The Use of Tree Diagram Technique in Teaching Vocabulary

Raisa Anakotta
raisaanakotta@gmail.com

Doni Sudibyo
donisud@unimudasorong.ac.id

Wa Risnawati
Warisna124@gmail.com

Universitas Pendidikan Muhammadiyah Sorong

ABSTRACT

The objective of this research is to find out whether a tree diagram technique is effective or not in teaching vocabulary at seventh grade in MTs Muhammadiyah 2 Aimas. Related to the objective of the research used pre-experimental quantitative research design. The design of this research is one group pretest- posttest. The population of this research was seventh grade students divide two classes that were VII A and VII B and the total them are 24 students. Based on purposive sampling, the researcher chosed seventh B grade and which total are 18 students because the class is lack of vocabulary so the low score. In the collecting the data, the researcher used 20 items multiple choice for pretest and posttest. In analyzed the data, the researcher used SPSS 20 program to calculation the data.The result finding of the research showed that the result of N-gain is (58.46) or (58%) the categorized was quiet effective. In addition to result of T-test is P value (0.000) < α (0.05), it means that H0 was rejected and Ha was accepted. The alternative hyphothesis (Ha) was there is an effective in teaching vocabulary using tree diagram between pretest and posttest. And also , it can be seen from the mean score from the posttest was (45.83) improved on posstest (77.50). It can be concluded that tree diagram technique in teaching vocabulary were effective in teaching vocabulary.

Key words: *Teaching Vocabulary, Tree Diagram Technique.*

INTRODUCTION

Vocabulary is part of language learning in English Subjects at an educational institution that needs continuing growth and development besides grammar and pronunciation. According to Kridalaksana (2008) vocabulary is a component of language that maintains all information about the meaning and using the word in a language. So, vocabulary can be defined as a powerful carrier of meaning and the knowledge of words and their meanings. It means that without establishing a strong

vocabulary base, comprehension and use of a language will not be achieved. Besides, the students should be able to recognize words and know their meanings as well. Thus, when a student is effectively able to recognize and use a word in different contexts, to speak, to write, to pronounce the word well, she/he has the knowledge and the meaning of that words. Wallace in Tunggala (2010) argued vocabulary proficiently affects not only the students reading skills, but also their listening, speaking and writing skills as well.

In listening, their vocabulary influences how much they understand whatever they listen. In speaking the word chosen affects how well they are speaking, the impression they make, how people reach them. In writing, their vocabulary determines how clearly and accurately they can express their ideas to others". The statement means that the most influential English component to learn is vocabulary because it can affect the students' ability in mastering other English components and even English skills. Additionally, vocabulary is a language component that enables people to be easy to build up words into sentences to be able to understand a language. In this research, the researcher used a tree diagram technique to solve those problems. The tree diagram technique was a technique that is useful to improve the students' vocabulary mastery by adding some words in the branch of the tree diagram technique. The tree diagram technique was not only enjoyable but also it can help the students to categorize the words from general to specific.

A tree diagram is simply one example of mind mapping. Whereas the mind map is a central idea surrounded by the branches of related ideas, tree diagram comes up with a diagram looks like a tree. Tague (2005) states that the tree diagram technique starts with one item those branches into two or more, and so on. It looks like a tree with a trunk and multiple branches. It is used to break down broad categories into finer and finer levels of detail. Tree diagram helped the students moving their thinking systematically from generalities to specifics. The tree diagram technique is an outlining technique which can be used to improve the organization of the words. McGraw (2008) argues that this type of tree diagram is helpful when you want students to find the main idea of a paragraph or section. The main idea or topic is written in the top box. It means that tree diagrams have a main idea, which has interrelated to support the idea. Then, the students should analyze for information that demonstrated or supported the main idea or topic. The objective of the research aimed to find out whether a tree diagram is effective in teaching vocabulary or not

