# AN ANALYSIS OF THE FIRST YEAR STUDENTS' VOCABULARY ABILITY USING WORD TREES AT ENGLISH DEPARTMENT OF BUNGHATTA UNIVERSITY 

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#### Abstract

The purpose of this research was to describe the students' vocabulary ability by using word trees at English department of Bung Hatta University. The researcher used descriptive design in this research. The population of this research was the first year students at English department of Bung Hatta University.The total number of population members 59. They were distributed into three classes; Class A, B and C. In selecting the sample members, the resercher used cluster random sampling technique. The number of sample members was 20 students. The instrument used to collect the data was vocabulary test by using word trees. The researcher found the reliability of the test by using Pearson Product Moment formula. It was found that the reliability index of this test was .809 . The result of the data analysis showed that the students' vocabulary mastery had by the first year students of English department of Bung Hatta University was moderate. It was proved by the fact that 0 student ( $0 \%$ ) were categorized as having high ability that 16 students ( $80 \%$ ) were categorized as having moderate ability, and 4 students ( $20 \%$ ) were categorized as having low ability. Hence, the average of students' ability in vocabulary by using word trees was moderate (see Appendix 11). Based on that findings, it could be concluded that most students was categorized as moderate, however the students having high score.The researcher suggested of this research, gave suggestion to the lecturer that lecturer should give more exercises to used word trees in learning vocabulary. For students, to improve their ability in vocabulary ability, they should make efforts to increase their ability in word trees.


Key words: Vocabulary ability, word trees.

## A. Introduction

One of compulsory subject at education in Indonesia is English. English is taught from junior high school until university. Even, it is also introduced at some kindergarten. English as a
compulsory subject in National Examination (UN) for SMP and SMA becomes one of the subjects test. In the university, English is taught as general subject that must be taken by the students. Especially in English Department, English is divided into several subjects. They are
listening, speaking, reading, writing, grammar, pronunciation, translation, literature, linguistics, vocabulary, etc. Students must have adequate vocabulary to understand and comprehend all of language skills; both spoken and written form. For instance, the students will comprehend a sentence if they know the words meaning of the sentence. They can catch the point or the information from the sentence.

However, vocabulary is not easy to students to learn. Students should be creative when they learn vocabulary. When they learn English vocabulary becomes problem for the students. They feel afraid of with English word that they are difficult to pronounce, to spell and to memorize of the new words. And understand the meaning of the words. Because of that, students should know many vocabularies before they learn in the class. If the students acquire many vocabularies they will be easy in applying sentences and creating in listening, speaking, reading, and writing.

Based on the researchers' observation, the researcher found two problems that impede the students in learning vocabulary. Firstly, many students got difficulties to memorize new vocabularies. That condition made them bored to study English. Secondly, the
sound of English alphabets are different from those in Indonesian. It means that the way to read English words is not the same as that in Indonesian.

To overcome this problem, it is important for students to create a proper way during learning. They should be able to find a good strategy in learning vocabulary which can make them pronounce, spell, and acquire of their English vocabularies become well. Thus, the students will have interest keep learning English. The students are interested and enjoy in learning English especially English vocabulary. They should find new strategies in learning vocabulary so that it will help students to gain more vocabularies during learning process.

Regarding to that problems, the researcher tried to describe the application of the importance of vocabulary. In learning vocabulary, strategies cannot be separated for using learning aids when will help students getting more interesting and fun.

Based on the explanation above, the researcher was interested in conduct a research entitled " An Analysis of the First Year Students' Vocabulary Ability Using
Word Trees at English Department of Bung Hatta University".

Vocabulary is one of component of English language. Everyone must be able to develop much word in communication. Vocabulary is closely related to communication or the four English language skills. Khairiza (2002:9) stated that is vocabulary is an element of language which plays a very important role. The vocabulary is a major core in studying a foreign language.

Vocabulary is an important aspect in learning English, because when the students learn English they must know vocabulary first. It means that when the students learn English for the first time, they must know and rich the vocabulary. It is also one of the subjects to enrich their English fluently. However, vocabulary is not easy to teach for students, the lecturer should be creative in learning vocabulary so it will be easy to understand by the students.

Word trees are interesting strategy in learning vocabulary. It will help learners in expanding their vocabularies since it is familiar, new and easy to remember. Sumiati (2012:3) says there are new strategies that can be applied in learning vocabulary such as word splash, carousel, peculiarity letter strategy, word trees, etc. Word trees are a learning word together that are associated in meaning is a popular and useful way of organizing your vocabulary study. So that students interested to learn more. Word splash strategy is a creative
strategy, engaging way to introduce key vocabulary. Carousel strategy is a strategy in cooperative learning in which student's do some task related to words comprehending. Peculiarity letter strategy is strategy to comprehend words with describe and indentify the words in letter tiles inside the envelopes.

