TEACHING VOCABULARIES USING THE WORD MAP
(An Experimental Research at the Second Grade Students of SMP Prima Nusantara Sepatan Kab. Tangerang).

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Abstract: Vocabulary is one of the important language elements in learning English. In Teaching Vocabularies some of students forgot easily the newly learned. Based on these problem above, the writer wants to research the students in SMP Prima Nusantara, the study entitled "Teaching Vocabularies Using The Word Map" (An Experimental Research at the Second Grade Students of SMP Prima Nusantara Sepatan Kab. Tangerang). The research uses quasi experimental research. The population is the second grade of SMP Prima Nusantara year 2016/2017, while class VIII A as the experimental class and class VII B as the control class are taken as the sample. From the result of the research show that the hypothesis, the null hypothesis is rejected its showed from statistical value that significant 5%=2.00 and significant 1%=2.65 and the result of t_0=3.82. Based on calculation the data of t-test that effective of using the word map in teaching vocabularies has positive effect for the second grade students of SMP Prima Nusantara.

Key Words: Vocabulary, Word Map, Quasi Experimental.

INTRODUCTION

In order to learn English, language learners should learn the vocabulary first. In Indonesia it self, English vocabulary is being taught for junior high school students.

Hughes says that "Vocabulary is one of the important language elements in learning English." In fact, the vocabulary is one of language elements which taught in learning English before study to anothers language elements.

According to Folse, "Vocabulary will help language learners accomplish better communication whether in listening, speaking, reading, or writing." So it is clear, because the vocabulary will help language learners to understand, respond to, and express meanings accurately, fluently, and acceptably whether in oral or written language.

Teaching vocabularies using the right strategies is important in order to help the students learn the target words. There are various ways to using each vocabulary, such as translation, giving definitions, and using the word list. However, many students still have difficulties in memorizing the target words. Most students tend to memorize the target words by using regular exercises, such as matching the target words with its definition, and translating the target words into their first language. However, some of them forgot easily the newly learned words, and cannot achieve well in the vocabulary test.

One expert, such as Rosenbaum proposed, "The Word Map as tool to increase students' ability in memorizing the target word." To verify this argument, the writer conducted this study.

Hatch and Brown define vocabulary as a list of words for a particular language that language learners might use. From the statement above, In short, vocabulary can be defined as a list of words that a language learner can use to communicate in the target language.

Allen says that "Vocabulary is important to be learned for the student's own use (or production) in speaking and writing." Based on the definition about vocabulary the writer can conclude that the vocabulary is important for everyone who learns the language to be use in listening, speaking, writing, and reading beside grammar because without vocabulary all are nothing.

According to Schmitt, "Vocabulary is important for expressing word's meaning through speaking, or writing and it can be useful when language learners used in communication." Based on the explanation above, the writer conclude that communication whether in spoken or written cannot continue if they lack necessary words. Speakers cannot express their message accurately, fluently and acceptably if they do not know what words they have to use in order to communicate with their interlocutors.

Teaching Vocabulary

Knowing a word in second language requires an effort from the language learner. As Wallace says that "Language learners can know a word in second language well if they can relate or associate the word to other related words."[1] So, it is clear that the language learner have to know how to associate the word to the other word to understand about the word correctly.

Correspondingly, Nation says that "Knowing a word means knowing that there are related words, and what the word mean in the particular context." What Nation says above, the writer conclude that knowing a word is way to know the word means in the particular context.

Harmer states that "Teaching vocabulary is a major part of the teacher's art." So, it is clear that teaching vocabulary is major part of the teacher's art because, the students need to see words in context to see how they are used, and at the best way the teachers have to introduce the new words and how to use it in context. However, many teachers have some difficulties in teaching vocabulary, due to the fact that students often have difficulty in memorizing new words. Memorization is considered as one of the important factors that can help students to learn vocabulary. Therefore, teachers should be creative in selecting activities when teaching vocabulary in order to increase the students' ability to memorize the target words.

Many experts propose ways to memorize vocabulary items, such as Wallace, Carter & McCarthy, Ur, and Harmer. Other way is given by Wallace says that "Who propose to make the students think actively about they are trying to remember." So, it is clear that the students have to think actively to remember their target words. For example, students try to make the link between the target word and its translation.

