THE EFFECTIVENESS OF MIND MAPPING FOR TEACHING VOCABULARY TO THE EIGHTH GRADE STUDENTS OF SMP NEGERI 3 SUNGAI KAKAP IN ACADEMIC YEAR 2012/2013

Sahrawi

Program Studi Pendidikan Bahasa Inggris STKIP-PGRI Pontianak
Jl. Ampera No. 88 Pontianak
Awilakilucky@yahoo.com

Abstract

This study was a pre-experimental research. The purposes of this study were to find out the effectiveness and the significance of mind mapping for teaching English vocabulary. This study was conducted in SMP Negeri 3 Sungai Kakap in academic year 2012/2013 where the population was eighth grade students with a total number of 112 students.The data showed the difference result between pre-test and post-test. The average achievement of the students' pre-test was 46.28 and 86.14 in the post-test. Furthermore, the data showed there was significant difference of the score where the t-test result 31.88. It showed that the result of t-test was higher than t-table (2.052) at 5% with degree of freedom N-1 (28-1). Therefore, it can be suggested that mind mapping can be an effective technique to teach english vocabulary. This result hopefully would motivate english language teachers to use a mind mapping in teaching English in the classroom.

Keywords: *The Effectiveness, Mind Mapping, Vocabulary*

Abstrak

Penelitian merupakan sebuah penelitian pre-experiimen. Adapun tujuan dari studi ini adalah untuk menemukan keefektifan dan signifikansi dari mind mapping dalam mengajar kosa kata pelajaran bahasa inggris. Penelitian ini dilaksanakan di SMP Negeri 3 Sungai Kakap tahun ajaran 2012/2013 yang mana populasinya adalah siswa kelas VIII dengan jumlah keseluruhan 112 siswa.Berdasarkan hasil penelitian menunjukan bahwa terdapat perbedaan anatara hasil pre-test dan post-test. Hasil rata-rata siswa dari pre-test adalah 46.28 dan 86.14 dari hasil post-test. Data menunjukan terdapat perbedaan yang signifikan dari hasil pre-test dan post-test yaitu 31.88. Hal ini menunjukan bahwa hasil dari t-test lebih tinggi daripada t-table (2.052) pada 5% dengan tingkat kebebasan N-1 (28-1). Oleh karena itu mind mapping dapat menjadi sebuah teknik yang efektif dalam mengajar kosa kata bahasa inggris. Besar harapan agar hasil dari penelitian ini dapat memotifasi guru bahasa inggris untuk menggunakan mind mapping dalam mengajar bahasa inggris didalam kelas.

Kata Kunci: The Effectiveness, Mind Mapping, Vocabulary.

INTRODUCTION

Vocabulary is essential in the process of learning English. There is no language without vocabulary. That is why it is one of the most important elements of language. The mastery of vocabulary help learners understand reading

materials, understand other speaking, given responses, listening and writing materials. In other words, students can communicate fluently. As Mukoroli (2011: 6) defined, "vocabulary as the entire stock of words belonging to a branch of knowledge or known by an individual." Having good mastery of vocabulary, contributes significantly to the achievement of the subjects in the class.

Teaching English vocabulary is challenging, especially for young students because English vocabularies are something new for them. So, as they are in the position of acquiring skills, they need to get a technique which can help them learn English vocabulary. As Singer et al (2003: 39) stated, "teaching is helping learners to acquire new knowledge or skills. Teaching consists, mainly, of telling, showing, guiding the learner in performance tasks and then measuring the results."So, teachers need to know what kinds of classroom activities they can use to help their students gain new vocabulary. Teaching English vocabulary needs variety of instructional media that will be able to help the students more attractive in receiving the lesson in the classroom. In other words, the variety of instructional can avoid the students from getting bored.

In order to help the students improve their vocabulary mastery, a teacher needs to apply an appropriate approach. One of the approaches that might be used in teaching vocabulary is mind mapping. It helps teachers relate subject matter content to real world situation and motivates the students to make connection between knowledge and its applications to their life. According to Buzan (2009: 4), "mind mapping is an easy way to place information to brain and take information out from brain. Mind Mapping is creative and effective way to write and will map your mind by a simple way." He also said that it is creative, effective and simple method of note taking. It is powerful graphic technique which provides a universal key to unlock the potential of the brain. Mind mappingis very useful for students to memorize vocabulary. Therefore, this way is expected to stimulate the students' interest.

