The Effect of Word Mapping Strategy on Students' Vocabulary Mastery

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Abstract

Vocabulary is one of the foremost important components in learning language. Word mapping strategy is depiciting of changing relationship between and among words to encourage students studying English. The researcher used experimental method. The research was conducted at SMK PGRI Banyuputih from 10st August until 15th August 2018, in the academic year 2018/2019. The population of the research was tenth grade students at SMK PGRI Banyuputih. The samples were class X AK as the experimental class and class X TKJ as the control class. Both of them were consisted of 15 students. This research used quantitative approach with experiment design. The technique of collecting data used was a test. The data was analyzed by using t-test formula. Based on the result of the data analysis of T-test formula, it can be known the result of t-test was higher than the t table. That was 2,89 > 2,048. it show that there is an effect of word mapping strategy on the vocabulary mastery of the tenth grade students at SMK PGRI Banyuputih in academic year 2018/2019.

Keyword: *vocabulary mastery; strategy; word mapping;*

A. Introduction

Language has function as social institution, verbal practice, reflexive practice, medium of classroom, communication, and school subject as well. It becomes the dominant language arouns the world, and now more and more people use English as an intractional language. All of people in the world need communication with others. Language is one of the important tools to communicate with others. Language is verbal behavior that usually people use to communicate with other people around them. In addition, it is one of the tools to do some intractions and give response to someone (Harmer 2007:21). In other words, language as social institution, as verbal practice, as reflexive practice, as medium of classroom, communication, and also as school subject . one of international language which are often used as a means of communication is English.it becomes the dominant language around the world, and now more and more people use english as an intractional language.

Subsequently, vocabulary mastery must be a need in English dialect learning. In addition, there is another importance of vocabulary according to Pora (2003: vii), who says that vocabulary mastery is a must for someone who wants to understand a text, a conversation, or anything written in English. It

means that really English has been instructed beginning from kindergarten of basic level,but most of Indonesia individuals still cannot utilize English for communication well. Such condition may be caused by many factors such as the media, the method, and the technique used in not appropriate. In accordance with this matter, teachersare expected to have such an effective way to make the students interested in learning English vocabulary so that the teaching-learning objectives can be carried out successfully. In other words, there should be an appropriate strategy to help the students in learning vocabulary.

The strategy advances students' active investigation of word connections, in this manner lead to a more profound understanding of word implications by creating their conceptual information related to words. According to Wardani (2007: 134), word mapping strategy is a graphic organizer which enables students to expand definition of words. The researcher expected that word mapping procedure is an suitable technique to be actualized to senior high school studentsto assist them ace English vocabulary in arrange to be effective in vocabulary mastery.

This Strategy is chosen because it can invite the students to be active and fun in teaching and learning vocabulary without any pressures. To overcome those probles maximally, it is important for the teacher to choose a strategy of teaching vocabulary in order to the students are able to memorize and remember every word perfectly. Therefore, the researcher plans to employ a strategy to know whether there is an effect of using word mapping strategy on the vocabulary mastery. Based on the description above, the entitled " The Effect of Word Mapping Strategy on Vocabulary Mastery at SMK PGRI Banyuputih in academic year 2017/2018", the researcher wants to know whether there is an effect of word mapping strategy on the vocabulary mastery.

In learning English, The most important thing that should be learned is vocabulary because without having enough vocabularies and understanding their meaning, someone will get hindrance in speaking. Moreover, without pronuncing the words correctly it will be able to cause someone else missinterpret in listening. The choice of vocabulary and methods used in teaching vocabulary are important factors. Harmer (2007:229) also said when we intrude new vocabulary, there is always has a chance to improve vocabulary. Vocabulary has an important role in language learning to process. It will be helpful for students to master language skills and the can express idea. According to Thornbury (2005:16), "words are the basic social unit of language to accompaniment the students vocabulary mastery". Without vocabulary the person cannot communicate effectively and express idea. It will be better if the students know the meaning of vocabulary. Moreover, Harmer (2007:21) add is one of tools to do some intractions give response to someone. It means that the students know the meaning of word that they produce. For example, they not only know the meaning of word but also they must know what form and function of the word, like word "table" they do not know the meaning of table but they also know the form of table, like table have four legs. Learning vocabulary needs process to make the students understand the meaning of words. In line with Schmitt (2000 : 17) said that the mechanics of