Correspondingly, Carter & McCarthy also state that "In order to remember new vocabulary items, students can use associative bonding." For example, in teaching the word 'soft', teacher can present a cotton or fleece, that 'soft' would be stored not as an isolated item but as one paired with the image of a cotton or fleece, and therefore easier to recall. This visual association between the word 'soft' and the image of cotton or fleece will help the students to memorize the newly learned word.

Ur states that "The meaning relationships, such as synonyms, antonyms, hyponyms, co-hyponyms, subordinates and translation, are one of the important aspects that need to be taught in teaching vocabulary. Based on the statements the writer conclude that the teacher have to teach and introduce in teaching vocabulary, the way how to know and search the meaning relationship of words, such as synonyms, antonyms and translation, in other to the student more understand about the words and context in sentences. This aspect can help the students to enhance the students' ability in memorizing newly learned words.

Furthermore, Harmer states that "How words group together also considered as one of the important aspects that need to be taught in teaching vocabulary." Based on his statements, there are many ways for teaching or practicing a specific area of vocabulary in order to make the students words group together because it will make the vocabulary learning process become effectively. One of the various ways for practicing a specific area of vocabulary proposed by Harmer is the word map.

Brown states that "One of five important factors that must be considered when teaching vocabulary to teens is the varieties of sensory kinput." What Brown says above that means the sensory aids are an important element in teens' language teaching, can have some impact. Sensory aids, such as word maps, can help the students to internalize concept. When the students build up their own maps, they also build up their vocabulary knowledge it will make the student thinking creatively by their prior knowledge to build their own maps to increase their vocabulary mastery.

The present study will focus on explain about the techniques in teaching vocabulary.

Word Map
1. The Definition of Word Map

Word map is one of the various ways to memorize newly learned words by associating a word with other related words. Many experts define word map, such as Antonacci and O'Callaghan, Graves and Watts define word map as an approach in teaching vocabulary to engage the students in thinking about word relationships. So, it is clear that the word maps is one of strategy in teaching vocabulary to make the student attracted in studying vocabularies because the students have to thinking about word relationship the target words and also illustrate it into their maps.

Word map are visual displays of word meanings organized to depict relationships with other words. Based on the definition the writer conclude that the word map is strategy major student's art in learning vocabulary, because the students have to depict their vocabulary knowledge and also search the relationship of the target words and display it in their own maps.

Greenwood says that "The process of relating a target word with other related words can help the students memorize the target words." So, it is clear that memorized the target words is not automatically applied when the word appears in text, students need to read, hear, write, speak it, and also they need to relate the target words to other related words, so that target words is internalized and memorized and becomes part of their usable vocabularies.

Word map also can be used by teachers to show the students that words can be grouped together-or a word relates or associates with others words. Harmer states that "Word map can show students to retrieve and use what they know in order to build up their vocabulary knowledge." Based on the statement above, the writer conclude the students can try to remember some of the many words they have known when they are building up their own maps.

In this study, the writer would like using word map adopted from Harmer for teaching vocabulary.

1. **Teaching Vocabulary Using the Word Map**

In this section the writer will discuss about the word map activity. The word map activity proposed by Harmer. He suggests that:

a. The first, teacher starts by putting the target word in the blackboard, for example "House".

b. The second, the students are asked to work on aspects of houses and the things in the house. They can write on the board one by one, and add some rooms in the house, such garage, dining room, bedroom, kitchen.

c. The third, after the student mention all rooms that exist in a house, they can add things that belong to the room, such as a dining room, there are table, chair, plate, spoon, fork, cup, glass, Finally the board fills up with words, and it can show students how words group together.

METHOD

In this research the writer chosen an experimental research because he wants to compare between teaching vocabulary using the Word Map exercise and teaching vocabulary using the regular exercise. As the field research, the location is importance in this research, the writer chosee the place of the research in SMP Prima Nusantara Sepatan Kab. Tangerang. It is located in Jl. Raya Kramat km. 1 Rt.005/1, Sepatan, Kab. Tangerang 15520, Banten, Indonesia.