The Nature of Language Teaching and Learning

Teaching generally can be defined as an effort of someone to share knowledge, skills, or ideas with some other persons in order to make the target person can learn to do something. As Clarke and Erickson (2007: 54) said, "teaching is a professional practice where a teacher engages learners in the construction of knowledge related to a particular area of study." However, the main objective of teaching is not merely to transfer knowledge but also to help the students to respond to his/her environment in an effective way. Furthermore, Brown (2000: 7) claimed, "teaching is showing or helping someone to learn how to do something, giving instructions, guiding in the study of something, providing with knowledge, causing to know or understand." Teaching language is a process to fill the mind of the learners by information and knowledge of fact for future use, it is a process which learner, teacher, curriculum and other variables are organized in a systematic way to attain some pre-determined goal. Teaching is defined as the interaction of a students and a teacher over a subject that may be consist of several students in a class. The students can be man or woman, bright or below average intelligence, rich or poor, young and old. The subject can be easy or difficult.

Language learning is very complex because the students learn many aspect of the language. According to Brown and Atkins (2002: 160), "learning is essentially an active process of relating new material to old, and of establishing networks and connections within and between units of knowledge." One of the important aspects in learning language is vocabulary. As McCarten (2007: 18) stated, "learning vocabulary is a challenge for learners, partly because of the size of the task, and partly because of the variety of vocabulary types to be learned, including single words, phrases, collocations, and strategic vocabulary…."

Learning can be defined as an activity that starts at birth and can be expected to continue for a lifetime. As Cameron (2005: 241) defined, "learning is the process of making meaning out of participation in the social world. As children's mind stretch to find meaning in new experiences, so learning occurs." Learning is always active because when someone learns, he or she does

something. Learning is a conscious process of knowing something, it is usually reserved for a relatively permanent change in behavior, interpretation, or emotional response as a result of experience. According to Hohenstein and King (2007: 163), "learning can be defined as a relatively permanent change in thought or in behavior that results from experience." Learning can happen based on daily life of the person.

The Nature of Vocabulary

Vocabulary is one of the important elements to support the four-language skills namely: listening, speaking, reading and writing. It is as factor in forming up the sentence to achieve the form of the particular language correctly. That is why the interaction among others can happen fluently and the communication can easily to understand. According to Hirai (2010: 45), "vocabulary is the basis for the development of language." Furthermore, Kim and Kim (2012: 4) claimed, "vocabulary is the base of communication in that language. Therefore, it is critical to try out various and different teaching style that cheers students to acquire vocabulary easily without negative emotion about it."

It is important to know vocabulary in studying foreign language. It is hard to communicate with other people if someone does not know the vocabulary. As Ghazal (2007: 84) stated, "vocabulary learning is one of the major challenges foreign language learners face during the process of learning a language." He also said that the central of language is vocabulary. Having adequate vocabulary helps person to express in composition vividly, precisely, and without repeating the compositions. One cannot communicate each other without knowing words meaning. Words are used to express ideas, emotions and desires to other people. In short, vocabularies are tools of effective communication.

Vocabulary helppeople to communicate and understand among others. According to Mukoroli (2011: 6), "vocabulary is a set of words that are the basic building blocks used in the generation and understanding of sentences". However, other expertAkbari (2008: 54), "without vocabulary speakers cannot convey meaning and communicate with each other in a particular language." Furthermore,

Hiebert and Kamil (2005: 95) stated, "the knowledge of a word not only implies a definition, but also implies how that word fits into the world."

Vocabulary plays a very important role in developing in the four language skills. Many teachers aware the important of teaching vocabulary to their students, but they do not aware enough on how to teach the students properly. According to Dunlap and Weisman (2007: 145), "vocabulary development is essential for English learners' academic success. There is a strong relationship between vocabulary knowledge and academic achievement." That is why, vocabulary cannot be ignored, it is very important especially in learning certain language. It is worth nothing to master the grammar of rules if a speaker does not have adequate vocabulary in order to express his own ideas. Without vocabulary, speakers cannot convey meaning and communicate with each other in a particular language. Other expert; Morra and Camba (2009: 22) said, "nowadays it's widely accepted that vocabulary learning is one of the essential elements both of acquisition of one's native language and of learning a foreign language."