LITERATURE REVIEW

Previous Related Study

First, a research that was conducted in 2017 by Fitri ana with aims to improving vocabulary mastery of the seventh grade student through tree diagram technique, English language teaching society journal. This research is to investigate the effectiveness of tree diagram technique in improving the students' vocabulary mastery. This research employed a quasi-experimental research design, consisting

of an experimental and control group. The population is the seventh-grade students and the sample is VIIA and VIIB consisting of 21 students for each. The researcher applied the purposive sampling technique in selecting the sample. In collecting the data, the researcher used tests (pre-test and post-test) as the research instrument. To analyze the data, the researcher used statistical analysis by applying the t-test formula. In conclusion, a tree diagram technique can improve the vocabulary mastery of the seventh-grade students.

Second, a research was conducted in 2011 by Ririn Ambarwati with aims to effectiveness of tree diagram technique as a means of teaching writing is experimental research, which is intended to improve the students' ability in writing through tree diagram technique. The subjects of the experiment were the students of grade XI IPA 3 of SMA Negeri 2 Bae Kudus as the experimental group and the students of grade XI IPA 2 as the control group. The research was conducted in the even semester of the academic year of 2010/2011. This research was held in six meetings for both the experimental group and the control group. The test was used to know the writing development between the two groups.

Vocabulary

Vocabulary supports the speaker to express their opinions, ideas, and feelings in communication. Vocabulary, as one of the knowledge areas in language, plays a great role for learners in acquiring language. (Cameron, 2001). So, vocabulary is the most important component language because it affects the four language skills, there are listening, speaking, reading, and writing. Vocabulary learning is central to language acquisition, whether the language first, second, or foreign. Generically, vocabulary is the knowledge of the meanings of words.

John Read (2000) stated there are two types of vocabulary, they are active and passive. Vocabulary while learning new words, people need a lot of practice and context connections to learn them well, store the vocabulary in the memory, and recall it when speaking or writing. Thus two main groups of person's vocabulary are active and passive vocabulary. Active vocabulary (productive) is used in speech or writing and is made up of words that come up in a person's mind immediately when he or she has to produce a spoken or written sentence. On the other hand, passive vocabulary (receptive) is known but not used by a person. People understand it when it is heard or read.

According to Thornbury (2002), teaching vocabulary is a crucial aspect of learning a language as languages are based on words. It is almost impossible to learn a language without words; even communication between human beings is based on words. Recent research indicates that teaching vocabulary may be problematic because many teachers are not confident about the best practice in vocabulary teaching and at times do not know where to begin to form an instructional emphasis on word learning (Berne & Blachowicz, 2008). Vocabulary is a central of English language, acquisition, as according to Celce and Murcia (2001) vocabulary learning

is central to language acquisition whether the language is first, second, or foreign. From that explanation, teaching vocabulary is an activity where the teacher gives the students' knowledge about vocabulary and how to use it in daily life.

Tree Diagram

Tree diagram is simply as one example of mind mapping (Tony, 2007). Whereas the mind map is a central idea surrounded by the branches of related ideas, tree diagram comes up with a diagram looks like a tree. It starts with its "root" as a central or key idea and then it will be followed by some ideas related and they derived. It starts with a single node, with branches emanating to additional nodes, which represent mutually exclusive decisions or events. In the diagram below, the analysis will begin at the first blank node. A decision or event will then lead to node A or B. From these secondary nodes, additional decisions or events will occur leading to the third level of nodes until a conclusion is reached.
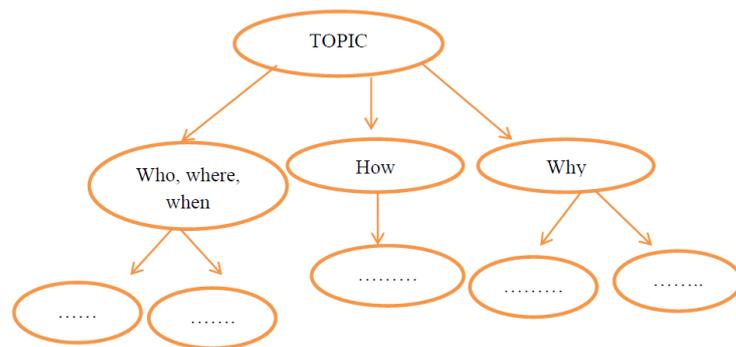
Figure 1. Concept of Tree Diagram

