

## The Impact of Students' Vocabulary Mastery by Using Memrise Application in Senior High School 6 Muaro Jambi

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### ABSTRACT

Vocabulary is important to support the four English skills, such as reading, writing, listening and speaking. Writing is one of the skills of organizing information or opinion in written form. Writing is one of the skills closely related to vocabulary learning. Writing as a thinking process involves a student's ability to organize words and explain them in writing. In other words, without vocabulary, students cannot write well and communicate their ideas. This research is a type of quantitative research that uses experiments. The experimental method is carried out to see the effect of a treatment. The purpose of quantitative statistics is to test hypotheses. The population of this study amounted to 8 classes consisting of 180 students. The researcher selected class XA as the sample in this study, which consisted of 30 students. There is a difference in learning outcomes of English vocabulary learning between the experimental group using the Memrise application and the control group taught without using the Memrise application as evidenced by the experimental group data with a sig value, (2-tailed) = 0.001 while sig 0.05 then (0.001 < 0.05) then  $H_0$  is accepted, this shows that there is a significant increase in the mastery of student vocabulary using the Memrise application at SMA Negeri 6 Muaro Jambi Academic Year 2024.

**Keywords:** *Vocabulary, vocabulary mastery, memrise application.*

### INTRODUCTION

Vocabulary is important to support the four English skills, such as reading, writing, listening and speaking. Writing is one of the skills of organizing information or opinion in written form. Writing is one of the skills closely related to vocabulary learning. Writing as a thinking process involves a student's ability to organize words and explain them in writing. In other words, without vocabulary, students cannot write well and communicate their ideas.

Harmer (1991:153) states that if language structures make up the skeleton of language, then it is vocabulary that provides the vital organs and the flesh. Vocabulary is one of the knowledge areas in language and it has a great role for learners acquiring a language. Vocabulary is one of the language components that is really important. Vocabulary development refers to the knowledge of stored information about the meanings and pronunciations of words necessary for communication. If a student does not know the meaning of the word, it is difficult to check for the word that fits.

Vocabulary collection is often used to strengthen students' ability to read the content of the text where students are asked to capture and understand the meaning according to the context

of the text assisted by various tools, one of which is using the Memrise application. Students have to understand the meaning of a text based on the context, and they are asked to work as a team that will share the meaning and words they get from the text. The teacher is required to guide the students by giving examples to the students on how the task is given.

In this age of globalization, educational tools have been developed by many experts, for example Memrise Application. Memrise is a free language learning platform with websites, learning apps for iOS and Android. The main advantages are portability and accessibility (via computer and application on smartphone and tablet). It uses audio, images and funny, creative activities to help students learn and remember their words and meanings. Memrise Application can be used inside or outside the classroom. Using the Memrise App is likely to build students.

Based on the research on the low mastery of student vocabulary through researching questions from the LKS book and conducting questions and answers in class, the research saw the beginning of the low mastery of student vocabulary at SMAN 6 Muaro Jambi, the research involved students in downloading the application and saw the extent to which students

understood the vocabulary in learning the memrise application in the classroom.

I observed the constraints of students in the first grade and saw the extent of the challenges faced by students in using the Memrise Application and the use of Memrise Application can affect the improvement of student vocabulary and identify the obstacles or challenges faced by students in using the Memrise application can provide insight into the factors that can affect the effectiveness of the use of the application on students. and Exploring students' potential and seeing students' opinions on the use of Memrise app in vocabulary learning, both positively and negatively, can provide an in-depth understanding of their experiences. problem identification.

## **REVIEW OF RELATED LITERATURE**

### **Mastery Theory**

Mastery is the process, method, act of mastering or mastering, understanding or ability to use knowledge, and intelligence. The word mastery can also mean a person's ability in something (KBBI, 2015).

When a student has mastered a lesson, the teaching and learning process is said to have been successful. The measure of learning success in an operational sense is the mastery of a subject matter.