Technique of Data Collecting

Collection of data is the data that should be collected regarding the research topic. In collecting the data the writer do some steps, such as:

Observation

According to Diana and Steve, "Observation is often used combination with a range of other methods of data collection." The writer observes to the location where the research was carried out. The purpose of this observation is asking permission of the headmaster to do research at his research at his place, by observation the writer can know the situation in mastering the lesson. Other activity, the writer observes the condition of education and the situation of teaching learning process at SMP Prima Nusantara Sepatan Kab. Tangerang.

Test

Davies (1968: 5) in Arthur Hughes's book "Testing for language Teacher" the good test is an obidient servant since it follows and an apes the teaching. The writer takes the data by using instrument test (pre-test and post-test) which was intended to check whether or not had known the target words.

In this research, the writer wants to compare result of the research between experimental class and control class students, the writer took step as follow:

1. The result of the post-test in experimental class is named variable (X1)
2. The result of the post-test in control class is named variable (X2)

The steps for statistic analyze are:

1. Investigating students worksheet give and describes score in the table
2. Determining mean of variable X with formula:

$$M_X = \frac{\sum X}{N}$$

3. Determining mean of variable Y with formula:

$$M_Y = \frac{\sum Y}{N}$$

4. Determining derivation score variable X with formula:

X = X2-Y1

5. Determining derivation score variable Y with formula:

X = Y2-Y1

After getting the data from pre-test and post-test, the writer analyze it by using statistic calculation of t-test formula with the degree of significance 5% and 1 % the formula as follow:

$$t = \frac{Mx - My}{\sqrt{\frac{\sum X^2 + \sum Y^2}{Nx + Ny - 2}\left[\frac{1}{Nx} + \frac{1}{Ny}\right]}}$$

T = test

M = means of each group from the deviation

X = the deviation of every X_1 and X_2

Y = the deviation of every Y_1 and Y_2

N = number of students

The data showed that the mean of pre-test scores obtained by students of VIII A as an experimental class = 55.33 and pre-test scores obtained by students of VIII B as a control class = 51. The highest score in two classes was same that was class VIII A as an experimental class got 70 and also VIII B as a control class got 70. The lowest score of pre-test in both classes was 40 for experimental class and also 30 for control class.

The mean of post-test, score of VIII A as an experimental class = 80.5 was greater that VIII B as a control class = 69.16. The highest score of post-test of VIII A as an experimental class got 90, and VIII B as a control class got 90. The lowest post-test of experimental class 65 and the lowest post-test of control class 55.

From the interpretation data above t-count > t-table means there is significance effect of using the word map in teaching vocabularies.

Testing hypothesis is to know the significant of both variables, and tested as follow:

$H_a = t_o > t_t$

$H_o = t_o < t_t$

H_a : Alternative Hypothesis

H_o : Null Hypothesis

T_o : The value of t- count

T_t : The value of t- table

The Result of the Research

From the data gotten above, the writer calculated t-test using some steps, there are:

1. Determining Mean of Score Experimental Class (M_X), through formula:

$$M_X = \frac{\Sigma_X}{N}$$

$$= \frac{755}{30}$$

$$= 25,16$$

2. Determining Mean of Score Control Class (M_y), through formula:

$$M_y = \frac{\Sigma_y}{N}$$

$$= \frac{555}{30}$$

$$= 18.5$$

3. Determining the Total Square of Error of Experimental Class (X), through formula:

$$\Sigma X^2 = \Sigma X^2 - \left[\frac{\Sigma x}{N}\right]2$$

$$= 21125 - \left[\frac{755}{30}\right]2$$

$$= 21125 - \backslash = 21125 - 19000.83$$

$$= \mathbf{2124.17}$$

The result above shows about the average score (mean) at experimental class. The writer got the data from $\Sigma X_1, \Sigma X_2, \Sigma X$ and ΣX^2. After words the writer calculated the data based on the formula above

4. Determine the total square of error control class (Y) with formula:

$$\Sigma y^2 = \Sigma y^2 - \left[\frac{\Sigma y}{N}\right]2$$

$$= 14075 - \left[\frac{555}{30}\right]2$$

$$= 14075 - \frac{308025}{30}$$

$$= 14075 - 10267.5$$

$$= \mathbf{3807.5}$$

The result above shows about the average score (mean) at control class. The writer got the data from $\Sigma Y_1, \Sigma Y_2, \Sigma Y$ and ΣY^2. After words the writer calculated the data based on the formula above.

