

## THE EFFECT OF DIGITAL FLASHCARDS ON VOCABULARY MASTERY OF THE 7<sup>TH</sup> GRADE STUDENTS AT SMPN 2 CIBITUNG

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### Abstract:

Vocabulary is the important thing to learn in English, but there are still many people who find it difficult to master vocabulary because of the lack of media to master it. This research was designed with the aim of finding out the effect of digital flash cards on vocabulary mastery. The design used in this research is quantitative research using pre-experimental methods. The sample in this research was 29 class 7B students at SMPN 2 Cibitung. This research was carried out by conducting a pretest, then continued with treatment for two meetings while observing, then a posttest was held after the treatment. Data in this study were collected using vocabulary test instruments at pretest and posttest, as well as observations made during the treatment. The results of this research show that students' vocabulary mastery increased after carrying out treatment using digital flash card media. This can be seen from the average score which increased from 31,28 to 61,38. Data from the results of the paired sample t-test in the SPSS application shows a significance of <0,001, which is smaller than 0,05. Then, from the observation results, it was found that digital flash cards had a positive impact on students' vocabulary mastery. The data findings from this research indicate that digital flash cards have the effect of increasing vocabulary mastery.

### Keywords:

Digital Flashcard;  
Learning Media;  
Vocabulary Mastery



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## INTRODUCTION

Language is one of some important things in human life. Language is a communication tool for humans to exchange information. As social beings, of course humans need good communication so that they can interact with each other, and receive and provide information properly. English is a language that is widely used in almost all regions in various parts of the world, but some people still have some lacks of English, especially for those who still unfamiliar with it. There are many people who lack of English, for example, a lack of English vocabulary.

Vocabulary can be also defined as lexicon, by Hatch and Brown (1995: 1) cited in Yusril, et al. (2023), as a listing or set of words for a specific language or a collection of phrases that a particular language speaker may use. It is clear from this statement that vocabulary

is an important thing that must be learned so that someone is proficient in English, but some people still do not master vocabulary well, for example is students. Learning and mastering a large number of vocabulary words makes it difficult for students to learn them. Especially for those who are still beginners such as the students. Students who are still unfamiliar with English vocabulary will certainly find it difficult to be learned and mastered. The lack of media to learn it makes them even more difficult to learn and master English. Therefore, creative and innovative media are needed in learning vocabulary.

In this case, researcher will use digital flashcards as a media to improve the vocabulary mastery and their effect. Flash cards are a media that is suitable to be used as a tool to help learn vocabulary, which is a simple medium that allows students to easily learn English vocabulary.

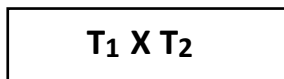
Arsyad (in Utami et al., 2021, cited in Kesumawati et al., 2022) Flashcards are compact cards featuring images, text, or symbols that serve as prompts or cues, guiding students towards associations with the depicted content. It can be stated that flashcards are a medium that contains pictures, writing, symbols, etc. which can be used as a tool to remember vocabulary efficiently and practically.

So, the researcher conducted this research to know what is the effect of digital flashcards on vocabulary mastery and how does digital flashcards give the effect towards students' vocabulary mastery. This research gave some benefits to the teacher, the students, and further research about using digital flashcards as the media of vocabulary mastery.

## **METHOD**

### **1. Research Design**

This research was carried out by using experimental quantitative research methods, where the researcher will use a pre-experimental design as the research method (Creswell, 2014; Gay & Airasian, 2003). The design of this research is illustrated as follows:



The design is described as follows:

T1 = Pretest

X = Treatment

T2 = Posttest

### **2. Place and Time of the Research**

#### **a. Place**

This research will be conducted at SMPN 2 Cibitung which is located at Surade Street, Talagamurni village, Cibitung Subdistric, Sukabumi Regency, West Java.

#### **b. Time**

This research was conducted from February to June 2024. It was started from February to March, the experiment and data analysis from April to May, paper preparation in May, and paper examination in June.