### **Definition of Vocabulary**

Vocabulary plays a fundamental role in mastering English as a foreign language. As like as explained in the background of this research proposal. There are some definitions from some experts about vocabulary.

Pennie and Patricia Marshall (2004) Vocabulary means words in general; you improve your vocabulary in any language when you learn more words. Other experts, Neuman and Drawyer as cited in Bints (2011 p. 44) said that vocabulary can be defined as the words someone must know to communicate effectively: words in speaking (expressive vocabulary) and words in listening (receptive vocabulary) and words in listening (receptive vocabulary). Hornby (2006 p. 1645) defined vocabulary as all the words that a person knows or uses when they are talking about particular subject in particular

language.

Fries (1959) says that vocabulary is an important aspect of learning a language. Learning a language means learning its vocabulary because vocabulary is one of the components of language that cannot be separated from language learning. Which cannot be separated from language learning.

According to some explanations above, it can be concluded that vocabulary is a collection of words or all of the words in a language that are used by people to express an opinion, feeling statement consists of some letters and has meaning. Vocabulary is a core component of language and it is the basis of how to speak, listen, write and read well. The more known vocabulary, the more able to understand what is heard and read; and better will be able to say opinions or ideas when speaking or writing.

### **Kinds of Vocabulary**

According to Haycraft (1978) there are two kinds of vocabulary, as follows :

- a. Active vocabulary - words that the student understands, can pronounce correctly and uses constructively in speaking and writing.
- b. Passive vocabulary - words that the student recognizes and understands when they occur in a context, but which he cannot produce correctly himself.

These kinds of vocabulary need to be learn to limit the vocabulary that is introduced because if too much is introduced, students will be impeded by the need to absorb too many words.

### **Aspects of Vocabulary**

Based on Brown (2010:19) vocabulary consists of several aspects meaning, spelling, pronunciation, word classes, and word use. The students should master all of the aspects of vocabulary in order that they can communicate well in English.

#### **a. Meaning**

A word may have more than one meaning when it is used in different contexts. In order to discover the meaning; the teacher can use ways such as guided discovery, contextual guesswork and using dictionaries.

Guided discovery involves asking question or offering example that guides

students to guess the meaning correctly. Involving students in discovered the meaning. It will be easy for students to remember the word and its meaning. Contextual guesswork means making of the context in which the word appears to drive an idea of its meaning, or in some cases, guess from the word itself.

b. Spelling

In learning vocabulary, spelling is important because it aids in reading. Spelling there may be different acceptable written forms for the same words within the same variety of English or most commonly, due to the fact that they belong to different varieties as happens with many British or American English terms.

c. Pronunciation

Pronunciation is how words are pronounced. Pronunciation of words is not related to spelling so it is difficult to learn. Good pronunciation helps the receiver easier to communicate.

d. Word classes

Word classes are categories of words. There are grammatical patterns that should be practiced fluently to the students such as nouns (countable and uncountable), verb complementation, phrasal verbs, adjectives, and adverbs (Kareem, 2000:4). The classification of words of a language in this way depends on their function in communication. Nouns can occur in certain places of sentences and serve certain functions. Verbs also occur in certain places and have special functions, so word class membership is an important lexical feature.

e. Word use

Word use is how a word, phrase, or concept is used in a language. Word use may also involve grammar and thus be the subject of profound analysis.

### Learning Media

One tool for teaching and learning is media education. Anything that can be utilized to pique students' interests, moods, and aptitudes in order to speed up the learning process. In the meanwhile, Briggs stated that learning resources such as books, movies, videos, and so on can be delivered physically through learning media.

Media is one of the many variables that might affect learning activities. The term "media" has been defined in a number of ways. There are many factors

that can influence learning activity and one of them is media. There are several definitions that have explained media is.

The American Association of Education and Communication Technology, or AECT, defines media as any and all channels that people utilize to spread commands or information. There is a difference in the definition offered by the National Education Association (NEA). Media includes all oral, written, and visual modes of communication as well as the resources used to support them.

