# THE USE OF WORD MAPPING TECHNIQUE IN TEACHING VOCABULARY

# **AN ARTICLE**

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# THE USE OF WORD MAPPING TECHNIQUE IN TEACHING VOCABULARY

(A Pre-Experimental Research on the Eighth Grade Students of SMP Negeri 14 Pontianak in Academic Year 2015/2016)

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# THE USE OF WORD MAPPING TECHNIQUE IN TEACHING VOCABULARY

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**Abstract**: The purpose of this research was to find out the effectiveness of the use of Word Mapping technique in teaching vocabulary. To achieve the objectives of the research, a pre experimental research was conducted at SMP Negeri 14 Pontianak with the subject of the research was the eighth grade students in class VIIIA in academic year 2015/2016 which was chosen by using cluster random sampling technique. The findings of the research obviously showed that there was a significant difference of the students' achievement before and after Word Mapping technique was applied, and that the use of the technique had a highly significant effect on the students' vocabulary mastery shown by the students' improved scores on the posttest. To sum up, the present research findings proved that the use of Word Mapping technique is highly effective in teaching vocabulary to the eighth grade students of SMP Negeri 14 Pontianak academic year 2015/2016.

# Keywords: Word Mapping Technique, Vocabulary Mastery, Vocabulary Teaching

Abstrak: Penelitian ini bertujuan untuk mengetahui efektivitas penggunaan teknik Word Mapping pada pengajaran kosa kata. Untuk mencapai tujuan penelitian, sebuah penelitian pre-experimental telah dilakukan di SMP Negeri 14 Pontianak dengan subjek penelitian adalah siswa kelas VIII A pada tahun ajaran 2015/2016 yang telah dipilih menggunakan teknik cluster random sampling. Hasil penelitian dengan jelas menunjukkan bahwa terdapat perbedaan yang signifikan terhadap prestasi siswa sebelum dan sesudah teknik Word Mapping diterapkan, dan penggunaan teknik teresebut mempunyai efek yang signifikan terhadap penguasaan kosa kata siswa yang ditunjukkan dari peningkatan skor posttest siswa. Dapat disimpulkan bahwa, penggunaan teknik Word Mapping efektif terhadap pengajaran kosa kata pada siswa kelas VIII A di SMP Negeri 14 Pontianak tahun ajaran 2015/2016.

Kata kunci: Teknik Word Mapping, Penguasaan Kosa Kata, Pengajaran Kosa Kata

Vocabulary is the one of the essential aptitudes that should be well understood by the learners in learning new language. Vocabulary takes the inseparable role in a language. It exists in the four fundamental skills for arranging the sentences. Vocabulary mastery helps the people to communicate well, to understand the meaning of words, and to pronounce fluently.

Unfortunately, many teachers tend to stress teaching mostly in grammatical rules without giving the clear explanation of how to recognize the meaning of words. Commonly, in teaching vocabulary the teachers ask the students to look for the unfamiliar words and find the meaning of words in the dictionary. In this case, the common technique used by the teachers is memorizing technique. The technique tends to stress teaching on how students memorize the vocabulary they got from the learning process.

In fact, the students get the difficulties in using the words in sentence without practicing and drilling. In drilling, the teacher modelling a word or a sentence and the students repeat it. Therefore, to use memorizing technique the teacher should combine with drill technique in order to make the students understand about the meaning of words.

Unfortunately, most teachers only use the memorizing technique without drilling. As the result, the students do not understand the meaning of words and the word itself does not exist any longer in their mind. Consequently, memorizing technique is not appropriate to be used in teaching vocabulary without drilling because the students cannot understand vocabulary well. In case of teaching reading process, the teachers bring their students to the reading activity, as well as memorizing vocabulary after reading. Another example is when they teach about writing, the students are required to have large number of vocabulary. Without having the vocabulary enrichment, the students will not be able to write and they cannot understand the meaning of words. As they are similar to speaking and listening, without mastering vocabulary, the students cannot achieve the outstanding skill in English. In consequence, vocabulary becomes a must for learners because it is the core of learning a new language.

