The Use Of Mind Mapping Technique
In Teaching Vocabulary

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Abstract

This research is aimed to describe the procedure of mind mapping technique on teaching vocabulary and to know the improvement of students' vocabulary mastery after teaching learning vocabulary through mind mapping technique. In collecting the required data, the writer did test and questionnaire. The writer as teacher tried to apply mind mapping technique in teaching vocabulary mastery of students. The result of test show that mind mapping technique improved students' vocabulary mastery. The result of the questionnaires show that most of the students agree that mind mapping is able to advance them, improve their vocabulary, expand their ideas, and increase their self confidence in learning.

Key Words: *Vocabulary, Mind Mapping*.

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1. Introduction

Language is an important role in improving students' intelligence, social, and physical. Language contains words which are used in making sentences named vocabulary. Learning vocabulary is very important since vocabulary is an important thing in communication. That is why everybody who learns English or a certain language should know the words. The mastery of vocabulary can support them in speaking when they are communicating to people, write and translate the meaning of words. If they do not know the meaning of words, they will not be able to speak, write and translate anything in English. Based on that statement, it knows that vocabulary is a basic need in communication.

Language helps students gain success in every subject at school. By learning language, students are expected to be acquainted with themselves, their culture and other culture. In learning language, students have to learn four skills. There are Listening, speaking, reading, and writing. They also have to learn about three language elements. There are structure, vocabulary, and pronunciation. Vocabulary is one of the language components that has a role in the mastery and use of language skills. An important thing is due to the fact that vocabulary is one of the components of language and no language exists without words. Words are signs or symbols for ideas. They are means by which people exchange their thoughts. The words we learn, the more ideas we should have. So we can communicate the ideas more effectively.

Harmer (1991: 73) also states that an ability to manipulate grammatical structure does not have any potential for expressing meaning unless words are used. Rivers in Nunan (1991: 103) has argued that the acquisition of an adequate vocabulary is essential for successful second language learners because without an extensive vocabulary, they will unable to use the structures and functions they may have learned for comprehensible communication. Allan (1977: 18) states that vocabulary is the words continually be learning as they learn structure and as they practice the sound system. Vocabulary is one of the most important aspects in mastering English because the ability of the students to read or comprehend the subject is relatively determined by their vocabulary. In this case, we must emphasize that vocabulary plays a key role not only in reading but also in speaking, writing, and listening.

To master all the language skills, vocabulary knowledge are important that have to known by the students and the teachers of English. The teachers should have a technique that makes the students interesting in learning vocabulary. There are many techniques of making the students interested in what they are learning especially in learning vocabulary. Brown (1994: 48) said that techniques are the specific activities manifested in the classroom that are consistent with a method and therefore in harmony with an approach as well.

It is clear that vocabulary as a fundamental requirement does influence students' achievement in studying

English. Vocabulary as one of language elements which functions not only to support the use of the other elements of language (pronunciation, spelling, and grammar) but also to facilitate the use of the four language skills (listening, speaking, reading, and writing). Learning vocabulary is one important matter in learning language but it is not a simple work to do. The bad score on vocabulary found in the students' achievement does not mean that there are no efforts to solve the problem. Both teachers and students have tried to apply various strategys and techniques in teaching and learning vocabulary. However, there are many factors assumed to give influence in teaching and learning process such as students' characteristics, materials, teachers' character, etc.

The students who have little knowledge of vocabulary will face some difficulties to understand the written language and oral language. Dellar and Hocking (in Thornbury, 2002: 13) said if you spend most of your time studying grammar, your English will not improve very much. You will see most improvement if you learn more words and expressions. You can say very little with grammar, but you can say almost anything with word. The students may get some difficulties in learning a language if they have limited number of vocabularies. Saleh (1997: 12) argues that the success in mastering a language is determined by the size of the vocabulary one has learned. Thornbury (2002: 23) adds that the learner needs not only to learn a lot of words, but to remember them.

Memory sensory has important value in learning vocabulary. The students need balancing in usage of the left brain and right brain. Whole brain is needed by the students to think perfectly. Right brain is for creativity and visualization. Left brain is for logical and rational. Mind mapping combines both and become whole-brained. It stimulates the brain by appealing to both the creative and logical side of the brain. According to DePotter and Hernacki as translated into English (in Abdurrahman, 2008: 152), mind mapping uses visuals reminder and sensory into a pattern from the ideas which are related.