Drawing from the aforementioned description, it can be deduced that media refers to instruments, resources, or occasions that facilitate the process of teaching and learning. To make lessons engaging and simple to understand, teachers must use media in their instruction. In order to give students comfort and convenience during their primary learning activities, the media plays a crucial support function.

The most widely used examples are computer or smartphone-designed teaching apps and textbooks. Technology and media have an impact on schooling. Computers, smartphones, and the internet, for instance, have changed how people learn these days. Technology can be used to help organize and give structure to the material that students are taught, as well as to facilitate anytime, anywhere interaction between students and parents. Therefore, an application that can be utilized as English learning media is considered technology in this study. The Memrise application is a free tool for learning languages. According to the justification provided, the Memrise application category utilized in this study is Computer-Assisted and Programed Instruction.

### The Purpose of Learning Media

The use of learning media is needed in relation to improving the quality of education. According to Akhmad Sudrajat (2008), the intended use of teaching media is:

1. So that the ongoing teaching and learning process can run appropriately and

- efficiently.
2. To make it easier for teachers/educators to convey material information to students.
  3. To make it easier for students to absorb or accept and understand material that has been delivered by the teacher/ educator.
  4. To be able to encourage the desire of students to know more and in depth about the material or messages conveyed by the teacher/ educator.
  5. To avoid misunderstanding between one of another students about the material or message delivered by the teacher/ educator.

### Memrise Application

Memrise is an internet learning tool that specializes in vocabulary development and was founded by Ed Cooke, Grand Master of Memory, and Greg Detre, a Princeton neuroscientist who specializes in memory science and forgetting. This tool contains a very specific audience who wants to find out about vocabulary development. Therefore, every teacher who wants to encourage their students to find out their vocabulary data or every student who aims to improve their vocabulary simply and with a very pleasant method is expected from the audience of this tool. Memrise is very easy to use. To increase the speed of learning and remembering memrise using a flash card repetition (Aminatun & Oktaviani, 2019). This application can be used with a website, and sign-in using a Google or Facebook account, but can also be done by downloading the application from the play store or mobile app store so that it can be used more easily and practically.

Memrise is an educational resource that can be accessed on mobile and web platforms. Memrise is a vibrant, rapidly expanding mobile language learning app. It specializes in fusing cutting-edge educational technology with engaging content to make language acquisition enjoyable, successful, and available to everyone.

### Teaching Learning Vocabulary Using Memrise Application

In Indonesian, students comprehend the definition and meaning of the word or phrase that is explained. Pupils listen to a tape of a natural speaker reading the provided vocabulary.

The words are rewritten by the students. This will help the children retain the writing of the words they have previously learnt. The application occasionally displays a multiple-choice, typing, and pronunciation exam in addition to the content.

Some of these assessments allow students to test their memory. When given a word in an Indonesian multiple-choice test, students must look for the English equivalent in the response selections. The pronunciation test involves listening to a native speaker pronounce a word. Students must then guess the word or phrase that the native speaker is referring to. The typing test is the final exam, in which students are given a list of English words and must write down the definition of each word. Finally, through their own profiles, students can view the order in which words or phrases that have previously been studied have been acquired.

### METHODOLOGY

This research is a type of quantitative research that uses experiments. The experimental method is carried out with the aim of seeing the effect of a treatment. The purpose of quantitative statistics is to test hypotheses.

This research design is experimental (*Quasi-Experimental*). The object of research is the use of memrise application (X) on critical thinking skills (Y). This research design uses two groups, namely the control class and the experimental class. The experimental class is the class that receives treatment in the form of applying the inquiry method while the control group is the control group, namely the class that does not receive treatment.

The place and time of this research were conducted in class XA students of SMA Negeri 6 Muaro Jambi in March 2024.

In this study, students in ten classes were selected as the population. The population of this study amounted to 8 classes consisting of 180 students.

The researcher used simple random sampling to obtain the research sample. According to Gay (2012), simple random sampling is the process of selecting a sample in such a way that all individuals in a given population have an equal and independent chance of being selected. The exam was used by

the researcher as an instrument to assess students' vocabulary mastery. The researcher selected class XA as the sample in this study, which consisted of 30 students.