The Nature of Mind Mapping

Mind mapping is one of techniques which use of whole brains in learning that can make the students more enjoyable and interested in studying English especially in learning vocabulary. According to Al-Jarf (2011: 4), "a mind mapping is a graphic organizer in which the major categories radiate from a central idea and sub-categories are represented as branches of larger branches."Teachers can use it to enhance learning. It is helpful for visual learners as an illustrative tool that assists with managing thought, directing learning, and make connections**.** It enables students to better organize, prioritize, and integrate material presented in a course. Furthermore, Hofland (2007: 5) argued, "mind mapping is a technique that stimulates both parts of the brains, the left side is used for rational and logical thinking whereas the right side is used for creative thinking." In short, mind mapping lets learners to make a connection between the lesson materials and their own feelings and experiences.

Mind mapping can help students learn vocabulary easier. According to Murley (2007: 175), "mind maps are a nonlinear visual outline of complex

information that can aid creativity, organization, productivity, and memory." He added that it also helps students look the relation between primary knowledge and recent information, it can aid students deliver what they know and used it to new conditions. Furthermore, mind mapping can help someone in learning, arranging, and saving as much information as possible and placed naturally even gives the access easily (Buzan, 2009). He also said that appeal to different learning styles such as visual can encourage pupils to think about connections in their learning content. They oblige pupils to use both sides of the brain.

Mind mapping works well especially when created in groups makes the task livelier and more enjoyable; it is a uniquely appropriate learning tool. Mind mapping is the use of whole brains technique by using the visualization and other graphic infrastructure to make an impression. The mind mapping works in harmony with the brain's natural desire for completion or wholeness replenishing our natural desire for learning. Mind mapping is potential infinite to express of the brain, and the human brain can make an infinite number of associations. However, other expert Jones et al (2012: 2) stated, "mind mapping helps students learn information by forcing them to organize it and add images and color to it. It allows students to create a visual image to enhance their learning."

In teaching, there is interaction happened between students and teacher which is allowing them to discover learning. Teaching means any activities which are decided to facilitate learning, including the setting of condition for learning and to make the learners able to learn. It is any activities on the part of one person intended to facilitate learning on the part of another. Teaching is a way to share power, knowledge, skills and the like, from one person to another and it is the effort to convince other.

Learning process will work out if all the learners actively involved in the teaching and learning process. In other words, students are participating in class to the subject. Therefore, teacher should create attractive activity for the class. If the teacher just explains or gives a speech every meeting, the learners will feel bored, too monotonous and it is passive way. Good learning atmosphere can guide the students to learn effectively and more meaningful. To accomplish such condition,

teacher must create various type and attractive techniques for the class. Furthermore, to increase the students' knowledge, teaching should be useful and effective.

Vocabulary plays important role in developing knowledge and skills of the students. To master the vocabulary as the going process of identi fying, appreciating and using the word meanings and background with accompanying concepts, in a progression that continue adds depth and breadth of understanding to oral pretend messages. Therefore, it is highly important that students be taught vocabulary in every class before learning the language. That is why, they should be taught extensively so that they will be able to place words in their memories.

Mind mapping is interesting way to express of the brain by making an infinite number of associations. Mind mapping gives the freedom to roam the infinite expanse of the brain. The view of its radiant nature, every key word adds to a mind mapping itself, adds the possibility of a new and greater range of associations. So, the researcher assumes that teaching vocabulary by using mind mapping is very effective for both teacher and students in teaching learning process to make the atmosphere of the class more enjoyable and to increase students' mastery of vocabulary.

RESEARCH METHODOLOGY

Pre-experimental method or one group pre-test post-test design was employed in this study where the sample was class D of the eighth grade students of SMP Negeri 3 Sungai Kakap in the academic year of 2012-2013.

The tools of data collecting used in this research was written test. The form of the test was multiple choice forms consists of 25 items. The students' correct answer was scored 4 point, meanwhile, the students' incorrect answer of each item was scored zero.

