# The Correlation between Vocabulary Mastery and English Speaking Ability of the Tenth Grade Students of Senior High School 12 Palembang 

Yus Vernandez Uzer<br>English Education Department University of PGRI Palembang yusvernandesuzer@gmail.com.


#### Abstract

This research was concerned with the inquiry of the correlation between vocabulary mastery and English speaking ability of the tenth grade students of Senior High School 12 Palembang. Mastering vocabulary is much needed in order to be good in speaking ability. The problem of the study is to investigate the correlation between vocabulary mastery and English speaking ability of the tenth grade students of Senior High School 12 of Palembang. This is a quantitative study. The data collection is deliberated by adopting test and $r$ Product Moment Correlation is used to analyze the data. Findings show that there is correlation between students' vocabulary mastery and their English speaking ability. In respect to the data analysis of this study, it can be concluded that there was significant correlation between students' vocabulary mastery and students' English speaking ability. It has been analyzed by test of vocabulary mastery and English speaking ability test. The result showed that the coefficient correlation of them was 0.630 , rescpectively with the significance level $5 \%$ was 0.320 . Therefore, alternative hypothesis $\left(H_{a}\right)$ is accepted while Null Hypothesis $\left(H_{o}\right)$ is rejected. The conclusion suggests that mastering vocabulary has significant role to improve students speaking ability.


Keywords: correlation, vocabulary mastery, and speaking ability

## INTRODUCTION

English is one of the most important languages in the world because it is used in international communication. Basically, language is a means of communication for sharing ideas, thought, desire and feeling. Nowadays, English has been used in international meeting, seminar and workshop. People learn English for many purposes such as business and class presentation. Most of people said that language consists of four elements they are listening, speaking, reading and writing. These elements are called as language skills. Beside such basic skills, in order to be able to communicate using a language people have to master vocabularies as well.

According to Richards (2008:19), the mastery of speaking skill in English is a priority for many second-language or foreign language learners. Consequently, learners often evaluate their success in language learning as well as the effectiveness of their English course on the basis of how much they feel they have improved in their spoken language proficiency.

According to Tarigan (2008:3), the quality of one's language skill depends on the quantity and quality of vocabulary. The more vocabulary we have, the bigger possibility to have a skill to use the language). Mastering vocabulary is the ability to get or to receive a lot of words. By having and mastering vocabulary students will be able to speak and they can communicate and express their idea. Measuring vocabulary helps to avoid making mistakes in understanding. Speaking is an interactive process of constructing meaning that involves producing and receiving and processing information. It means that speaking English is not as easy as the people described. It needs some process and supporting skill. In this case, vocabulary as the main point.

Vocabulary is one of the important elements in building up English. Through this element, someone can communicate, learn and think. Therefore, the learning of vocabulary is fundamental need to support some learners to master English, because the ability of students to speak and to comprehend the subject is relatively determined by their vocabulary mastery. Being able to speak in English, one needs to have enough vocabulary to express own idea. Therefore, speaking is one way of giving and finding information through oral communication. Speaker of English agrees that vocabulary is needed so much and not less important than grammar. Many students are still doubtful to expose their ideas in English because they have limited vocabulary in their mind.

Based on the writers' observation in Senior High School 12 of Palembang, the students' English speaking ability is still in unsatisfactory level and tends to be disheartened. As we have known, students have been taught English since they were in junior high school and in fact they have not yet able to speak English. There are many factors influencing students' English speaking ability. One of them is vocabulary mastery. The students' limited number of vocabulary is related to their speaking ability. Students cannot build a sentence, they do not know an English word they are going to say, they also do not know the function of a word. Thus, this problem may cause the slow progress in speaking. They could not build sentences without knowing the vocabulary to represent their mind, feeling and ideas.

Based on the problem above, the problem of the study was formulated as: "Was there any significant correlation between the tenth grade students' vocabulary mastery and their English speaking ability at Senior High School 12 Palembang?"