Word trees are interesting strategy in learning vocabulary. It will help learners in expanding their vocabularies since it is familiar, new and easy to remember. In this research, this study limited on student's vocabulary mastery by giving the example of a word using word trees. In addition the researcher also limited the research on the first year students at English Department at Bung Hatta University. Because they had taken the vocabulary study when they were learning intensive course.

In general, the purpose of this research was to identify the students' ability in vocabulary using word trees at the first year students at English Department of Bung Hatta University Padang. And especially, the purpose of this research was to describe and find out the students ability to master vocabulary using word trees at English department of Bung Hatta University.

## B. Reseach Method

This research used descriptive research design. The descriptive research design is the current status of data at the
time of investigation. According to Shuttleworht (2008:1), descriptive research design is a scientific method which involves observing and describing the behavior of a subject without influencing it in any way. In addition the descriptive research is used to get information concerning the current status of the phenomena to describe "what exist" with respect to variables or conditions in a situation. The researcher described the students' ability on vocabulary ability by using word trees at the first year students at English Department of Bung Hatta University.

The population of this research is all the first year students of English Department of Bung Hatta University Padang in academic year 2014/2015. The total of them is 59 students. They are divided into three classes; $\mathrm{A}, \mathrm{B}$ and C . The researcher chose this population since they had taken vocabulary class.

The researcher used cluster random sampling technique. Moreover, cluster random sampling is sampling in which groups, not individuals, are randomly selected (Gay, 1987:110). The researcher applied cluster random sampling because the population has been grouped into classes. They are selected randomly because all members of the population are homogeneous. It means that they have similar characteristics, they use the same
curriculum and teaching material, and they have same allocated time for learning English.

The instrument of this research was vocabulary test using word trees. In this research, the researcher used vocabulary test by using word trees to prove their ability in vocabulary. It was done in order to get the data.

For vocabulary test using word trees, the researcher used word trees test. The word trees test was a test which provided three until fifteen boxes in tree diagram, and one word as clue to answer the word trees.

A good test should be valid and reliable. A test is valid if it measures what is supposed to be a measured (Gay, 1987:128). Encyclopedia of Educational Evalution (in Arikunto 2012: 80) also says that a test is valid if it measures what it supposed to be measured. The validity of test represents the extent to which a test measures what is to be measured. To see the validity of the test, the researcher analyzes the content. According to Arikunto (2012: 67), one of the types of test validity is content validity. Test can be valid if it fixes with the material that is given to the students. Therefore, this test is constructed based on curriculum and teaching materials uses at English Department of Bung Hatta University Padang.

Gay (1987: 162) states that reliability is the degree to which a test consistently measures. To find out the reliability of this test the researcher used interater techniques since to minimize the subjectivity in this research. The researcher used two scorers to analyze students' vocabulary ability. The first scorer was the researcher and the second scorer was Bismil Hafiah. The criterion of choosing second scorer is good knowledge in Vocabulary. So, Bismil Hafiah got A for vocabulary subject.

To know the reliability of the test, the researcher used Pearson Product Moment formula to find out the coefficient correlation between scores given by the two assessors. Product Moment correlation. The formula is as follows Arikunto (2006:181-183):

$$
\begin{aligned}
& \mathrm{r}_{\mathrm{xy}} \\
& \sqrt{\left\{n \sum x y-\left(\sum x\right)\left(\sum y\right)\right.} \\
& \sqrt{\left\{n \sum x^{2}-\left(\sum x\right)^{2}\right\}\left\{n \sum y^{2}-\left(\sum y\right)^{2}\right\}}
\end{aligned}
$$

Where:
$\mathrm{r} x y=$ the coefficient correlation between x and y variables
$\mathrm{n}=$ the number of the students who follow the test
$\mathrm{x} \quad=$ the number of errors that is identified by first researcher
y $\quad=$ the number of errors that is identified by second researcher
$\sum \mathrm{x}=$ first scorer
$\sum \mathrm{y}=$ second scorer
$\sum x y=$ total number of errors that is identified by first and second scorer.

Gay (1987: 367) says that the value of $r$ counted is consulted to the value of $r$ table on the freedom N-2 and alpha 0.5 and if r counted > r table, the test is reliable, but if $r$ counted $<r$ table, so the test is not reliable. Based on the result of analysis of reliability index of this test, it was found that the reliability index was 0.89 . It meant the test was reliable.

