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THE EFFECT OF USING DIGITAL FLASHCARDS ON WORDWALL TOWARDS THE STUDENTS' VOCABULARY MASTERY AT THE 7TH GRADE OF ISLAMIC JUNIOR HIGH SCHOOL SEJAHTERA BADAS

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Abstract

This study aims to know the effect of digital flashcard media on wordwall app. on students' vocabulary mastery at the 7th grade of Islamic Junior High School Sejahtera Badas in Academic Year 2023/2024. This research used quantitative research and the research design used is a pre-experimental design with one experimental group only. The researcher used Digital Flashcards as a learning media and instrument used in this study was written test. The population of this research is 7th grade boarding school students with 26 students divided into two classes. The sample technique used Saturated Sampling technique that consists of 13 students in which the students were taken from the boarding school class. The research findings show that there is a significant difference between the results of the pretest and posttest. The result showed that the mean score of post-test is higher than pre- test (91,69 >60,61). The result of this research was obtained from calculating the data using wilcoxon test with the a significance value of 0.002 (<0.05). It proved that the alternatives hypothesis (Ha) is accepted and the null hypothesis (Ho) is rejected. Thus it can be said that there is a difference in the value of students' vocabulary mastery between before and after treatment. In other words, using Digital Flashcards on students' vocabulary mastery is effective

Keywords : *Digital Flashcards, Wordwall, Vocabulary Mastery*

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A. INTRODUCTION

.People from different countries use English to understand each other because they have different languages. English also helps people to have good international relationships with people from all nations or all countries. In the world of education, English also plays a very important role, especially in the context of globalization and the development of information technology. English is often the language of instruction in higher education in many countries. Many bachelor's, master's and doctoral programs use English as the language of instruction, allowing students from different countries to learn together in a diverse environment. Many educational resources, including textbooks, scientific journals, articles and other learning materials, are available in English. The ability to understand English enables students to acquire information and knowledge.

Indonesian students learn English to improve four language skills: listening, speaking, reading and writing. In order to master these four skills, students must learn language elements such as structure, sounds and vocabulary. Listening and speaking skills refer to spoken language, while reading and writing skills refer to written language. All four skills are closely related to the thought process behind language, the more often we use a language, the more skillful we become with it.

Vocabulary is one of the most important parts of a language. Learning a language requires mastering vocabulary because vocabulary is the key to successful language learning. Vocabulary can help people read and understand texts better. Therefore, mastering vocabulary can help a person express his or her ideas easily in both oral and written forms. Therefore teachers need to find ways to help students develop vocabulary mastery[3]. The importance of vocabulary for the basic of learning and understanding English which makes researchers interested in making vocabulary for research materials.

Teaching English vocabulary is not easy because it is very different from

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[3] Harmer in Yulsardi, R.P & Ratmanida. (2021). The Effect of Digital Flashcard on Students' Vocabulary Mastery: An Experimental Research at SMPN 12 Padang. Journal of English Language Teaching, 10 (3): pp. 305-314

Indonesian vocabulary. The spelling and pronunciation are very different. Moreover, one word has multiple meanings. Therefore, English teachers must have teaching strategy that is interesting, effective, and not bored. A good teaching technique make students understand and master the lesson like the other lesson which need a suitable techniques and methods.

The reason why researcher choose Vocabulary to be researched, because researcher found that learning vocabulary is monotonous and bored; Teachers teach vocabulary to students in traditional ways. For example, The teacher asks the students to read the text and write down the difficult words, and then the teacher translates these words, or the teacher gives the students a vocabulary list. Based on the above problem statement, the purpose of this study can be stated as follows: To investigate The Effect of Using Digital Flashcards on Wordwall towards the Students Vocabulary Mastery at the 7th Grade of Islamic Junior high School Sejahtera Badas.