According to Fraenkel et al. (2012:331), a correlational study describes the degree to which two or more quantitative variables are related, and it does so by using a correlation coefficient. Correlation is a measure of the degree of linear association between two variables. Correlations only describe the relationship, they do not prove cause and effect. It is necessary but not a sufficient condition for determining causality. It refers to the strength of the relationship between two measures. The scatter plot of a possitive correlation rises. With negative relationships, an individual who scores high on one measure tends to score low on the other or vice versa. In order to live in the world, people must name the things in and on it. Names are essential important for the construction of reality. Without a name it is absolutely difficult to accept the existance of an object, an event, a feeling, and emotion. By assigning names they impose a pattern and a meaning which allow them to manipulate the world. When students recognize much names whether the names of noun, adjective, adverb, pronoun, verb and so on, it means they are familiar with or know many words. And a set of words known to a person or other entity is usually defined as vocabulary.

Vocabulary as one of the language aspects have to be learned when people are learning a language. Good mastery of vocabulary is important for anyone who learns the language used in listening, speaking, writing, and reading besides grammar. According to Simaibang (2016:85), learners need to employ vocabulary, grammar, pronunciation, intonation, and organization of contents of speech at the same time in speaking skillIt is obvious that understanding vocabulary is very important part in learning a language, English vocabulary is extremely large and varies as well. Therefore, it is highly essential for students to mastering vocabulary in order to be able to speak by using the target language they learned.

According to Simaibang (2016:79), speaking is one of the four language skills that is called under productive skill. It is concerned with the ability to utter words or articulate sounds with the ordinary voices. According to Simaibang (2016:79), the mastery of speaking skills in English can be a priority for many second language or foreign language learners, because they feel that this skill requires frequent involvement in English communication.

In relation to the explanations above, students know that mastering vocabulary is something absolute for students in communication, vocabulary plays an important role for having a good communication. As educators know, most of students learn to speak English at school. They generally develop to explore their ideas a spoken language, but just some of students can speak well the target language. It is because their experience and vocabulary of
spoken language is still limited. By mastering vocabulary, students probably get informations and ideas more effectively and they can communicate fluently with the other people because in fact that vocabulary is one of the important components of language and that no language exists without words. Words are signs or symbols for ideas. Without words people cannot communicate and interact with the other people.

## METHODOLOGY

Relating to the objective of the research, the writer will use a correlational method to find out whether or not there is a correlation between vocabulary mastery and speaking ability. This study deals mostly with continuous variables. The simplest correlation and regression models assume linear relations and continuous independent and dependent variables. The product moment part of the name comes from the way in which it is calculated by summing up the products of the deviations of the scores from the mean.

## The steps conducted in this study were as follows:

1) Describing the techniques for collecting the data
2) Determining how the samples would be selected to represent the population
3) Giving vocabulary test
4) Giving speaking test
5) Drawing conclusion
6) Proposing suggestions
7) Writing research report as a thesis.

The population of this research was all tenth grade students at the Senior High School 12 Palembang in the academic year of 2016/2017. The total number of the population was 277 students. The sample students for this research taken from the population by using simple random sampling method. Each individual is choosen entirely by chance and each member of the population has an equal chance of being included in the sample. There are seven class of the tenth grade students of the population, by using sample random sampling method, the writer take one class that is X IPA 2 where the class consisted of 40 students available for the sample. In collecting the data for this research, there were two kinds of test used to collect the data, namely, vocabulary test and oral test. Vocabulary test used to measure the students' mastery in vocabulary. The test given to the students in the form of essay questions, consisting of 20 items. While, oral test used to measure students' ability in

Speaking. The sample students asked to have a role play in theme of "Giving Compliment", their speaking ability be evaluated in terms of its Pronunciation, Grammar, Fluency, Vocabulary and Comprehension. In order to know if the contents of the test item given are appropriate, the curriculum with test items provided for the students are checked and consulted with the advisors and teacher of English at the Senior High School Sriguna Palembang. In order to make the test have a high degree of content validity, it devised with the test specification and to measure the reliability of test items, the writer used inter-rater reliability. In this investigation, a spearman rank correlation (Rho) used to estimate the internal consistency reliability.