Mind mapping allows the students to clarify their thoughts by categorizing and grouping into related ideas. It starts with the students' main topic or the theme as the central idea and allows the main branches of mind mapping to represent the main points of their thought (right brain) then combined by the interesting colours and images (left brain) which will stimulate the brain. Thornbury (2002: 18) said that cquiring a vocabulary requires not only labeling but categorizing skills. The writer chooses mind mapping as a technique to help the students in memorizing the words which are expected in improving their vocabulary proficiency by memorizing easily.

Rivers (in Thornbury, 2002: 144) states that vocabulary cannot be taught, it can be presented, explained, included in all kind of activities and experienced in all manner of association, but it is ultimately it is learned by the individual. Mind mapping is believed as one of the techniques or activities which can

be used in teaching vocabulary which involve the essential idea and encourages memorizing vocabulary easily.

There are no specific rules to learn vocabulary efficiently; however, teachers may use various strategies in teaching vocabulary. Among other teaching strategy is Mind mapping Strategy. A mind mapping is a visual organizer that promotes vocabulary development. Using a graphic organizer, students think about terms or concepts in several ways. Most word map organizers engage students in developing a definition, synonyms, antonyms, and a picture for a given vocabulary word or concept. Enhancing students' vocabulary is important in developing their English skill. Mind mapping is creative note-taking strategy, which eases us to remember much information (De Porter, Readon, and Nourie, 1999: 175). The best mind mapping is colorful and used much pictures and symbols; usually like an art. Buzan (1993: 1) states that mind mapping is a powerful graphic technique, which provides a universal key to unlock the potential of brain.

Mind mapping technique imitates the thinking process, namely possible us to move from one topic to another topics back and forth. Recording the information through symbols, pictures, emotional meaning and colours, exactly our brains process it. A pattern which at least consists of picture, symbol and color that will not just help the students to understand the vocabulary knowledge but also makes the students feel good, enjoyable and attract their brain which at last lead them to have interest in mastering

vocabulary knowledge. By implementing the mind mapping, students allow finding similar words, which has relationship to the main word. They can work in group or individually. They learn to share knowledge and information about targeted content, and willingly do this because it is naturally following part of the class activity.

By implementing the mind mapping technique in teaching, indirectly, students might be improved their knowledge of English vocabulary. At least it will be raised their self confidence for expressing themselves openly, especially in English class. Students can share their knowledge and experience from others, including respectful listening and appropriate sharing of personal perspectives. Students also reported that their understanding of concepts were expressed and considered, at least we hope students can do not only in developing their vocabulary but also they are able to practice either in speaking or understanding of meaning of words.

Derived from the writer's experience when he conducted his research at the Seventh Grade students of SMPN 3 Nisam, mind mapping is a suitable technique for the students in secondary level for improving their vocabulary mastery. To be proved how far the mind mapping could be influenced students' vocabulary mastery, in this paper the writer tries to elaborate everything related to the technique of implementing mind mapping and its effect for increasing students' vocabulary mastery.

2. Review of Literature

2.1. Vocabulary

Vocabulary is an important part of language learning activities. It includes all the words that normally used when the other language skills are learned. Learning vocabulary does not mean learning word isolation. Word should be learned in context because a word may have different meaning in different context. In fact, word in isolation frequently does not match with the intended meaning, the meaning of the word will be depended on the context itself. This idea is supported by French (1983: 1) by saying that to know the English words and their meaning would be useless, unless someone know how the words put together meaningfully in a sentence. On the other hand, vocabulary growth is based on the students' experiences. Words must be associated with the meaning in order to be useful for communication.

Vocabulary has a significant role in mastering a language. Everyone who wants to master a foreign language included English need to master vocabulary well. Mastering vocabulary is the first step to master English well. Therefore the students who are lack of vocabulary will face difficulties in mastering English. They cannot express their idea as clearly as they want because they are lack of vocabulary, and also they could not understand the lecturer's explanation because they do not know the meaning of words used by the lecturer. Moreover, they have problems in understanding books, newspapers, magazines which are written in English, or even in understanding the radio broadcast or television program. So the mastery of a large number of vocabularies are necessary to master a foreign language included English.

In other word, vocabulary as a working tool which can help the students to understand completely when they listen or read something. Harmer (1991: 23) stated that we should ensure that our students are aware of the vocabulary they need for their level and that they can use the words which they want to use and/or the words we have selected for them to use. Therefore, the mastery of vocabulary is an important tool to enable students to understand information or explanation.

Murdiono (2002: 16) said that vocabulary is one of language aspect beside grammar and pronunciation which functions as a tool to support the ability to communicate in English. Vocabulary could be as the medium of communication to one self. In other words, vocabulary is also as a vehicle that makes it easier to conduct any activity concerned with other language skill namely: listening, speaking, reading and writing. According to Ur (1996: 60) vocabulary can be defined roughly as the words we teach in foreign language.

