Mengaplikasikan Tehnik Pohon untuk Meningkatkan Kosa Kata Siswa Kelas VII MTS Negeri 1 Palu

The Application of Tree Technique to Increase Vocabulary Mastery of the Seventh Grade Students of MTS Negeri 1 Palu

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Abstract
This research was conducted at the Seventh Grade students of MTs. Negeri 1 Palu. It was quasi experimental research as design. The sample was Seventh B and Seventh C consisting 30 students each. The data was collected from the Test (Pre-test and Post-test). The findings of the research shows that the application of tree technique can increase students' Vocabulary mastery. The result of pretest shows the average score of the experimental group is 65.13, while the average score of the control group is 72.92. Meanwhile, the result of the posttest reveales that the average score of the experimental group is 74.59, while in the average score of the control group is 68.06. The difference in vocabulary scores of the experimental group and the control group is 6.53. It shows that the average score of the experimental group is higher than the control group. Using t-test, the calculated t-value is found 7.287. It is higher than the t-table value which is 2.019. From the calculation, it can be stated that there is a significant difference between the experimental group and the control group. The researcher concludes that the students can increase their vocabulary mastery through the use of tree technique. Furthermore, with this technique the students are able to explore their new vocabularies.

Key terms: Tree Technique, Vocabulary Mastery, Quasi Experimental

INTRODUCTION

English is one of the subject in schools of Indonesia. It becomes a foreign language that has important roles to the beneficial development of the country. English is used for mastering science and technology and also others fiels of learning. The government has apparently understood the essential of learning English. Thus, English becomes one of compulsory subjects learn in some levels of education.

Mastering English as a means of communication and transferring information in this global era becomes important reason for teaching English since the early years of Junior hight school up to university. English learners should learn the language components such as; grammar, spelling, pronunciation and vocabulary. Mastering vocabulary is important in learning English.

Vocabulary is one of the language components that are necessary for communication in English. If we have less vocabulary, we do not understand what people say. According to Nation (2007: 9), vocabulary is essential for successful second language use and plays an important role in formation of complete spoken and written texts in English as a second language and English as foreign language (EFL) learning vocabulary items plays a vital role in all language skill (listening,speaking,reading, and writing).
Therefore, vocabulary is very important to support the four skills, so the students can easly communicate with other people in English.

As stated in the Curriculum 2013 of Junior high school (MTS) level, there are four components that should be achieved in the teaching, learning process, namely pronunciation, grammar, structure, and vocabulary. In teaching process, the students must know many vocabularies so that they can easily communicate and understand English. It is stated that the students are intended to understand how to express their ideas and feelings both oral and written forms.

In fact, mastering vocabulary is difficult for the students. Based on the preliminary research conducted in MTs. Negeri 1 Palu, there were some problems that the researcher found regarding English learning. First, the students were lack of vocabulary. Their prior knowledge background in their school did not support in learning English. For example, when the teacher asked the students about the English words for things around them, they could not answer properly. Second, the students were difficult to understand the meaning of the word. Third, the students had diffilcult in using the word. Last, the students used *bahasa* when they were asked and answered the question from the teacher.

Having these problems, the researcher proposed a technique to increase the students' vocabulary mastery. The proposed technique is tree technique. According to Beers (2003:190), Tree technique is a way to generate ideas in a tree. It is a kind of technique that can be helpful for the students to find out vocabulary. In that technique the students are asked to make a diagram or a tree represent new vocabulary that has association with the main word. By using tree technique, the students narrow down their idea more easily. This technique can help the student understand the new words and their meanings in group that belong to the same relation. For example, the teacher says*school*, the students say other word which relates to the school like: *teacher, classroom, library, books*, and *headmaster*, than the students write the word into the vocabulary tree.

Based on the background, the researcher conducted the research by applying tree technique to increase the vocabulary mastery of the seventh grade students of MTs. Negeri 1 Palu.