As an experimental research, the instrument used in this research is a test, namely Pretest and Posttest. The data analysis technique used is the normality test and t-test.

**FINDINGS AND DISCUSSION**

**Pre-test Results**

The pre-test results of all students can be seen in the following table. The pre-test results for class XA, 15 students as the experimental class and 15 others as the control class, namely:

**Table 1. Pre-Test Score of Experimental Class**

No	Students	Score
1	Student 1	60
2	Student 2	75
3	Student 3	80
4	Student 4	75
5	Student 5	70
6	Student 6	60
7	Student 7	70
8	Student 8	70
9	Student 9	50
10	Student 10	50
11	Student 11	90
12	Student 12	85
13	Student 13	90
14	Student 14	55
15	Student 15	80
<b>Total Score</b>		<b>1060</b>

Table 1 indicates how the collected student scores will be computed using SPSS. Students received a minimum score of 50 and a maximum score of 90 with a total score of 1060.

**Table 2. Criteria in Pre-Test**

Score	Criteria	Number of Students
80-100	Very good	5 Students
66-79	Good	5 Students
56-65	Enough	2 Students
40-55	Less	3 Students
0-39	Fail	-

Table 2 shows the total number of students in each criterion, after the pre-test in the experimental class, there were 5 students who

scored in the very good category and 3 students who scored in the less category.

Table 2 indicates how the collected student scores will be computed using SPSS. Students received a minimum score of 50 and a maximum score of 90 with a total score of 1060.

**Table 3. Pre-Test Score of Control Class**

No	Students	Score
1	Student 1	90
2	Student 2	50
3	Student 3	50
4	Student 4	80
5	Student 5	60
6	Student 6	85
7	Student 7	95
8	Student 8	55
9	Student 9	65
10	Student 10	70
11	Student 11	85
12	Student 12	50
13	Student 13	60
14	Student 14	90
15	Student 15	55
<b>Total Score</b>		<b>1040</b>

Table 3 indicates how the collected student scores will be computed using SPSS. Students received a minimum score of 50 and a maximum score of 90 with a total score of 1040.

**Table 4. Criteria in Pre-Test**

Score	Criteria	Number of Students
80-100	Very good	6 Students
66-79	Good	1 Student
56-65	Enough	3 Students
40-55	Less	5 Students
0-39	Fail	-

Table 4 shows the total number of students in each criterion, after the pre-test in the control class, 6 students scored in the very good category and 5 students scored in the less category.

**Post-test Results**

The post-test results of all students can be seen in the following table. The pre-test results for class XA, 15 students as the experimental class and 15 others as the control class, namely:

**Table 5. Post-Test of Experimental Class**

No	Students	Score
1	Student 1	90
2	Student 2	90
3	Student 3	85
4	Student 4	90
5	Student 5	85
6	Student 6	75
7	Student 7	80
8	Student 8	85
9	Student 9	80
10	Student 10	85
11	Student 11	95
12	Student 12	100
13	Student 13	95
14	Student 14	65
15	Student 15	100
<b>Total Score</b>		<b>1300</b>

Table 5 explains how the collected student scores will be calculated using SPSS. The minimum and maximum scores for students were 65 and 100 with a score of 1300 which is higher than the pre-test score of 1060.

**Table 6. Criteria in Post-Test**

Score	Criteria	Number of Students
80-100	Very good	13 Students
66-79	Good	1 Student
56-65	Enough	1 Student
40-55	Less	-
0-39	Fail	-

Table 6 shows the total number of students in each criterion, after the post-test in the experimental class, there were 13 students who scored in the very good category and 1 student who scored in the less category.