In collecting the data, the researcher administered twice, they were pre-test and post-test. The pre-test was given before the researcher applying the treatments while the post-test was given after the treatments. The treatment was given three times to the eighth grade students of SMP Negeri 3 Sungai Kakap in class D.

To figure out the significance of pre-test and post-test score, the researcher used t-test formula as Sing (2006: 237) stated, "t-test is used to determine the statistical significance." Then, the researcher make a conclusionfrom the result of the t-test calculation whether mind mapping is significanct or not to be used for teaching vocabulary.

RESEARCH FINDINGS AND DISCUSSION

The findings of this study obtained from the written test, then the data was analyzed in order to find out whether the teaching vocabulary through mind mapping to the eighth grade students of SMP Negeri 3 Sungai Kakap is effective.

Before giving the treatment, the average pre-test score of the students was 46.28. Most of the students got low score. However, the average score which the students got in the post-test was 86.14. The students got higher score than pre-test. Then, the researcher calculated the students' difference score between pre-test and post-test results. $\overline{D} = \overline{X2} - \overline{X1}$

$\overline{D} = 86.14 - 46.28$

$\overline{D} = 39.86$

So, it can be concluded that there was big differentiation between pre-test and post-test score that was 39.86.

To answer the hypothesis, the researcher analyze the data to know whether the alternative hypothesis was accepted or not, the researcher found important things in this study. Based on the result of the data computation from the several formulae, it was obtained that the test score (31.88) was higher than the t-table (2.052) at 5% the degree of freedom (df) = N-1 (28-1=27). It can be seen that there was difference between test score and t-table. It could be proved that mind mapping was effective. Therefore, the alternative hypothesis was accepted and the use of mind mapping is effective to increase students' vocabulary mastery in the eighth grade students at SMP Negeri 3 Sungai Kakap in academic year 2012/2013.The calculation of the t-test indicated 31.88 which were higher than t-table (2.052) at 5%, the degree of freedom N-1 (28-1=27). In conclusion, there was a significant difference between the mean score of pre-test and post-test. In

this research, the researcher taught vocabulary through mind mapping to the eighth grade students of SMP Negeri 3 Sungai Kakap in academic year 2012/2013.

Based on the finding in this study, the researcher interprets that mind mapping technique was a technique that can stimulate students' creativity. According to Hofland (2007: 5), "mind mapping is a technique that stimulates both parts of the brains, and the left side is used for rational and logical thinking whereas the right side is used for creative thinking." Besides, mind mapping can be used as creative, effective and simple method of note taking for learning (Buzan, 2009). So, it is effective method for teaching vocabulary to the eighth grade students of SMP Negeri 3 Sungai Kakap. It was assumed that the students' ability in learning vocabulary before being taught through mind mapping technique was in the poor to average level and after being taught through mind mapping technique, the students' ability was in the good to excellent level. In short, after the treatment the students' achievement in vocabulary improved.

This condition meant that teaching vocabulary through mind mapping technique could improve their vocabulary mastery. Furthermore, the result of the teaching showed that there were difference achievements on the experimental group. The mean difference of two measurements was $86.14 - 46.28 = 39.86$. The result of the calculation of the t-test formula was 31.88 and it is higher than the t-critical value (2.052). So, the treatment that was given to the students in the experimental group could influence their ability in vocabulary mastery from enough level to good level.

Besides, the t-obtained showed that the alternative hypothesis was accepted because the result of the calculation of the t-test formula was 31.88. It meant that there was a significant difference of the students before and after they were taught by using mind mapping technique. Finally, mind mapping can be used as one of the method in teaching vocabulary at SMP Negeri 3 Sungai Kakap. Discussing the result to data analysis and t-test, the researcher do believe that eighth grade students at SMP Negeri 3 Sungai Kakap on vocabulary items is getting improve

because of some reasons. Firstly, they did not get bored in a class. Secondly, the students could be faster and more easily understand even remember the vocabularies. Thirdly, most of the students' motivations in learning were aroused because they felt happy and had fun about the materials given.