### 3. Population and Sample

#### a. Population

In this research, the total population is 96 students of class 7 of SMPN 2 Cibitung, which is 33 students from 7A, 29 Students from 7B, and 34 students from 7C.

#### b. Sample

The sample of this research is 29 students from the 7B, which contains of 13 males and 16 females.

### 4. Instrument of Study

This research used the vocabulary tests and observation as the instrument. The vocabulary tests contained 25 questions of multiple choices and the observation contained 20 statements.

### 5. Technique of Data Collecting

The data of this research were collected by doing a pretest, treatment, posttest, then the observation.

### 6. Technique of Data Analysis

The data of this research were analyzed by using SPSS, there were validity test, reliability test, normality test, descriptive statistical analysis, and paired sample t-test.

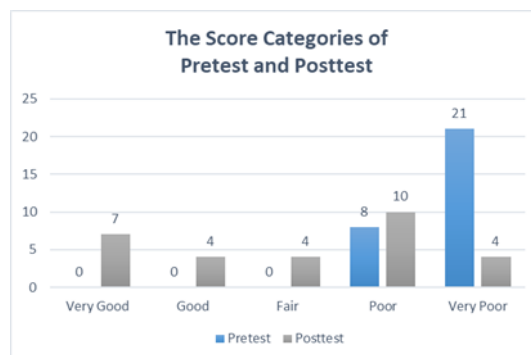
## RESULTS AND DISCUSSION

### Results

**Table 1** Results of the Vocabulary Test

Name	Total	Average
Pretest	936	1780
Posttest	32,28	61,38

From the data, it can be seen that there is an increase from the pretest to posttest results. In the pretest, the total student score was 936 points with the average 32.28. Meanwhile, in the posttest, the students' total score was 1780 points with the average 61.38. This increase occurred after researchers carried out treatment on students using digital flashcards to increase vocabulary mastery.



**Figure 1** The Score of Pre-Test and Post-Test

From the graph above it can be seen that in the pretest, class 7B of SMPN 2 Cibitung had the "very poor" category with a score interval of less than 39 points, namely 21 students

out of a total of 29 students or 72%, while the remaining categories were at the "poor" level, which has a score interval of 40-55 points is 28% or 8 out of 29 students. Meanwhile, the other categories are at 0%, namely the "fair" category with a score interval of 56- 65, the "good" category with a score interval of 66-79, and the "very good" category with a score interval of 80-100. Then in the posttest, the most dominant category was the "poor" category, namely 34% or 10 out of 29 students, then followed by the "very good" category at 24% or 7 out of 29 students, then followed by three other categories, namely "very poor", "fair, and "good" with the same percentage, namely 14% or 4 of 29 students from each category. Then, from the observation that had been conducted during the treatment, the researcher found that the statements are related to how the digital flashcards give the effect on students' vocabulary mastery. The statements are below:

- a. Students actively participate during learning by using digital flashcards as a medium to master vocabulary.
- b. Students are more focused on learning using digital flashcards compared to using traditional methods.
- c. Students are active in asking several questions regarding the vocabulary listed in the digital flashcards.
- d. Students often discuss and collaborate with their classmates to learn vocabulary by using digital flashcards.
- e. Students can easily recall the vocabulary they have learned by using digital flashcards.
- f. Students become more aware if there are errors when they memorize vocabulary by using digital flashcards.
- g. Students show positive attitudes and increased motivation towards vocabulary learning after using digital flashcards.
- h. Students do not show excessive cognitive load when learning by using digital flashcards.
- i. Students are more independent when studying by using digital flashcards.
- j. Students showed high enthusiasm during learning with digital flashcards.
- k. The time spent learning vocabulary by students becomes more effective when using digital flashcards.
- l. There is more interaction between teachers and students when learning by using digital flashcards.
- m. The quality of learning increases when using digital flashcards as a learning medium for vocabulary mastery
- n. Students can remember the vocabulary faster by using digital flashcards.
- o. Students can spell and pronounce the vocabulary well by using digital flashcards.
- p. Students feel comfortable by using digital flashcards as the media for learning vocabulary.
- q. Students can collect new words and their meaning better by using digital flashcards.
- r. Vocabulary learning become funnier by using digital flashcards as the media.
- s. Students show a significant increase in vocabulary mastery after using digital flashcards.
- t. There was an increase in vocabulary test scores after using digital flashcards.