The teachers should use the appropriate techniques to teach in vocabulary teaching. One of the techniques is verbal technique which pertains to the use of illustrative situation, synonyms, opposite, scale, definition, and categories. In this technique, the students can learn the synonym and the opposite of words, writing the definition of words, and they are able to use the words in sentences.

In teaching vocabulary, Word Mapping technique is considered as the one of appropriate and applicable techniques used by the teacher in the classroom, particularly in building up a large store of words in order to arrange a sentence. Word Mapping technique is a graphical tool for organizing and representing knowledge that shows the three elements of a definition which includes (1) the category to which the word being defined belong which can be discovered by a question "what is it?", (2) some characteristics of the main word that can be discovered by a question "what is it like?", and (3) some examples of the main word (the illustrations). The students need to have some understanding of what a definition is and how it works before they can give the meaning of a word on their own way by the use of the concept of definition map or word map.

In word mapping technique, the students refer to the context, their prior knowledge, and the dictionary to find the definition and the elements needed. Typically it has the form of having the vocabulary word in the central portion of the graphic organizer, and three separate sections for the three main questions about the word that linked to it. By the use of word mapping technique it can increase students' vocabulary and it often teach to be the one of the most effective ways of integrating language skills in the language classroom.

Word mapping strategy is an instructional vocabulary strategy developed to help students learn how to predict the meaning of unknown words, specifically word mapping strategy helps students who have not learned the meaning of a large number of words, do not know how to identify parts of words that have meaning, do not know the meaning of word parts, and do not know how to use the meaning of word parts to predict the meaning of whole words (Harris, Schumaker, & Descher, 2008). Word Mapping is extremely engaging way of building up vocabulary knowledge as well as provoking students into retrieving and using what they know (Harmer, 2007: 187).

The purpose of word mapping technique is to promote students' deeper understanding of the new words through depicting varying relationship among words. The students can be more active in exploring the relationship among words. Word map provides a way for students to organize conceptual information as they seek to not only identify, but also understand a word (Schwartz and Raphael, 1995). Students learn about new words through word mapping concept because it helps the students in examining the characteristics of the word concepts, categorize words, and the relationship among words as well as the words are similar or different to each other.

The previous research entitled "The Effect of Word-Map Technique on Iranian EFL Learners" Vocabulary Acquisition: A Response to help-Seeking Strategy (A Study in Azad University, Malayer, Iran) conducted by Ronaghi et al (2015) explained that word mapping technique is very beneficial in improving learners' vocabulary. The result witnessed a dramatic growth of the students' performance in vocabulary learning due to the effect of word mapping technique,

because the students who were taught based on this technique can enhance and improve their performance, for example in speaking, word map strategy improved learners repertoire. The technique corresponds to all level of language proficiency and to nearly all languages like Arabic, Persian, etc. According to Satuna (2015), the use of word mapping technique in teaching vocabulary in State Vocational School 1 Pamekasan (Accounting Department 1) is successful in classical category. It was found improving vocabulary mastery using word mapping technique had motivated the students to learn more effectively and enjoyable through their active participation in using English. Based on the previous research stated above, the researcher conducts a pre experimental study in order to prove and find out whether there is an effect of the independent variable towards the dependent variable itself.

Based on the researcher's interview, there are many students that still have limited vocabulary and it causes the students unable to speak in English, answer the exercise, and response to the teacher's explanation. As the result, they are not meaning because of limited vocabulary. Therefore, it causes the students gain the low score below minimum standard score. To complete this research, the researcher applied Word Mapping Technique to enhance students' vocabulary.

The researcher investigated whether or not it is significant to increase vocabulary mastery using Word Mapping technique and how effective increasing vocabulary mastery using Word Mapping technique is. Therefore, the researcher conducted a pre experimental research on the eighth grade students of SMP Negeri 14 Pontianak Academic Year 2015/2016.