As can be seen, after giving mind mapping technique in teaching vocabulary, so that the students were able to improve their vocabulary and they can understand the meaning of unfamiliar words. There was also important finding in vocabularies, the students were more encourage using new words that they get from their mind when mind mapping was a key of words, and new words were supported by other key words that serve as contents of new words. Students felt more confident in using new words to put in another words. Mind mapping strongly improve the mastery of vocabulary and enhances in creating new ideas.

Based on the research finding above, the achievement of the students are influenced not only from the students itself, but also by the process of teaching and learning or though mind mapping as a technique in teaching vocabulary which has positive effect to the students' achievements. The effect of mind mapping in teaching vocabulary helps the teacher to create an enjoyable classroom condition that gave positive outcomes for the students.

CONCLUSIONS

This study was to find out whether or not mind mapping technique in teaching vocabulary especially concrete noun effective for teaching vocabulary. Based on the analysis result, it showed that mind mapping technique looked like to be a good technique in teaching vocabulary. It was referred from the calculation of t-test and effect size. It meant that the researcher can concluded that the alternative hypothesis (Ha) of significance level was accepted and consequently null hypothesis (Ho) was rejected. In other words, it was effective to teach vocabulary through mind mapping technique to the eighth grade students of SMP Negeri 3 Sungai Kakap.

BIBLIOGRAPHY

Al-Jarf, R. 2011. Teaching Spelling Skills with a Mind-mapping Software.*Asian EFL Journal Professional Teaching Articles,*(53):4-16.

Akbari, O. 2008. Teaching Vocabulary Items through Contextualization and Picture to Elementary Iranian EFL Students.*The Asian EFL Journal.* (10):53-77.

Buzan , T. 2009. *Buku Pintar Mind Map*. Jakarta: PT Gramedia Pustaka Utama.

Brown, G. & Atkins. M. 2002. *Effective Teaching in Higher Education*. London & New York: Routledge.

Brown, H.D. 2000. *Principles of Language Learning and Teaching*, 4th ed. San Francisco : Addison Wesley Longman, Inc.

Cameron, L. 2005. *Teaching Language to Young Learners*. UK: Cambridge University Press.

Clarke, A. & Erickson, G. 2007. *International handbook of self-study of teaching and teacher education practices*. The Netherlands: Springer.

Dunlap, C.Z & Weisman, E.M. 2007. *Helping English Language Learners Succeed*. USA: Shell Education.

Ghazal, L. 2007.Learning vocabulary in EFL contexts through vocabulary learning strategies.*Novitas-royal,*1(2):84-91.

Hiebert, E.H., & Kamil, M.L. 2005. *Teaching and Learning Vocabulary*. United States of America: Lawrence Erlbaum Associates.

Hirai, D.L.C., Borrego, I., Garza, E., Kloock, C.T., Wakelee, D., & Murray, V. 2010. *Academic Language/Literacy Strategies for Adolescences*. New York & London: Routledge.

Hofland, C. 2007. *Mind mapping in the EFL Classroom*. Blerick: Fontys Hogescholen.

Hohenstein. J. & King. H. 2007. *Becoming a Teacher*. USA: Open University Press.

Jones, B.D., Ruff, D., Snyder, J.D., Petrich, B., &Koonce, C. 2012.The Effects of Mind Mapping Activities on Students' Motivation.*International Journal for the Scholarship of Teaching and Learning,*6(1).

Kim, S. & Kim, M. 2012. Kolb's Learning Styles and Educational Outcome: Using Digital Mind Map as a Study Tool in Elementary English Class.*International Journal for Educational Media and Technology,*6(1):4-13.

McCarten. J. 2007. *Teaching Vocabulary*.United States of America: Cambridge University Press.

Morra, S. & Camba, R. 2009. Vocabulary learning in primary school children: Working memory and long-term memory components.*Journal of Experimental Child Psychology*. (104):156-178.

Mukoroli, J. 2011. Effective Vocabulary Teaching Strategies for the English For Academic Purposes ESL Classroom. Brattleboro, Vermont: SIT Graduate Institute.

Murley, D. 2007. Mind Mapping Complex Information.*Law Library Journal.* 99. (1):175-183.

Singer, A.J., Murphy, M. & Hines, S M. 2003. *Teaching to Learn, Learning to Teach*. London: Lawrence Erlbaum Associates.