After the researcher calculated the coefficient correlation of the two scorers, it was found that the values of $r$ calculated of vocabulary was .809 (see Appendix 3). Then, the writer compared the values of $\mathrm{r}_{\text {calculated }}$ with the value of $\mathrm{r}_{\text {table }}$ on the level of significance $95 \%(\alpha .05)$ and the degree of freedom (df) $\mathrm{n}-2$ (18), the value of $\mathrm{r}_{\text {table }}$ was .468 (see Appendix 4). It means that $r$ calculated (.809) was higher than $\mathrm{r}_{\text {table }}(.468)$. Therefore, the coefficient correlation of two scorers and the reliability of the test was reliable.

In gathering data, the researcher gathered the data through vocabulary test
based procedure below. There are several steps in collecting data from test as follows;

1. The scorer gave the vocabulary test
2. The scorer distributed the vocabulary test
3. The scorer collected the students work.
4. The first scorer copied students' work and gave it to second scorer. The original one is for the first scorer.
5. Two scorers checked the errors found in the students' work.
6. The first and the second scorer identified the students' work.
7. The researcher and second scorer gave score 3 for correct answer and 0 for wrong answer.

To know the students' ability to understand using tree diagram, in this case, the researcher analyzed the data from test as follow;

1. The researcher counted the total score for each students
2. The researcher calculated the average score from two scorers by using the following formula:
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    Students' scores =
first scorer's score + second scorer''s score
2
```

3. The researcher calculated Mean (M)

Here is the mean formula:

$$
\mathrm{M}=\frac{\sum \mathrm{x}}{\mathrm{~N}}
$$

Where: $\mathrm{M} \quad=$ mean

$$
\begin{array}{ll}
\sum \mathrm{x} & =\text { sum of } \mathrm{x} \\
\mathrm{~N} & =\text { number } \quad \text { of }
\end{array}
$$

students
4. After calculating the mean of each indicator, the researcher classified the students ability into high, moderate, and low ability using the following categories:
$>\mathrm{M}+\mathrm{SD}=$ High ability
$\mathrm{M}-\mathrm{SD} \rightarrow \mathrm{M}+\mathrm{SD}=$ Moderate ability
< $\mathrm{M}-\mathrm{SD}=$ Low ability
5. Finally, the researcher calculated the percentage of the students who get high, moderate, and low ability by using the following categories;
$P=\frac{F}{N} \times 100 \%$
Where:
P = the percentage of students
$\mathrm{F} \quad=$ the sum of the students who get high, moderate, and low ability
$\mathrm{N} \quad=$ the sum of the students

## B. Findings and Discussion

## Findings

Based on the result of descriptive analysis, the students' ability was categorized as high if their scores were higer than 92.04. It was categorized as moderate if their scores were in the range of $81.5 \leftrightarrow 92.04$ and it was categorized as low if their sores were lower than 81.5 Then, the researcher calculated the percentage of the students who were included into high, moderate, and low group.

It could be seen that 0 student ( $0 \%$ ) were categorized as having high ability that 16 students ( $80 \%$ ) were categorized as having moderate ability, and 4 students ( $20 \%$ ) were categorized as having low ability. Hence, the average of students' ability in vocabulary by using word trees was moderate.

## Discussion

Based on the finding of this study that was discussed previously, it was found that students had moderate ability in using word trees. It could be proved that $80 \%$ of the students had got scores more than 81.5. It also claimed that the students are able to develop their vocabulary by using word trees. The using word trees in teaching and learning vocabulary to makes the students understand and easy to develop their words
into good sentence and it also improve their vocabulary.

According to Kimbell-Lopez (2009:4) states that word trees can help students recognize how word can grow base word and root words. Relating to the result of this study, to improve students vocabulary ability in learning English as foreign language, word trees strategy is proper strategy in teaching and learning vocabulary.

## C. Conclusions and Suggestions

## Discussion

Based on finding as already discussed in the previous chapter, it can be concluded that :

An analysis of the first year students' vocabulary using word trees at English Department of Bung Hatta University was categorized moderate ability. It means that the students are able to improve their ability in vocabulary by using word trees.

## Suggestions

Based on the conclusions above, the writer can give suggestions as follows:

1. In selecting teaching material for vocabulary class, the lecturer should consider the form of word trees.
2. For students, to improve their ability in vocabulary, they should make efforts to increase their in word trees.
3. The researcher hopes that the next researcher will use this research as a reference to expand the next researchers or conduct other researchers.

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