METHOD

In this research, the researcher used experimental research. The kind of experimental that the researcher conducted was quasi experimental research. This research needed one group as an experimental group and another one as control group. The researcher provided treatment to the experimental group using the tree technique as the technique in teaching and learning vocabulary while the control group as comparison without treatment. The design of the research is adopted from Sugiyono (2010:112) as follows Quasi-Experimental Design

Group   : Pre-test Treatment   Post-test
Experimental : O1   X   O1
Control   : O2   O2
     Where:
O1= Pre-test

O2=Post-test
X=Treatmet

In this research, the population was all the seventh grade students of MTs. Negeri 1 Palu. It consisted of seven classes. Related to the explanation above, the researcher used purposive sampling technique in taking the sample. It is non random technique. It was supported by the information from teacher in school. The students were still low in vocabulary. Based on the information, the experimental group was Seventh C and the control group was Seventh B. The researcher conducted the treatment to experimental group while in control group was taught by the teacher. There are two kinds of variables in this research: dependent variable and independent variable. Dependent variable of this research is the vocabulary mastery of the seventh grade students of MTs. Negeri 1 Palu while independent variable is the application of tree technique.

FINDINGS AND DISCUSSIONS
Result of the Deviation of Pre-test and Post-Test Experimental Group

The result of the individual score of the experimental grup is presented in following table:

Then, the researcher calculated the mean deviation score by using formula as follows:

$Mx = \frac{\sum x}{N} = \frac{283,6}{30} = 9,45$

$My = \frac{\sum y}{N} = \frac{-112,3}{30} = -3,74$

The mean deviation of the experimental group is 9,45 while the control one is -3,74. Then, the researcher calculated the mean square deviation of experimental and control groups by using formula as follows:

Experimental Group:

$$\sum x^2 = \sum x^2 - \frac{(\sum x)^2}{N}$$
$$= 3791,16 - (\frac{283.6}{30})^2$$
$$= 3791.16 - (9,45)^2$$
$$= 3791.16 - 89,31$$
$$= 3701.85$$

Control Group:

$$\sum y^2 = \sum y^2 - \frac{(\sum y)^2}{N}$$
$$= 2511,85 - (\frac{129.2}{30})^2$$
$$= 2511,85 - (-3,74)^2$$
$$= 2511,85 - 13,99$$
$$= 2497.86$$

Mean square deviation score of the experimental group, 3701.85 is greater than mean square deviation score of the control group, 2497.86.

Testing Hypothesis

To find out the significance between experimental and control groups, the researcher analyzes the data by using t-test formula as follows:

$$t = \frac{Mx - My}{\sqrt{\left(\frac{\sum x^2 + \sum y^2}{N_{x+N_y} - 2}\right)\left(\frac{1}{N_x} + \frac{1}{N_y}\right)}}$$

$$t = \frac{9.45 - (-3,74)}{\sqrt{\left(\frac{3701.85 + 2497.86}{30 + 30 - 2}\right)\left(\frac{1}{30} + \frac{1}{30}\right)}}$$

$$t = \frac{13,19}{\sqrt{\left(\frac{6199,77}{58}\right)\left(\frac{1}{30} + \frac{1}{30}\right)}}$$

$$t = \frac{13,19}{\sqrt{\left(\frac{6199,77}{58}\right)\left(\frac{2}{60}\right)}}$$

$$t = \frac{13,19}{\sqrt{(109.89)(0,03)}}$$

$$t = \frac{13,19}{\sqrt{3,2976}}$$

$$t = \frac{13,19}{1,81}$$

$t = 7,287$
(So, the t-counted was 7,287)

The research of data analysis shows the t-counted was 7,287. The degree of freedom was 58 is not found in the t-table value. The calculation is as follows:

Degree of freedom = Nx + Ny – 2
$$30 + 30 - 2$$
$$= 58$$

Level of significance is 0.05

a. $60 - 58 = 2$
b. $60 - 40 = 20$
c. $2.021 - 2.000 = 0.021$
d. $\frac{a}{b} x c = \frac{2}{20} x\ 0.021 = 0.002$

If degree of freedom 58 is 2.021 – 0.002 = 2.019
In the t-table value of 58 degree of freedom is 2.019

Since t-counted is greater 7,287 than t-table value is 2.019, Ha is accepted. If the t-counted 7,287 is higher then t-table 2.019 the alternative hypothesis is accepted. In other words, tree technique is effective to increase students' vocabulary mastery of the seventh grade students of MTs. Negeri 1 Palu.

Discussion

The application of tree technique with applying different topic every meeting was successful in increasing the students' vocabulary. That finding could be inferred from the observations of the teaching and learning process. This research conducted to the students of MTs. Negeri 1 Palu. The researcher gave the treatment to the Seventh C as the experimental group by using tree technique. This technique can increase the students' vocabulary mastery. It can be seen from the results of the tests that have been given to students. This technique can give opportunity for students to explore their knowledge especially vocabulary mastery.