vocabulary learning are still something of a mastery, but one thing can be sure is that words are not instantaneously acquired, at least not for adult second language learners. Students demands to remember many kinds of vocabulary. It is because students will get achievement when they can understand the meaning of words. Nouns, verbs, and adjectives are kinds of vocabulary, these words are always used by students in the class. 1) According to Mariana (2006: 5) Noun is the name of person, place or thing. Noun are traditionally grouped into proper nouns and common nouns. Proper nouns, like Geby, Jakarta are names of specific persons or entities. In English, they generally are not preceded by articles (e.g., the book is down, but Geby is down). In written English, proper nouns are usually capitalized. They are proper nouns (personal names, names of geographic unit), concrete or abstract nouns (flower,girl, beauty,justice,man kind,etc). Countable or noun uncountable nouns (one girl, two girls, coffe, iron, etc), collective nouns (audience, committee,class crew,crowd,enemy,etc), and noun compounds (bathroom,blue print, woman doctor etc); 2)According to Mariana (2006: 5) Adjectives are words that describe or modify other words. Making your writing and speaking much more specific, and a wholelot more interesting words like small, blue, and sharp are descriptive, and they are all examples of adjectives. Most languages have descriptive words for the concepts of color (white, dark), age (ancient, youthful), and value (great, terrible), but there are languages without descriptive words. Since descriptive words are utilized to distinguish or measure person individuals and special things, the are as a rule position some time recently the thing or pronoun that the modify; 3) Mariana (2006 : 5) states that same like noun and adjectives, vebs is also one kind of vocabulary. Verbs show action from subject, for example, to buy, to write, to read, to walk, to run, and many others. Verbs show state from subjectare to be (is/was, am/was, are/were); to have, to become, to seem, and many others. In English's grammar, verbs have two groups they are finite verbs and non-finiteverbs.

In this study, the researcher will only focus on three elements on part of speech to know the students' vocabulary mastery. They are noun, verb, and adjective because those elements are represents enough to assess their vocabulary achievement. From the explanation above, this implies that the students are hoped to be able to improve their vocabularies in grammatical includes noun, verb, and adjective.

In teaching vocabulary, the learners should recognise their needs this is important because words are in various kinds, which make it impossible for the teacher to teach all of words. According to Nation (2008: 5) teaching vocabularyis among the least important of a teacher's job. In this case teachers teach the students to know the meaning of the words based on the context. There are several reasons of this. First, there are many words that a learner needs to know. Second, learning word is a cumulative process that requires meeting words. Third, teaching words need to be limited in scope. Finally knowing words well involves knowing a range of aspect of word, including the meaning, form and use. Thornbury (2002: 15) states that in teaching vocabulary, there are many ways which can be used by the teacher in presenting the material, they are:

a) translation is the easiest to where improve the meaning of difficult words; b) explanation is the ways where the teacher has revealed the words to the students and explain them; c) synonym is the the part when the teacher gives words which have same type and the same general meaning; d) Antonym is the part when the teacher gives words which have different meaning; e) showing the real object is when the teacher shows picture and explains them about what happen in the pictures or things that are in the pictures. The researcher tries to apply the method that can be used in teaching vocabulary in easy way. Teaching English vocabulary using word mapping strategy is easy way and enjoyable to increase their vocabulary because the students can learn more active learners.

The strategy promotes students' active exploration of word relationships,thereby leading too deeper understanding of word meanings by developing their conceptual knowledge related to words. The strategy promotes students' active exploration of word relationships, thereby leading too deeper understanding of word meanings by developing their conceptual knowledge related to words. To make students understand and memorize about their vocabulary skill, teacher and try this strategy, word mapping strategy. Antonacci (2012 :94) states that the purpose of the word mapping strarategy is to promote the students' deeper understanding of words through depiciting varying relationships between and among words.

The strategy may be adapted to the nature of vocabulary instruction, the learning outcomes, and students' grade levels. For illustration, for learning a few words, it may be more fitting to have understudies investigate the equivalent words, antonyms, and root of the words, while for other words it may be more supportive to discover cases and non illustrations of the words. It is simple and helps the student to improve their vocabulary in English learning. This strategy starts from teacher by writing keywords and then the students must mention from that.

The procedure of teaching vocabulary by using word mapping strategy can be done in several steps (Antonacci 2012:96) . The first step is selecting words (e.g who is My Favorite Actrist) for vocabulary instruction, then the second is drawing a blank word map on the screen, the third is writing the key words on the word map. In each blank, write and say the key word that will be taught. Fourth, recording some ideas that have been used to explore the word meanings and relationsips. Fifth students are directed to use the word maps during and after reading to add information about the key words. last students share their mapswith others.

Harmer (2007:236) said that getting students to build up their own maps by working in groups has the add advantages of making them try to remember some of many words they know, while at the same time learning new words from their peers. It can be concluded by the researcher that word mapping students can improve vocabulary because they can understand words through depicting varying relationships between and among words.