1. Calculates T-test

Notes:

$$t = \frac{Mx - My}{\sqrt{\frac{\sum X^2 + \sum Y^2}{Nx + Ny - 2}\left[\frac{1}{Nx} + \frac{1}{Ny}\right]}}$$

T = test

M = means of each group from the deviation

X = the deviation of every X_1 and X_2

Y = the deviation of every Y_1 and Y_2

N = number of students

$$t = \frac{Mx - My}{\sqrt{\frac{\sum X^2 + \sum Y^2}{Nx + Ny - 2}\left[\frac{1}{Nx} + \frac{1}{Ny}\right]}}$$

$$t = \frac{25.16 - 18.5}{\sqrt{\frac{2124.17 + 3807.5}{30 + 30 - 2}\left[\frac{1}{30} + \frac{1}{30}\right]}}$$

$$t = \frac{6.66}{\sqrt{\frac{5931.67}{58}\left[\frac{2}{60}\right]}}$$

$$t = \frac{6.66}{\sqrt{102.27 \times 0.03}}$$

$$t = \frac{6.66}{\sqrt{3.06}}$$

$$t = \frac{6.66}{1.74}$$

t= 3.82

The result above shows about the average score (mean) at experimental class. The writer got the data from MX, MY, $\sum Y$ and $\sum X^2$. After words the writer calculated the data based on the formula above.

Determine the Degree of Freedom, with formula:

$Df = N_X + N_Y - 2$

$Df = 30 + 30 - 2$

$Df = 58$

The result above shows about the score of samples both experimental and control class. The writer used 40 for research. students from VIII A as experimental class and students from VIII B as a control class.

Comparing "t" has tested in calculating (t_o = 3.82) and df = 58. There is no df (degree of freedom for 58, so the writer used the closer "df" from 60, which has been tested on t-table (t_t 5% = 2.00 and t_t 1% = 2.65). It can be known that $t_o > t_t$ 5% and $t_o >$ 1%, it means $2.00 < 3.82 > 2.65$.

To prove the data hypothesis, the data obtained from an experimental class and control class are calculated by using t-test formula with assumption as follows:

f $t_o > t_t$: The alternative hypothesis is accepted. It means there is significant effect by using the word map in teaching vocabulary.

f $t_o < t_t$: The alternative hypothesis is rejected. It means there is no significant by using the word map in teaching vocabulary.

From the result calculation above, the of t_o = 3.82 the degree of freedom (df) = 58 (60). The writer used the degree of significant 5% = 2.00 and 1% = 2.65. it means that H_a (Alternative Hypothesis) of the writer is accepted and H_o (Null Hypothesis) is rejected.

After getting the data, the writer compared it t_t both degree of significant 5% and 1% $t_o > t_t$ 5% and $t_o > t_t$ 1%, it means $2.00 < 3.82 > 2.65$. it means (Alternative Hypothesis) of the research is accepted.

Based on the criteria above, the writer inferred that her alternative hypothesis (H_a) teaching vocabularies using the word map is accepted. On the other hand, null hypothesis (H_o) teaching vocabulary with the regular exercise or strategy doesn't effectives in teaching vocabularies is rejected.

Conclusion

The use of the word map strategy could improve the vocabulary of the second grade students of SMP Prima Nusantara Sepatan Kab. Tangerang. The total mean score of students in the pre-test of experimental class was 55.33 after having treatment the students mean score improve to 80.5; we can be seen that use the word map startegy is influence to vocabulary of the second grade students of SMP Prima Nusantara Kab. Tangerang. There was significant effect of the word map strategy in teaching vocabularies; it was proven by T-test result. The result was $t_{count} \leq t_{table}$, $2.00 < 3.82 > 2.65$ in degree of significant 5% and 1%. It means that H_a (Alternative Hypothesis) of the writer is accepted and H_O (Null Hypothesis) is rejected.

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