### ***Discussion***

From the pretest results, it was found that the lowest score of all students was 12 points in the "very poor" category, while the highest score for students was 52 points in the

"poor" category. Then, students had a very low average score, namely 31,28 with the dominating category being "very poor" with a score interval of less than 39, namely 72% or 21 out of a total of 29 students, followed by the "poor" category. with a score interval of 40-55, namely 28% or 8 out of 29 students, while the other three categories. totaled 0% or no students in that category, namely the "fair" category with a score interval of 56-65, the "good" category with a score interval of 66-79, then the "very good" category with an interval of 80-100. Then, from the results of the posttest scores carried out after carrying out treatment for 2 meetings, students showed a significant increase in their scores when compared to the results of the pretest scores. Based on the data that has been found and analyzed, the results of the posttest data show that the student's lowest score changed to 24 points and was still in the "very poor" category, as well as the highest score which changed to 100 points which was in the "very good" category. Then, the average student score increased overall, namely 61,38, with the dominating category being "poor", namely 34% or 10 out of 29 students, then followed by the "very good" category at 24% or 7 out of 29 students, then followed by three other categories, namely "very poor", "fair, and "good" with the same percentage, namely 14% or 4 of 29 students from each category. From the data obtained, it can be seen that there was an increase in students' vocabulary test scores after carrying out the treatment, which means that the treatment carried out to increase students' vocabulary mastery by using digital flashcards had a good effect on increasing the vocabulary. This can also be determined through a t-test on IBM SPSS using a paired sample t-test.

Then, the observation results showed that digital flashcards gave so many positive effects and benefits towards students' vocabulary mastery as it can be seen from the statements of the observations. Studies have also found that digital flashcards are highly effective in enhancing vocabulary acquisition, as they promote active recall and spaced repetition, which are proven strategies for long-term retention (Bahrani & Soltani, 2012; Haug, 2016). Moreover, the use of multimedia elements in digital flashcards further engages students, making the learning process more interactive and stimulating (Zhang, 2019).

## CONCLUSION

After the researcher found the results of the research procedure in class 7B of SMPN 2 Cibitung, the researcher has obtained data that has been described and analyzed, and also discussed.

The following are the conclusions made by researchers based on these data findings.

- a. Digital flashcards have an effect on vocabulary mastery, namely increasing vocabulary mastery. This can be seen from the comparison of students' pretest and posttest scores. Where at the pretest, students' vocabulary mastery was at a very low level based on the pretest scores obtained. In the pretest, the overall average score of the 29 students was 31,28. However, after carrying out treatment to improve their vocabulary mastery by using digital flashcards, the students' overall average score also increased to 61.38.
- b. Digital flashcards gave so many positive effects and benefits towards students' vocabulary mastery as it can be seen from the 20 statements of the observations. Digital flashcards are a useful, innovative, creative, and effective media to learn and master vocabulary well, since it has so many useful features in it, such as pictures, sounds, and games.

### Suggestion

There are some suggestions given in this research to be used as evaluation material in order to improve and complete the shortcomings contained in this research.

- a. For teachers, digital flashcards are a medium that can help improve students' vocabulary mastery in a creative, practical, efficient and fun way compared to just using traditional methods. Therefore, teachers are expected to be able to know and apply the use of digital flashcards in vocabulary mastery so that the quality of learning will be better.
- b. For students, they are expected to be able to understand the benefits of using digital flashcards as a vocabulary mastery learning medium so that they can learn vocabulary in an easier, creative, innovative, modern and fun way.
- c. For further research, the researcher hopes that further research that is relevant to this research can use this research as reference material and evaluation material so that this research can be developed into better research and get better results as well

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