The tree diagram design above is an example of how we start our essay using a tree diagram. As the reader can see, the first and central point is the topic or we can call it a central idea. The next step that the students should do is to make some branches below the root. These branches can be divided based on how many parts that the essay will be. If the essay will be four parts, so the root should have four branches. These branches include the main idea of each part. Then, the next step is similar to the root. The next branches of the branch will depend on how to detail the information will be. The more detailed information or essay, the more branches the researcher should have. Based on the sources about the tree diagram above, the researcher concluded that the procedures in teaching vocabulary using tree diagram technique as follows:

1. First, the researcher gives an example of the topic. For the material being taught is present continuous tense.
2. Second, the researcher provides the main words in the tree diagram technique based on the topic, for example, " look at around us".

3. Third, the researcher asks the students to add a new word into some branch one by one comprehensively as they can like what are you see, for example, are teachers, students, and sellers.
4. Then the researcher asks the students what are they doing?
5. The students answer the researcher are sit, write, etc. afterward the researcher instructs the students to change the word according to the material being taught. An example site becomes sitting, write becomes writing, etc.
6. Principally, after the students connected the tree diagram technique, the researcher asks the students to mention the meaning of the words and the pronunciations

METHOD

Design and Samples

The design of this research was conducted pre-experimental design using quantitative. Quantitative research is inquiry employing operational definitions to generate numeric data to answer predetermined hypotheses or questions, Ary (2010). It is using a quantitative approach because quantitative is the data of all numbers using statistic data. The sample of this research was seventh B grade at MTs Muhammadiyah 2 Aimas, in which the total students are 18 students. The researcher chosed the sample because the students still lack of vocabulary so the score of students is low.

Instrument and Procedure

The researcher uses the multiple-choice test as an instrument to collect the data, the researcher was given the students twice tests, those are pre-test and post-test with the total number are 20 questions. The researcher collected the data through the pretest and posttest. The pretests value was obtained before the study using tree diagram technique in teaching vocabulary. The aim of the pretest is measuring the students' ability in vocabulary before they enter the experimental class. The posttest was obtained after the researcher used tree diagram technique in teaching vocabulary. The aim of the post-test to measure the effectiveness of certain treatments on this research is teaching vocabulary using a tree diagram. Both of pretest and posttest, the researcher gave 20 questions about verbs.

Data Analysis

Test Paired Sample T-test is a test used for two samples of paired data. In this test use the same sample, but given different treatment. Usually, the researcher wants to compare data before it is given a pretest and after treatment (posttest). After test normality carried out the data is already normal, then test hypotheses that can be used using test N-gain. Test N-Gain was conducted to determine the extent to which the students ' learning outcomes before and after learning. The difference between

the initial test score and the final Test (gain) is seen from the treatment. According to Archambault (2008) the test formula of normalized Gain as follows:

$$N - Gain = \frac{Score\ Postest - Score\ Pretest}{Score\ max - Score\ Pretest}\ X\ 100\%$$

Table 1. Category Interpretation Effectivity Score N-Gain

Percentage	Classification
< 40	Not Effective
40-55	less effective
56-75	Quite effective
> 70	Effective

(Source: Hake, R,R, 1999)