In an introduction, Richard and Renandya (2002: 255) stated that vocabulary is a core component of language proficiency and provides much of the basis for how well students speak, listen, read and write. While Hornby in Advanced Students' Dictionary of Current English (1989: 142) defined vocabulary as a total number of words that make up a language body of word know to a

person or used it for a particular book, subject and test of word used in book.

Based on some definitions given above, it can be concluded that vocabulary is list of words which functioned as tool to communicate and it is used in written and spoken language. Vocabulary can help the student especially English study program students in mastering the others language skills namely listening, speaking, reading and writing. It is clear enough that everybody who learns a language as a foreign language is hoped to know and master the vocabulary to improve the language skills. So when someone interests to learn a foreign language they must master vocabulary well, because in all language aspects vocabulary is needed. Vocabulary becomes a major problem in learning English especially to English university students, when they have good ability in mastering vocabulary, they will be easier in mastering any aspect of English.

2.2. Mind Mapping

Mind mapping is creative note-taking method, which eases us to remember much information (De Porter, Readon, and Nourie, 1999: 175). The best mind mapping is colourful and used much pictures and symbols; usually like an art.

Buzan (1993: 1) states that mind mapping is a powerful graphic technique, which provides a universal key to unlock the potential of brain. Mind mapping technique imitates the thinking process, namely possible us to move from one topic to another topics back and forth. Recording the information through symbols, pictures, emotional meaning

and colours, exactly the same like our brains process it. A pattern which at least consists of picture, symbol and color that will not just help the students to understand the vocabulary knowledge but also makes the students feel good, enjoyable and attract their brain which at last lead them to have interest in mastery vocabulary knowledge.

Mind mapping was developed as an effective method for generating ideas by association in the 1960s (Murley, 2007). A mind map is a graphic organiser in which the major categories radiate from a central idea and sub-categories are represented as branches of larger branches. It is a visual tool that can be used to generate ideas, take notes, organise thinking, and develop concepts (Budd, 2003; Murley, 2007: Siriphanic & Laohawiriyano, 2010; Al-Jarf, 2011). In other words, it is a tool for language teaching that helps the teacher introduce or bring together multiple words that are linked to one subject or theme.

As with a traditional outline, a mind-map is based on organising information via hierarchies and categories. But in a mind-mapping, the hierarchies and associations flow out from a central image in a free-flowing, yet organised and coherent, manner. Major topics or categories associated with the central topic are captured by branches flowing from the central image. Each branch is labelled with a key word or image. Lesser items within each category stem from the relevant branches.

In order to create a mind-mapping, we usually start in the middle of the page with the central theme or main idea. From that point, we work outward in all directions to create a

growing diagram composed of keywords, phrases, concepts, facts and figures. Murley (2007) explains that mind-mappping graphically show ideas in a relational context, with the main topic at the center of the map, major subtopics on branches radiating from the main topic, and sub-subtopics around each subtopic that can be created with paper and pens or with one of several computer applications.

Buzan (1993: 15) states that a mind mapping is a powerful graphic technique which provides a universal key to unlock the potential of the brain. It is visual map of ideas, laid out in a radial format around a central thought and it involves a unique combination of imagery, colour and visual-spatial arrangement which is proven to significantly improve recall when compared to conventional methods of note-taking and learning by rote. It needs imagination and association to activate our brain in remembering something.

Based on DePotter and Hernacki as translated into English (in Abdurrahman, 2008: 153), mind mapping is the use of whole brains technique by using the visualization and other graphic infrastructure to make an impression. Besides, mind mapping is one of techniques which can make the students more enjoyable and interesting in studying vocabulary.

According to Martin as translated into English (in Trianto, 2009: 158) mind mapping is a concrete graphic illustration which indicates how a single concept related to other concept in the same categories. Mind mapping is a pattern which at least consists of picture,

symbol and colour that will not just help the students to understand the vocabulary knowledge but also make the students feel good, enjoyable and attract their brain which at last leads them to have interest in mastery vocabulary knowledge.

Additionally, Murley (2007:15) notes that it is easy to understand the maps drawn on mind-maps. This benefits the students as it saves time and increases productivity. Different learning styles in vocabulary class can also be accommodated. Mind-maps are especially helpful for strong visual learners who absorb information better when it is presented via diagrams and similar visual aids than through written text.

Mind mapping also help students see connections between prior knowledge and new information, which helps them transfer what they learn and apply it to new situations. Mind mapping technique proves to be a powerful tool for improving students' ability to generate, visualise and organise ideas in learning (Al-Jarf, 2009: 71).

