of this study. The result of the t-test becomes the quantitative proof whether or not there is a significant difference of the pre-test and post-test between two groups. The following are the results of the experimental group and control group.

	Experimental group	Control Group
Σ (the total score)	2581	2467
N	36	36
Mean	70.22	65.75
Standard deviation (s)	1.26	1.05

The calculation of standard deviation was as follows:

- $$SD \bar{x}_A = \frac{SD_A}{\sqrt{N_A-1}}$$

$$= \frac{7.44}{\sqrt{36-1}} = \frac{7.44}{\sqrt{35}}$$

$$= 1.26$$
- $$SD \bar{x}_B = \frac{SD_B}{\sqrt{N_B-1}}$$

$$= \frac{6.21}{\sqrt{36-1}} = \frac{6.21}{\sqrt{35}}$$

$$= 1.05$$
- $$SD \bar{d}x = \sqrt{(SD \bar{x}_A)^2 + (SD \bar{x}_B)^2}$$

$$= \sqrt{(1.26)^2 + (1.05)^2}$$

$$= \sqrt{2.69}$$

$$= 1.64$$

T-test statistical analysis

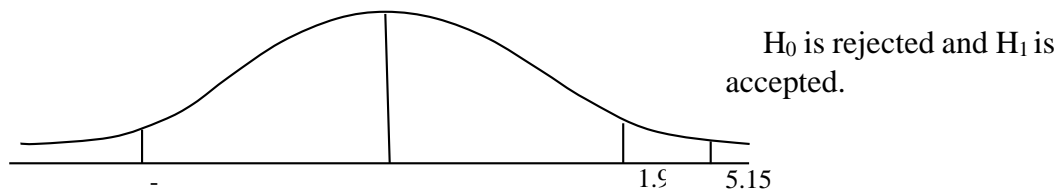
The computation of t-value by using t-test formula was as follows:

$$t_{value} = \frac{M\Sigma (A_2-A_1) - M\Sigma (B_2-B_1)}{SD \bar{d}x}$$

$$= \frac{15.08 - 6.64}{1.64} = \frac{8.44}{1.64}$$

$$= 5.15$$

$$df = 36 + 36 - 2 = 70, t\text{-table} = 1.960$$



The diagram above shows that t-test value is 5.15, which is a true t-table value. It means that H_0 is rejected and H_1 is accepted. This means there was a significant difference in vocabulary mastery between the students who were taught by using drilling technique and those who were taught without using drilling technique. In other words, teaching vocabulary by using drilling technique was more effective to improve students' vocabulary mastery of the seventh grade students of SMP Negeri 2 Tanggulangin.

Conclusion

Based on the results of the data analysis and research findings, the writer concludes that there is a significant difference in vocabulary achievement between the students who were taught by using drilling technique and those taught without using drilling. The use of drilling technique is more effective than word-listing to improve students' vocabulary mastery. Therefore, the study has answered the research question to find out whether there is any difference between seventh grade students' English vocabulary mastery taught using drilling and those taught without using drilling.

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