**Table 7. Post-Test Score of Control Class**

No	Students	Score
1	Student 1	80
2	Student 2	55
3	Student 3	50
4	Student 4	80
5	Student 5	65
6	Student 6	85
7	Student 7	95
8	Student 8	55

9	Student 9	75
10	Student 10	70
11	Student 11	85
12	Student 12	60
13	Student 13	60
14	Student 14	90
15	Student 15	60
<b>Total Score</b>		<b>1065</b>

Table 7 indicates how the collected student scores will be computed using SPSS. Students received a minimum score of 50 and a maximum score of 95 with a total score of 1065.

**Table 8. Criteria in Post-Test**

Score	Criteria	Number of Students
80-100	Very good	6 Students
66-79	Good	3 Students
56-65	Enough	4 Students
40-55	Less	2 Students
0-39	Fail	-

Table 8 shows the total number of students in each criterion, after the post-test in the control class, there were 6 students who scored in the very good category and 2 students who scored in the less category.

**T-test**

The t-test analysis technique aims to determine the difference in students' ability to learn vocabulary at the initial stage and after using the media at the stage they are learning. The results of the class t-test calculation using the SPSS version 26 program can be seen in the appendix, while the summary of the results for the t-test calculation is listed in the table below:

**Table 11. Summary of Paired T-test Data Results**

Group	Total	T-count	T-table	df	Value (Sig-2 tailed)
Pre-Post Experiment	15	1.323	1,701	14	.207
Pre-Post Control	15	6.666			.000

Based on the table above, it can be seen that the control group T count is 1.323 and the T-table

is 1.701. The table is obtained from  $dk = n-2$  ( $30-2 = 28$ ) in the distribution of the T table value. So the significance value of  $0.207 > 0.05$  and  $T \text{ count} < T \text{ table}$  or  $1.323 < 1.701$  indicates that  $H_0$  is accepted and  $H_a$  is rejected. Followed by the experimental group with T count of 6.666 and T table 1.701 so that the significance value is  $0.000 < 0.05$  and  $T \text{ count} > T \text{ table}$ , namely  $6.666 > 1.701$ ,  $H_0$  is rejected and  $H_a$  is accepted so that it can be concluded that the control group has no improvement while the experimental group has a significant increase in the mastery of student vocabulary using the memrise application at SMA Negeri 6 Muaro Jambi.

**Table 12. Summary of Independent T-Test Data Results**

Group	Total	Average	T count	T table	Value (Sig-2 tailed)
Experiment	15	17,33	3,549	1,701	0,001
Control	15	14,20			

Based on the calculation of the SPSS test results, getting a sig value, (2 tailed) = 0.001 while sig 0.05. Thus, the criteria are accepted if the sig value is smaller than 0.05 ( $0.001 < 0.05$ ) then  $h_a$  is accepted, this shows that there is a significant increase in the mastery of students' English vocabulary using the memrise application at SMA Negeri 6 Muaro Jambi.

Then making a value decision, which is equal to the t-count 3.549 and for the t-table, which is 1.701, which means that the t-count is greater than t table or  $3.549 > 1.701$ , then  $H_0$  is rejected and  $H_1$  is accepted, so it can be concluded that there is a significant increase in the mastery of students' English vocabulary using the memrise application at SMA Negeri 6 Muaro Jambi.

**CONCLUSIONS**

Based on the results of the research and discussion that has been described, the following results are obtained:

1. There is a difference in learning outcomes of English vocabulary learning between the experimental group using the Memrise application and the control group taught without using the Memrise application as evidenced by the experimental group data with a sig value, (2 tailed) = 0.001 while sig 0.05 then ( $0.001 < 0.05$ ) then  $h_a$  is accepted,

this shows that there is a significant increase in the mastery of student vocabulary using the Memrise application at SMA Negeri 6 Muaro Jambi Academic Year 2024.

2. Students' English vocabulary learning using the Memrise application is more effective than without using the Memrise application as evidenced by the control group's significance value of  $0.207 > 0.05$  while the experimental group's significance value is  $0.000 < 0.05$ , meaning that the experimental group is more effective in increasing student vocabulary using the Memrise application at SMA Negeri 6 Muaro Jambi.

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