Using the word mapping strategy as a graphic organizer could help the students think about terms or concepts in different ways. The strategy may be adapted to the nature of vocabulary instruction, the learning outcomes, and

students' grade levels. For example, for learning a few words, it may be more fitting to have understudies investigate the equivalent words, antonyms, and root of the words, whereas for other words it may be more helpful to find examples and non examples of the words.Teacher wants to use this strategy because this strategy has some advantages. According to Beck and Kucan (2002:9) they are to promote the students' more profound understanding of words through depicting changing relationship between and among words, to create students'vocabularies. This technique encourages understudies to call on their individual information when understanding new words. By considering their foundation knowledge, the students will grant their own definition of the word. By considering their background knowledge, the students will give their own definition of the word. In here, they will increment their vocabulary and appreciate studying vocabulary. As a result, they can master other skills that are related to the vocabulary and get the good mark in English subject.

The hypothesis of the study is formulated as below " There is a significant effect of word mapping strategy on the vocabulary mastery of the tenth grade students at SMK PGRI Banyuputih –Situbondo in academic year 2018/2019".

B. Research Method

1. Research Design

The researcher designs an experimental research in this study. The experimental research is a study to know what happens to the subject after wegive a certain treatment or we try something to those groups (Fraenkel in istiyani, 2003:20). In this model before starting a treatment, two classes are given the first test or pretest to measure the initial conditions(0_1, 0_3). After that, the experimental class is given a treatment(X) and in the control class is not given. Then the experimental class has finished the treatment, both of classes are given the test again as a post test (0_2, 0_4).

Table 1 Research Design

R	0_1	X 0_2
R	0_3	0_4
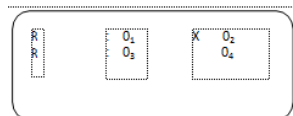
Note:

0_1, 0_3 : Pre-test

0_2, 0_4 : Post-test

R   : Experimental class

R   : Control class

X   : Treatment

2. The Research Area

Purposive method was used in determining the area of the research. In this study, SMK PGRI Banyuputih is located in Jl. Pandean Desa Wonorejo, Situbondo. The researcher did the research in 2018/2019

academic year. First, the researcher was teaching in this school in order to fulfill Teaching Practice program. Thus, the researcher knew the characteristics of the students. Second, the researcher also consider the time, energy, and fund.

3. **The Research Respondent**

The population of this study was the tenth grade students of SMK PGRI Banyuputih. The total of class X are 38 students which devided into three classes they were X AK, X TKJ, and X TKR. The sample of this research are 15 students from class X AK as experimental group and 15 students from class X TKJ as control group. The total number of respondent are 30 students. Finally, the tenth grade students were chosen as the respondents of this experimental research.

4. **Data Collection Method**

Data needed in this experimental research was classified into primary data and supporting data. The way of collecting data depend on the characteristics of data, both primary and secondary data. The primary data were gotten from the result of vocabulary test. Meanwhile, the supporting or secondary data were collected from results of documentation. In this research, the researcher used objective test to get score of students' vocabulary mastery. The test used in this research was multiple choice. In pre-test and post-test there are 25 multiple choices that contains three elements on part of speech, 8 numbers of Nouns, 9 numbers of Verbs, and 8 numbers of Adjectives score for each correct answer is 4. Both of tests have same questions, but there are difference vocabulary in each answer. The writer carries out pre-test before the instuctional activity. This test is carried out to find out the students' vocabulary mastery before the students get the treatment and the writer also carries out post-test to find out the result afterthe application of the Word mapping strategy. The Multiple-choice test design for pre-test & post-test of vocabulary mastery is shown as the following :

Table 2. The Distribution of Vocabulary Test

Indicator	Number of Item	Total of Item
Adjectives	3,7,12,14,15,16,20,22	**8**
Nouns	2,4,6,10,17,23,24,25	8
Verbs	1,5,8,9,11,13,18,19,21	9
Total		25

Documentation in this research is used to find out the supporting data suchas the names of respondents, the structure organization of SMK PGRI Banyuputih, names of the personel and the number of the students at that school.

5. **Data Analysis Method**

The collected data will be analyzed based on the form data. It is described based on the fact on the students' condition when the vocabulary teaching and learning process by using vocabulary test through data analysis by applying word mapping. This research used simple randomized design. It was taken from basic simple random sampling of limited population or sub population direcly asked the subject in experiment group and control group randomly. The result of this pretest-post test of experimental group and control group design would be anlyzed by using t-test.

$$t=\frac{X_1-X_2}{\sqrt{(\frac{SD_1{}^2}{N_1-1})+(\frac{SD_2{}^2}{N_2-1})}}$$

Note :

t = Value of t

X_1 = The Mean Score of post-test of experimental class

X_2 = The Mean Score of pre-test of experimental class

$SD_1 2$ = The Variant Value of post-test of experimental class

$SD_2 2$ = The Variant Value of pre-test of experimental class

N1 = The Number of students post-test

N2 = The Number of students pre-test

The degree of freedom was (Nx + Ny − 2) and the result was consulted to t-table pf 5% significant level. The result of t-computation was higher than that of t-table, so the null hyphothesis (Ho) was rejected.