The researcher gave the pretest to both groups: Seventh B and Seventh C. The pre-test conducted on February 27th, 2019 in experimental group and control one. In the pre-test, the researcher gave a test consist of multiple choices and matching words. The total number of the test was 25 items 15 item multiple choices and 10 item matching word. Then, the students answer by their knowledge. The mean score of the experimental group in pretest was 65,13 and 72,92 for the control group.

The researcher had different topic in every meeting so it made the students felt interested. Tree technique makes the students easy to understand the material. Then, tree technique can help the students to be more active because they can participate in front of the class. In the first meeting, the researcher provided topic about "Part of classroom". Then she gave some vocabularies that related in part of class. For instance: table, chair, whiteboard and so on. After that, she draw the tree and put some vocabulary and the researcher asked the students to write another vocabulary related with the topic. After that, she asked them to use the vocabulary in the sentences. For example: The student wipes off the "whiteboard". In the second meeting, the researcher gave some vocabulary with different topic about "Part of Family". This topic maked the students very interested because they can mentioned member of their family. Most of the students were enthusiatic to come up in the front of class to write down the vocabulary of family member. The researcher asked the students to use the family member in the sentences. For example: My "niece" lives in Palu. In the third meeting, the

researcher gave topic about "Names of buildings". The researcher drew the tree and asked the students to write the vocabulary related with the topic. Then she explained the vocabulary and asked them to use the vocabulary in the sentences. For example: My father works in the "Hospital". In the fourth meeting, the researcher gave the topic of " Names of Transportation" related to their surroundings. The researcher asked the students to draw the tree and put the some vocabularies in the tree. Then, she gave examples of vocabulary that using in sentences. For examples: My mother goes to the market by a "taxi". In the fifth meeting, she gave vocabulary by using tree technique. the researcher gave some vocabulary related with the topic about "Part of house". The researcher asked the volunteer to draw the tree in the whiteboard. Than, the researcher asked the students to mentioned the vocabulary about part of house. Next, the researcher asked them to use the vocabulary in the sentences. For example: My mother cooks in the "kitchen". In the last meeting, she told the students the topic about "Tools in bedroom". the researcher guided the students to draw the tree and wrote the vocabulary in the shape. Then, the researcher asked the students to use in the sentences. For example: My cousin puts "pillow" in the bed.

The researcher got some progress during teaching and learning process. First, the students get a lot of new vocabularies because tree technique makes the students easy to explore new vocabulary. Second, the students are more interested in English learning. It is proved when during teaching and learning process, most students paid attention when the teacher explained the material. In addition, the students asked about the vocabulary related with the topic. Last, they are more confident in expressing their ideas or opinions. It can be proved when the teacher asked them, most students raised their hand when the teacher asked them to write the vocabulary in the front of class.

The researcher tested grade Seventh B and Seventh C. The post-test was given on March, 21st 2019 for the experimental group and control one. The post-test result of experimental group was 74,59 that has significant improvement from the pre-test experimental group result 65,13 while the control group result of post test was 68,06 that has significant difference between pre-test of control group result 72,92. The post-test is given to find out students' score after the treament.

The improvement of experimental group is because every meeting thay got new vocabulay and always disscused of material. Thus, the researcher concluded that tree techniques can increase student vocabulary. So that's why, the result post-test in experimental group is increased. In other words, the application of tree technique is effective in increase students vocabulary of the seventh grade students of MTs. Negeri 1 Palu.

CONCLUSIONS AND SUGGESTIONS

Based on the data analysis and the research findings, the researcher can conclude that the application of tree technique is effective in teaching vocabulary mastery. At first, the control group and the experimental group were in the same level. Hence, the researcher concludes that there is significant difference between the students who were taught using tree technique and the students who were taught without using tree technique. It is proved by the computation of the t-test formula. In this research, the degree of freedom is 58 from Nx+Ny-2 (30+30-2) and 0,05 level of significance. The calculated t-counted is defined as 7,287 than t-table value is 2.019. Thus, there are significant difference between two group test results, it mean the application of tree technique can increase vocabulary mastery of the sevent grade student of Mts. Negeri 1 Palu.

The suggestion that is given by the researcher is offered to teachers. First, in applying tree technique the teachers must be creative in drawing the shape of the tree in order the students become interested to learn vocabulary. Second, the teacher should repeat the vocabulary that the students learn in the previous week to make sure they remember about it.

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