$$
R=1-\frac{6\left(\sum \mathrm{D}^{2}\right)}{\mathrm{n}\left(\mathrm{n}^{2}-1\right)}
$$

## Where:

R : Rank-different correlation
$\mathrm{D}^{2}$ : Different Score
n : The number of the students

The calculation of reliability test as follows:

$$
\begin{gathered}
R=1-\frac{6\left(\sum \mathrm{D}^{2}\right)}{\mathrm{n}\left(\mathrm{n}^{2}-1\right)} \\
R=1-\frac{6(462)}{40(1.600-1)} \\
R=1-\frac{2.772}{40(1.599)} \\
R=1-\frac{2.772}{63.96} \\
R=1-0.043 \\
R=0.957
\end{gathered}
$$

Fraenkel et al (2012:149) note that for research purpose, a useful rule is that reliability should be at least 0.70 and preferably higher. A reliability of 0.70 indicates $70 \%$ consistency in the scores that are produced by instrument. In other words, a minimum reliability of 0.70 is required or should be higher in this study. The calculation of reliability above proved that the test was reliable because 0.957 was higher than 0.70 . In analyzing the data, the writer used Pearson Product Moment Correlation, to measure the degree of relationship between the students' vocabulary mastery and their speaking ability. In real practice, another formula to be used is mathematically identical. This is the computational or raw score formula for the correlation coefficient. A correlation can differ in the degree or strength of the relationship
(with the Pearson Product-moment correlation coefficient that relationship is linear). Zero indicates no relationship between the two measures and $\mathrm{r}=1.00$ or $\mathrm{r}=-1.00$ indicates a perfect relationship.

$$
r=\frac{N \Sigma X Y-(\Sigma X)(\Sigma Y)}{\sqrt{\left(N \Sigma X^{2}-[\Sigma X]^{2}\right)\left(N \Sigma Y^{2}-[\Sigma Y]^{2}\right)}}
$$

## Where:

$\mathbf{r}_{\mathrm{xy}} \quad=$ Coefficient of correlation between x and y variable or validity of each item.
$\mathbf{N} \quad=$ The number of students/students participating in the test.
$\Sigma \mathbf{X}=$ The sum of total score in each item.
$\sum \mathbf{X}^{2}=$ The sum of the square score in each item.
$\sum \mathbf{Y}=$ The sum of total score from each student.
$\sum \mathbf{Y}^{\mathbf{2}}=$ The sum of square total score from each students
$\sum \mathbf{X Y}=$ The sum of multiple of score from each students with the total score in each.
To provide interpretation of coefficients correlation which was found high or low, we could see in the table of the interpretation coefficients of correlation below

Table 1. The interpretation cpefficient of correlation

| Interval Coefficients | Level of Relationship |
| :---: | :---: |
| $0.00-0.199$ | Very low |
| $0.20-0.399$ | Low |
| $0.40-0.599$ | Fair |
| $0.60-0.799$ | Strong |
| $0.80-1.000$ | Very Strong |

In analyzing the data from the students' speaking test the writer used rating scale of speaking. In this case there are five components are generally recognized in analyses of the speech process. The components speaking to be measured are pronunciation, vocabulary, grammar, fluency and comprehension. To know the level of the students' speaking skill, the writer used the conversion of percentage range.