C. Conclusion

Based on the result of data analysis from the score of pre test and post test of the students, it was found that the value of t-test result was 2,89 and the value of t-table at 5% significant level of df = 28 was 2,048. So the value of t-test was higher than t-table (2,89 ≥ 2,048). Based on calculation above, null hyphothesis (Ho) was rejected and alternative hypothesis (Ha) was accepted. It means that there is an effect of Word Mapping Strategy on the Vocabulary mastery of the tenth grade students at SMK PGRI Banyuputih in academic year 2018/2019. After analyzed the result of the students' vocabulary test on control group, the lowest score on pre-test was 20 and highest was 40, while the lowest score on post test was 20 and the highest was 72. The compilation of pre test and post test score produced the gain score (post test score – pre test score) on control group the average of gain score 316, so the mean score was 21,06. From the analysis of the students' vocabulary test on experimental group, the lowest

score on pre test was 32 and the highest was 60, while the lowest score on post test was 80 and the highest was 88 . The compilation of pre test and post test score produced the gain score (post-test score – pre-test score) on experimental group the average of gain score 562, so the mean score 37,46.

From the analysis of the students' vocabulary test, the researcher found that the experimental group got better improvement in their vocabulary mastery. It showed from the numbers of students whose scores   increased than the result on pre-test. Based on analyzing of the students' vocabulary test, in pre-test most of students both in control and experimental group got wrong answer in items to choose the correct answer. It still happened in post-test on control-group, while in experimental group they had must progress and their score were much better than the students on control group.

After analyzing the result of the students' vocabulary test, the researcher knew that the students on experimental group were more effective with the strategy that researcher used, word mapping strategy to the students vocabulary mastery. They were suit and easily adapt the method in teaching because it did not make them depressed so they felt enjoy when being taught. These findings were supported by Antonacci, (2012 :94) who states that the purpose of the word mapping strategy is to promote the students' deeper understanding of words through depicting varying relationships between and among words. Word mapping strategy can be used students enjoy in learning English. In teaching learning process, sometimes students feel bored and they do not have much pay attention to the material much. To solve this problem, teachers have to choose an interesting way to make students interested is by using word mapping strategy. The students will study how to concentrate with a word which is having the clues. This strategy is appropriate for students, especially in learning vocabulary because is provides such as cooperative with the other students in a group to find out the correct answer. The strategy advances students' dynamic investigation of word relationships, in this manner lead to a more profound understanding of word implications by developing their conceptual information related to words.

Word mapping stategy has advantages in teaching and learning vocabulary to the students as follows : focus in the reading and increase the number of vocabulary (Gustinna, 2015 : 21). They will be interested in reading a book and they will find the different learning in class. Also, this strategy is very interesting for the students in learning vocabulary. It can stimulate the students' interest to find and learn vocabulary, and let them be active in learning. Thus, it will create condusive teaching learning process to make the students understand the material easily. By using the appropriate techique to add and memorize the number of vocabulary.

The result of data analysis showed that using word mapping strategy positively contributed on the vocabulary mastery of the tenth Grade students at SMK PGRI Banyuputih in academic year 2018/2019. This could be seen from the hypothesis that applied word mapping strategy gave positive effect on vocabulary mastery. Basically, this research revealed that word mapping strategy has a significantly developed that students vocabulary mastery of the

tenth grade at SMK PGRI Banyuputih in academic year 2018/2019. The result of data analysis showed that use of word mapping strategy had an effect on teaching English for vocabulary mastery by using t-test that the statistical value of the t-test was higher than that of the critical value of t-table with significant level 5% (2,89 > 2,048).

Based on the explanation above, it can be claimed that using word mapping strategy to the students vocabulary mastery has significant effect on students' motivation and also activeness in joining the English class. Moreover, it was also supported by the expert statement. Graves, (2008: 94) states in Gustinna, (2015:10) that gives definition that the word mapping strategy is one of the most powerful approaches to teaching vocabulary because it engages students in thinking about word relationships. The students will study how to concentrate with a book which is having the clues. This strategy is appropriate for students, especially in learning vocabulary because it provides such a cooperative learning where can improve the students in a group to find out the correct answer. In short, it was really proved that the students' vocabulary mastery by word mapping strategy has a significant effect of the tenth grade students at SMK PGRI Banyuputih in academic year 2018/2019.

D. Acknowledgement

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