In short, by conducting this research, the researcher obtained quite much information that could hopefully help teachers maximize their teaching process and increase students' vocabulary mastery by the use of word mapping technique. Teachers need to concern more on how they can use word mapping technique to manage the classroom effectively so that the students are engaged actively cooperated with their classmates to enhance their learning. It is expected that the more information the teachers can get from this research, the more effective their learning process becomes.

## **METHOD**

In this research, the researcher intended to find out whether or not Word Mapping technique is effective in teaching vocabulary. So that, the students can determine the words that appropriate to the context. The procedures of pre-experimental research design which were conducted by the researcher were described in the following steps: (1) Applying pretest (O1) to the experimental group to measure students' vocabulary mastery which was judged by their mean score before the treatment was given, (2) Administering the treatment (X), which was the use of Word Mapping technique, (3) Applying posttest (O2) to know the changes which occur as the result of the applied treatments judged by students' mean score, (4) Comparing O1 and O2 to determine the mean score of the pretest and the posttest, (5) Applying the Effect Size formula to investigate the effectiveness of the treatment given on students' vocabulary mastery.

The population of this research is the eighth grade students of SMP Negeri 14 Pontianak in academic year 2015/2016 which are divided into eight classes with the total number of the students is 352 students. In this research, the researcher used cluster random sampling technique to select the sample. Sample is the selected subjects in the population which are chosen using certain procedure. The researcher chose the sample based on the students' English examination score of class eight and take it randomly by using lotre. Sample is the selected individuals who are representative of the entire population that the researcher plans to study for generalizing the population (Creswell, 2012: 142). Each class has an equal chance of being chosen in this case. Since this is a pre experimental research, the researcher would take one class only and therefore choose the group that had similar ability among the students. Of the eight classes, the researcher took class VIII A which consists of 36 students as the sample because this class represented the students who had low vocabulary achievement, and considered as the suitable class to conduct the research.

In the process of conducting the research, the researcher followed some steps. After identifying a research problem, reviewing the literatures, and specifying the purpose of the research, the researcher needs to collect the data to help provide answer to the research questions and hypothesis. The process of collecting quantitative data involves not only gathering information, but also selecting the individuals or the subjects of the study, obtaining permission needed, selecting instruments to use, and administering the data collection process to collect the data (Creswell, 2012: 140-141).

In collecting the data, it is required for the researcher to use the instruments. An instrument is a tool for measuring, observing, and documenting data (Creswell, 2012: 151). In this research, the data were collected by the use of relevant method and tools. The researcher measured the students' vocabulary mastery by administering pretest and posttest on the experimental group in this research. The pretest was administered to the students before applying the treatment. Then posttest was administered to see the effect of the given treatment towards the students' vocabulary mastery. In collecting the data of students' learning achievement, the researcher measured the students' learning achievement before and after the treatment. First, the researcher gave a pretest to the students in order to know students' vocabulary knowledge before experimenting.

A pretest provides a measure on some attributes or characteristics that you assess for participants in an experiment before they receive a treatment (Creswell, 2012: 297). The students are required to list vocabularies which are related to the given theme and they need to write the examples of the given word. The second is treatment. The researcher gave the treatment to the students. The researcher applied word mapping technique in the teaching learning process. After giving the treatment, the researcher gave a posttest to the students. A posttest is a measure on some attributes or characteristics that is assessed for participants in an experiment after a treatment (Creswell, 2012: 297). A test that used by the researcher in this research is taken from the concept of word mapping by Schwartz & Raphael (1995) with a little modification.

In collecting data, the researcher used the relevant tool which was essay test. The researcher measured the students' vocabulary mastery by administering pretest and posttest on the pre-experimental group in this research. The test was in form of the essay test. So that, the students can determine the words that appropriate to the context. The test required students to name the main word based on the picture, write some illustrations about the main word, write the examples of the main word, write a description, and write an advertisement to promote the product.