Activat

RESULT AND DISUSSION

In proving the hypothesis research, the researcher conducted N-gain tests to determine effective criteria for an overview of the outcome of learning scores before and after treatment. The formula of normalized Gain as follows:

$$N - Gain = \frac{Score\ Postest - Score\ Pretest}{Score\ max - Score\ Pretest}\ X\ 100\%$$

$$N - Gain = \frac{77.50 - 45.83}{100 - 45.83}\ X\ 100\%$$

$$N - Gain = \frac{31.67}{54.17}\ X\ 100\%$$

$$N - Gain = 58.46$$

$$N - Gain = 58\%$$

Based on the result, the student's N-Gain value is 58.46, or 58%. If the value of n gain ranges from 56-75 then categorized quite effectively. Based on the results of N-gain that is 58.46 or 58%, it is confirmed quite effective. It has proven that, the Alternative Hypothesis (Ha) is accepted and the Null Hypothesis is rejected.it means that tree diagram technique is effective in teaching vocabulary at seventh grade in MTs Muhammadiyah 2 Aimas.

In addition, there was technique in this research is tree diagram technique which was different of students result in teaching vocabulary with the material is present continuous tense. Based on the result of findings research, the researcher found that the technique of tree diagram can be effective in teaching vocabulary students, this

is evidenced by the mean pretest (45.83) students are improved on posttest (77.50) students. Where the mean score on posttest (77.50) improved above the KKM (75).

In addition to T-test with the result of the P-value of $< \alpha$ (0.05), then H0 was rejected and Ha was accepted. So that the alternative hyphothesis (ha) was tree diagram is an effective teaching vocabulary at seventh B grade in MTs Muhammadiyah 2 Aimas. The researcher found P- Value is (0.000) $< \alpha$ (0.05) so that the null hypothesis (H0) was rejected and the alternative hypothesis (Ha) was accepted. The alternative hypothesis was tree diagram is an effective in teaching vocabulary at seventh grade in MTs Muhammadiyah 2 Aimas.

Beside that the result of N-gain was (58.46) or (58%). If value of N-gain ranges from (56-75) then categorized quite effective. So the result of N-gain was categorized quite effective. It explained that the effectiveness of the alternative hypothesis, in this research Ha was quite effective. It shows that the use of tree diagram technique is different affected in improving students' in teaching vocabulary. After conducted this research and getting the result of this research that tree diagram can also be used in online classes.

Based on the explanation previously, there are several points influencing the result of the posttest which higher than the pretest. Firstly, Tree diagram technique was a good technique it can help the students more active in learning vocabulary. In this research when the researcher used Tree diagram technique to explain about present continuous tense. It similarly with Tony (2007) explained that tree diagrams can ease the students to organize, classify, generalize, and visualize their ideas when they are up to make any genre of vocabulary.

Secondly the tree diagram make easy for students remember of vocabulary. As explained by Tague (2005) that the tree diagram technique can set the student's idea because the tree diagram components are well-connected and well-arranged and as a communication tool that explains details to others. In the previous chapter researchers of Fitri Ana (2017) said that the tree diagram technique can be improved in teaching vocabulary. She concludes this technique can improve students ' vocabulary ability.

Ririn Ambarwati (2011) also said that tree diagram techniques can be effective in teaching writing with the mean N-gain is 88 it is confirmed of effective. This means it that the outcome of this research, where N-gain on the results of this research was quite effective. As for the factors that make the results are different that the previous research was conducted at senior high school and also on writing skills. While in this research was conducted at junior high school and also on teaching vocabulary. Another factor that affects also the implementation of this research was conducted online so that the results are also quite effective.

CONCLUSION

Applying the tree diagram techniques was effective in teaching vocabulary. It can be seen that the result of N-Gain was 58.46 (58%) it was confirmed quite effective. Besides that, the result of T-tes was P value (0.000) < α (0.05) , it means that there is significant difference between pretests and posttest. So the alternative hypothesis is received (Tree diagram is effective in teaching vocabulary) and the null hypothesis is rejected. In addition the result of mean score pretest (45.83) improved the posttest (77.50). Generally, the tree diagram technique can help the students more active because the students can to organize their idea in learning vocabulary and also remembering the student's vocabulary.

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