Table 2. The conversion of percentage range

| Percentage of correct | Level Achievement |
| :---: | :---: |
| $91-100$ | Excellent |
| $81-90$ | Very Good |
| $71-80$ | Good |
| $61-70$ | Good Enough |


| $51-60$ | Enough |
| :---: | :---: |
| $41-50$ | Fairly Enough |
| $31-40$ | Lack |
| $21-30$ | Very Lack |
| $11-20$ | Poor |
| $1-10$ | Very Poor |

## RESULTS

After analyzing the gathered data from the test, it was found that there was a positive correlation between students' vocabulary mastery and their English speaking ability. It can be seen from (1) The students' average score in vocabulary mastery were 98 , (2) the students' English speaking ability average score were 56 , (3) the coefficients of correlation between the students' vocabulary mastery and their English speaking ability were 0.630 . The value of rProduct Moment Correlation is 0.320 at the significance level of $5 \%$ for one tailed test and degree of freedom (df) $40,(\mathrm{~N}-2) 40-2=38$. Since coefficients of correlational is higher than t -table ( $0.630>0.320$ ). It means that the Null hyphothesis (Ho) was rejected and the Alternative hyphothesis (Ha) was accepted. In other words, students' vocabulary mastery had positive correlation with English speaking ability at the tenth grade students' of Senior High School 12 Palembang. Then, the interpretation of r-value which got was $39 \%$, it showed that the correlation between the tenth grade students' vocabulary mastery and their English speaking ability of the tenth grade students of Senior High School 12 of Palembang was strong.

Based on data analyzed, it was found that the total score of the students' vocabulary mastery test was 196.5 . There was one student who got the highest score which was 7.5 and there were 2 students who got the lowest score was 1.5 . it was found that the highest score of the students speaking ability was 16.5 from 1 student and the lowest score was 8.5 got by 2 students. In order to find out the correlation between the students' vocabulary mastery (X) and their English speaking ability (Y), the writer used Pearson Product-moment formula.

$$
r=\frac{r x y=\frac{N \Sigma X Y-(\Sigma X)(\Sigma Y)}{\sqrt{\left(N \Sigma X^{2}-[\Sigma X]^{2}\right)\left(N \Sigma Y^{2}-[\Sigma Y]^{2}\right)}}}{\sqrt{\sqrt{\left([40] 1.084 .25-[196.5]^{2}\right)\left([40] 8.165 .75-[561.5]^{2}\right)}}}
$$

$$
\begin{gathered}
r=\frac{114.97-110.334}{\sqrt{(43.37-38.612)(326.63-315.282 .25)}} \\
r=\frac{4.636}{\sqrt{(4.758)(11.347 .75)}} \\
r=\frac{4.636}{\sqrt{53.99}} \\
r=\frac{4.636}{7.3477} \\
r=0.630
\end{gathered}
$$

## Level of significance 5\% (0.05)

$$
\begin{gathered}
\mathrm{r}_{\mathrm{obt}}=\mathrm{df}(\mathrm{n}-2) \\
\mathrm{r}=\mathrm{df}(40-2) \\
\mathrm{r}=\operatorname{df}(38) \\
\mathrm{r}_{\mathrm{tab}}=0.320 \\
\mathrm{r}_{\mathrm{obt}} 0.630>\mathrm{r}_{\mathrm{tab}} 0.320
\end{gathered}
$$

## DISCUSSION

In respect to the data analysis of this study, it can be concluded that there was significant correlation between students' vocabulary mastery and students' English speaking ability. It has been analyzed by test of vocabulary mastery and English speaking ability test. The result showed that the coefficient correlation of them was 0.630 , rescpectively with the significance level $5 \%$ was 0.320 . In other words the alternative hyphothesis (Ha) was accepted and the nul hyphothesis (Ho) was rejected, it can be concluded that there is significant correlation between vocabulary mastery and English speaking ability of the tenth grade students of Senior High School 12 Palembang.

## REFERENCES

Fraenkel, J. R. , Wallen N. E. \& Hyun, H. H. (2012). How to design and evaluate research in education. New York: McGraw-Hill Companies, Inc.

Richards, J. C. (2008). Teaching listening and speaking, from theory to practice. New York: Cambridge University Press.

Simaibang, B. (2016). English language teaching in a foreign situation. Palembang: Citra Books.

Tarigan, H. G. (2008). Berbicara sebagai suatu keterampilan berbahasa. Bandung: Angkasa Bandung.