# FINDINGS AND DISCUSSION

# **Findings**

Based on the category 1 of vocabulary assessment rubric, the findings of students' achievement in pretest showed that some students did not completely understand the term and their description shows some mistakes about the meaning of the term. The other students did not understand the term and they had many mistakes when describing the term. The rest of the students did not try to describe the term. Based on the category 2 of vocabulary assessment rubric, the findings of students achievement in pretest show that the students had an incomplete understanding of the topic or some misconceptions about the meaning of the term, but they had a basic understanding of the term. The other students had so many misconceptions about the term that they cannot be said to understand the term. The rest of the students had not enough information to make a judgment. The total of the students' score in pretest is 1540, with the mean score 42, 77.

After the treatments were carried out, it was found that the students' posttest scores improved significantly. The findings of students achievement in posttest shows that the students were improving in all the categories. Based on the category 1 of vocabulary assessment rubric, almost the students had a complete and detailed understanding of the term, they created a description of the term, and they used the term in the sentences. The other students had a complete understanding of the term and they created a description of the term. Based on the category 2, the almost the students had a complete and detailed understanding of the term, they generated the description of the term, and used the term in the context. The other students had a complete understanding of the term and they generated a description of the term. The total of the students' score in posttest is 3060, with the mean score 85. From the research findings between pretest and posttest, the researcher found the difference between them. Most of the scores were improving. From the data, the researcher found the mean score of pretest was 42, 77 and posttest was 85. The interval between pretest and posttest was 42, 23. The students' score in posttest shows the improvement from the pretest to posttest with the difference of mean is 42, 23.

After the mean of the pretest and posttest were calculated, the researcher then calculated the standard deviation, and was followed by the effect size. The findings of standard deviation on the students' pretest was 17,33 and standard deviation of the students' posttest was 12,98. The calculation of the effect size of 1,93 was categorized as high which indicates that the use of Word Mapping technique has a highly significant effect on the students' vocabulary mastery. Therefore, the alternative hypothesis "the use of Word Mapping technique is significant to increase vocabulary mastery to the eighth grade students of SMP Negeri 14 Pontianak Academic Year 2015/2016" is accepted, and the null hypothesis is rejected.

From the data analyzed, it was found that the students' vocabulary mastery increased significantly after the class received a two-time treatments by the application of the word mapping technique indicated by the mean of the posttest which is higher than the mean of pretest. The increase of the mean indicated that, generally, the treatment gave a good impact on the students' vocabulary mastery, so that the posttest result showed a better output than the pretest. From the tabulation of the finding, the use of word mapping technique was effective in teaching vocabulary, and in line with this, the result of the calculation of the Effect Size was categorized as highly effective which led the researcher to conclude that the use of Word Mapping technique gave highly significant effect in teaching vocabulary.

# **Discussion**

The findings of the present study were in line with the existing research finding which revealed that there was a significant difference in students' score before and after the technique was applied indicated by the result of the statistical calculation that consequently resulted in the rejection of the null hypothesis. Another research finding to support these results revealed that the students that taught with word mapping technique outscored significantly and it motivated the students to learn more effectively and enjoyable through their active participation in using English.

Besides being indicated by the statistical calculation, the effectiveness of word mapping technique on students vocabulary mastery was also shown by the students learning process when the treatment were given where they became actively engaged in the activities conducted by the researcher. Being active here meant they were not only sitting, reading, and paying their attention to the researcher's explanation, but they were able to work on several activities actively with their group member. During the treatments, the researcher discovered that the students could follow the word mapping activities easily although the researcher sometimes had to give the instruction more than once to avoid them from being confused. The students who were already paired off in the group got along well and did all the intended activities correctly.