Moreover, Al-Jarf (2011: 54) points out that mind-mapping is used to enhance learning. Visual learners find it useful as an illustrative tool that assists with managing thought, directing learning, and making connections. Al-Jarf (2011: 51) also adds that mind-mapping enables students to better organise, prioritise, and integrate material presented in a course.

From the discussion above, it is clear that mind mapping is an effective technique for harnessing the power of both sides of the

human brain to foster studying, problem solving, critical thinking and memory recall.

2.3. The Advantages of Using Mind Mapping Technique

DePorter and Hernacki (in Abdurrahman, 2008: 172) describe that there are some advantages of using mind mapping technique, they are as follows;

1. Flexible

    Explaining something can be easy without confusing in add the material based on the mind mapping. We can put the label and category of something based on our own opinion anywhere in the mind mapping.

2. Concentrate on the Topic

    Getting the subtopics what we talk about with focus on the main ideas easily. Keep focus on the keyword can help us to make it simple and it does not waste the time.

3. Increasing Comprehension

    Using mind mapping can make easy in understanding the material. Mind mapping is a simple think pattern so it is not make us confuse to understand what we have learned and easy to remember the material.

4. Enjoyable

    Imagination and creativity are unlimited in using mind mapping, so it can be funny to learn. By using pictures and colours, it makes the brain enjoy and excited in thinking something what we want about the material.

2.4. Parts of Mind Mapping Technique

There are some parts of mind mapping (Windura, 2008: 77-86) namely; (1) central image, (2) key word, (3) basic ordering ideas, (4) branches, (4) colour and (5) picture.

1. Central Image

    A central image has to describe the main idea of a mind mapping and put it on the centre of the paper. It is for activate the students' right brain, strengthen the students' memory and make the learning activity enjoyable.

2. Key Word

    A key word is a word that can lead a sentence or event. Identifying a familiar word in one's own language or another language that sounds like the new word and using only one key word per line. It is as an urge to remember a lot of words for the students. It is strong noun or verb that creates image to trigger recall the memory.

3. Basic Ordering Ideas

    Basic ordering ideas are the branches that collect sort information and it connected to the central topic that radiate out from the centre. Making basic ordering ideas which can direct our mind to make mind mapping and it need creativity that encourage the students to understand to the material. It is thick and thinner at the ends. It can be seen as headings for your topic and spread anywhere but do not become steep.

4. Branches

The branches should be curvy and in the same length as the words or pictures above it. These branches can be seen as sub headings. It is thinner branches and containing details.

5. Colour

    Colour is a very good memory sign and it involves the right brain in learning for long term memory. Colours encourage creativity and help in memorization. Adding plenty of colours via branches, map background and images will add life to your mind map. It makes easier to comprehend and remember.

6. Picture

    In mind mapping, pictures which can change or streng then a key word that has been written before.

2.5. The Criteria of Making Mind Mapping Technique

Based on what Buzan (in Purwoko, 2005: 20) states that the mind mapping uses colors and pictures to help constructing your imagination with your style in making mind mapping. Words or pictures which are in the curvy lines or branches will help the students' memory to make associations.

Furthermore Buzan (in Purwoko, 2005: 20) explains the steps below in how to make mind mapping, they are presented below:

1. Take a piece of white paper and it is in a landscape position.
2. Start by drawing a coloured image in the centre of the paper and write the key word with capital letters.

3. Choose a color and draw the main themes of the mind mapping on the thick branches radiating out from the central image.
4. Add other main themes branches around the map.
5. Make thick and colourful branches spanning out from your mind map.
6. Write basic ideas about the key word and still use the capital letters.
7. Add an image to all the main branches to represent each key theme and also use images to visualise every important key word on your map.
8. Let your mind mapping be as imaginative as possible.

3. Research Method

The design of this research is experimental research by using quantitative data approach. According to Arikunto (2000: 201) experimental research is a research which determines the effect of applying variable to object, or the reciprocal relationship in the research. Experimental research is a kind of research that purpose to prove the approach, method, strategy or technique whether effective or not which is used in teaching and learning process. Experimental research designs are used for the controlled testing of causal process. The general procedure is one or more independent variables are manipulated to determine their effect on a dependent variable.

In doing this research, the writer had two groups, they were experimental group and control group. Before giving the treatment to the experimental group, it was performed pre-

test to both experimental group and control group. The students in seventh grades SMP 3 Nisam class VII_2 was taken as the samples. In doing this research, the writer would select students from this class randomly and then place the chosen students into one of two groups using random assignment. He would give a pretest to each group. One group would receive the experimental treatment while the other would not receive it.