With regard to the highly significant effect of word mapping technique gave on students' vocabulary mastery, there were some causes that might have influenced it. The successfully done treatments more or less influenced the results of the study. Since the very first treatment given, the researcher tried to carry out the learning process based on the lesson plan made before. So it can be ensured that this research had been going in line with the procedures of what it was supposed to be like.

During the first treatment, to avoid students' confusion, the researcher introduced the learning topic which was advertisement text and showed the students the pictures related to the topic, and asked the students some questions related to the picture. After that, the class was divided into some groups which members were already determined by the researcher. The researcher distributed the handout of group work activity. In this activity, the students filled in the box with the words that related to the picture. After that, the students made an advertisement to promote the product based on the listed words. The students wrote some examples of the main word, they also wrote the overview of the main word and the description about the main word. During this activity the students worked together and share their knowledge each other. They were allowed to open the dictionary. The use of dictionary was to help the students in finding the meaning of words. After the students already filled the box of word mapping concept, they make an advertisement to promote the product. In the first treatment, the topic was about the pizza.

In the second treatment, the students were getting familiar with the activities of word mapping technique in teaching vocabulary. They were more ready and also prepared themselves before the class began. In this treatment, the activity was same with the first treatment which the students should filled the box of word mapping concept in order to make an advertisement. Before the class was divided into the groups, the researcher explained more about the material and repeated the last material. The students were already understood the concept of word mapping. They were enjoying the process of learning. After the researcher explained the material, the students did their group work activity. They made an advertisement based on the picture in the word mapping concept. The topic of this second treatment was about hamburger. So the students make an advertisement about the hamburger.

The repeated activities in each treatment were actually to improve students' vocabulary which consequently resulted in their improved scores in the posttest than ones on the pretest. Moreover, the calculation of the Effect Size was categorized as highly effective that led the researcher to reject the Null Hypothesis and concluded that the use of word mapping technique gave highly significant effect in teaching vocabulary to the eighth grade students of SMP Negeri 14 Pontianak in academic year 2015/2016.

# CONCLUSION AND SUGGESTIONS

### Conclusion

Referring to the discussion of the research, the use of word mapping technique in teaching vocabulary has significant effect indicated by the effect size that categorized as highly effective. Word mapping technique promoted the students' deeper understanding of the new words, engaged them in thinking about the relationship of the word, and it enabled students to actively participate in learning process and they are required to be more creative in illustrating the relationship among the words which could directly be observed from the result of the treatments, that the students were able to outscore significantly on the test after the technique was applied.

# **Suggestions**

From the conclusion above and dealing with the result accomplished in this research, the researcher would like to suggest the English language teacher to:

- 1. Establish group work activity with mixed ability students especially when teaching vocabulary so that the students can help each other when having difficulty in understanding the meaning of words and make their learning meaningful.
- 2. Hand over a worksheet completed with the task for group work activities in each of learning process so that the students would work systematically and help overcome the time limitation.
- 3. Provide the pictures related to the topic, what is being described and explained by the teacher should be clear to help avoid students' confusion and help them do a brainstorming activity.

## **BIBLIOGRAPHY**

- Creswell, J. (2012). Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research. Boston: Pearson.
- Harmer, J. (2007). The Practice of English Language Teaching. London: Longman.
- Harris, M. L., Schumaker, J. B., & Deshler, D. D. (2008). *The Word Mapping Strategy: Instructor's Manual.* Lawrence, KS: Edge Enterprises, Inc.
- Ronaghi, A., Bayat, A., & Mahmoodi, A. (2015). The Effect of Word Map Technique on Iranian EFL Learners Vocabulary Acquisition: A Response to Help Seeking Strategy. International Journal of Education Investigation. Vol. 2. PP: 1-9.
- Satuna, W. (2015). *Improving Students Vocabulary Mastery Using Word Mapping Strategy*. Pamekasan: Okara.

Schwartz, R., & Raphael, T. (1995). *Word Map Getting Started Vocabulary*. New York: Cambridge University Press.