3.2 Data Collection Technique

The data were gained by administering test and questionnaires to the students. Questionnaire consists of some statements which reflect the implementation of teaching-learning through by mind mapping.

In test, the writer used a written test to know the students' ability in learning vocabulary. A test is a short examination of knowledge that consists of questions that must be answered. The writer gave the written test to measure the students' vocabulary in using mind mapping technique. The test was in the forms of multiple choice tests and matching test with 40 test items and the students got 40 minutes to do the test.

3.3 Data Analysis

The data of this reasearch were then analyzed quantitatively. Because quantification used to describe the data in percentage as suggested by Hatch and Farhady (1981: 39).

4. Findings and Discussion

Findings of this research are divided into two analyses, namely data analysis on pre-test and post-test, data analysis on close ended questionnaire.

Each section in detail is elaborated as follows:

4.1. Analysis of the Test

The research began with a pre-test. The purpose of this activity is to test students' skills in English language words vocabulary. In pre-testing, classroom teacher helped me to control the class. Pre-test is conducted on Monday, March 2, 2015, taken by 35 students, 15 boys and 20 girls. Pretest consists of 120 words in English. In this test the writer wanted to know how many words students know well. Students' pretest results were as follows: 27 students scored below 60, 4 students scored about 60, and 4 students scored more than 60. The average score on the pretest was 50. From the results of the pretest, the writer concluded that most students are not able to master English vocabulary well yet. The result of students' achievement in the pre-test was 50%. The result is less than the desired criteria.

Then, students gain vocabulary treatments by mind mapping technique. Here students to know how to learn vocabulary using this technique. After completion of treatments and then at the end of the meeting students were given posttest. The post test was conducted on Monday, March 9, 2015. The test was used to know the students' progress after getting the treatment English mind mapping to teach English vocabulary. There were 120 words that were scored. There were no students who got scores less than 60. 2 students got scores about 60 and 33 students got scores more than 60. And the average of their scores was 82. From the analysis above, we know that the students' achievement in the

post test were higher than in the pretest. And the improvement of the students' achievement from the pre test into post test was 64%. It was obtained from the computation below:

$$= \frac{\text{The average of the posttest} - \text{the average of the pre test} \times 100\%}{\text{The average of the pre test}}$$

$$= \frac{82 - 50 \text{ x } 100\%}{50}$$

$$= 64\%$$

From the analysis above, the writer finds that the students' achievements in the post test after they got the treatment were higher than in the pretest. The writer concluded that mind mapping can improve the students' achievement in vocabulary mastery.

4.2. Questionnaire from the Students

The data from the first question related to the use of mind mapping in the teaching vocabulary, the students respond various responses. The responses are 70% of the students respond that they easy understand and 30% of them respond that they don't enjoy study with this technique.

Hence, the second question related to the problems students study vocabulary, students response the following answers. The responses are 30% of the students have some difficulties in understanding the meaning words. Meanwhile, 40% of them said that the problem is the fact that English is difficult and 30% said that they feel difficult to understand the meaning which are spoken in English.

Thus, the third question related to strategies used to overcome the problems of understanding vocabulary in the classroom, the students respond such as the following responses. The responses are 70% of the students use mind mapping and 30% of them ask to teaching in other strategy.

5. Conclusion and Suggestion

5.1. Conclusion

According to findings and conclusion of the research, there are some conclusions can be drawn as follow:

Mind mapping technique is one of the alternative technique in teaching vocabulary. The research result shows that this technique is effective to improve the students' ability in vocabulary mastery. Moreover, mind mapping has been proven to have an effective influence in improving students' vocabulary mastery. The experimental study show that the improvement in vocabulary mastery of the experimental group is statistically than the improvement in control group.

The result of the questionnaires show that most of the students agree that mind mapping is able to advance them, improve their vocabulary, expand their ideas, and increase their self confidence in learning.

Nevertheless, a good technique will not work well and help students in learning's if does not suit to the students need and condition. Mind mapping technique is still unable to recover the student's entire problem in vocabulary.

5.2. Suggestion

There are several suggestions proposed for the next study in the similar field

as the present research: First in the treatment process, the students have some difficulties in maintaining the time. The teacher should pay attention more by giving clear instruction before students made mind mapping.

Second, mind mapping used in this research effectively improved the student vocabulary mastery. It's important for the next researcher to know whether this technique appropriate applied in other skill. Last, this research is conducted in seventh grade of junior high school in SMPN 3 Nisam. Hence, further research should prove whether mind mapping technique is also effective for student in different grades or school.

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