B. RESEARCH METHOD

This research is a quantitative method. It is a systematic study of a phenomenon by collecting quantifiable data and applying statistical, mathematical, or computational techniques to produce results.[4]

This study used a pre-experimental research design with only one experimental group. A pre-experimental design is a design that contains only one group or class and conducts pre- and post-tests. In a single-group pre- and post-test design, no control group or comparison group is used. Here, the researcher used a pre-experimental design in which one group receives pre- and post-tests. In other words, the researcher treated a single class as a group, which was subjected to pre- and post-tests in order to determine the effectiveness of the treatment.

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[4] Alan satriawan*, THE EFFECT OF USING FLASH CARDS ON STUDENTS' VOCABULARY AT 7th GRADE OF SMPN 5 JONGGAT*,(Mataram :2020)

Yasminto, M., Agustina P.N: *The effect of using Digital Flashcards on Wordwall Towards the Students' Vocabulary Mastery at the 7th grade of Islamic Junior high School Sejahtera Badas*

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Table 1 Pre Experimental Design

Pre-Test	Treatment	Post-Test
Y1	X	Y2

Note:

Y1: Pre-test

X : Treatment on the Experimental group

Y2: Post-test

The population of this research was the Seventh grade students of Islamic Junior High School Sejahtera Badas Kediri in the academic year 2023-2024. The total number of population was students consisting of 2 classes, namely 15 students at school and 13 students at the boarding school with a total of 7th grade. The total number of population was 28 students. Because there were researchers from other universities, the principal gave the policy to researchers to conduct research on boarding school students with a total number of 13 students.

Table 2 Number of the Seventh Grade of Islamic Junior high school sejahtera

Class	The Number of Student
Students at Boarding School	13
Students at School	15
Total	28

In this study, the researcher used a saturated sampling technique. Saturated sampling is a sampling technique that uses all members of a population as a sample. The Researchers focused on grade 7th boarding school students at Islamic Junior High School Sejahtera Badas as the experimental group because there were researchers from other universities; the principal gave the policy to researchers to conduct research on boarding school students with a total number of 13 students.

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The measurement of a test's level is referred to as validity, which indicates the extent of error present in the test. A test is considered valid when it accurately assesses what it was designed to measure 13. In this particular study, a set of 50 multiple-choice questions were administered to determine the test's validity, and there were 18 items Multiple choice and 10 items matching test that had been valid. The number question of validities were;1, 2, 4, 5, 8, 10, 11, 13, 15, 18, 21,22, 24, 25, 27, 28, 31, 35, 37, 38, 42, 43, 44, 45, 46, 47, 48, 49. The researcher just needed 25 questions for pre-test and post-test, The number of the questions were; 5, 8, 10, 11, 13, 15, 18, 21, 22, 24, 25, 27, 28, 31, 35, 37, 38, 42, 43, 44, 45, 46, 47, 48, and 49.

The consistency of a test in measuring what it is intended to measure is what defines its reliability. The confidence to obtain the score from the administration of a test were essentially the same score.14. An instrument is said to be reliable if it meets the criteria testing the reliability of the instrument using a significant level of 5%. The calculation of reliability used IBM SPSS STATISTICS versions. 25 application.

Table 3 Data of Reliability

Reliability Statistics

Cronbach's Alpha	N of Items
.899	50

From **table 3,** It is known that the N of items (sample) is 22 with a Cronbach's alpha value of 0,899 . because of the Cronbach's alpha value 0,899 > r.table (0,432), it can be concluded that all question items are reliable.

The researcher collected data by comparing students' scores before and after a test. This study utilized quantitative data analysis, which involves numerical information. The pre-test and post-test scores were then subjected to quantitative analysis using the paired sample T-Test in IBM SPSS statistic 25. Statistical

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analysis was chosen for this research due to the numerical nature of the data.

To determine if there was a significant difference in the students' scores, the researcher employed a T-test to analyze the data. This involved comparing the first set of data (pre-test) with the second set of data (post-test). If the post-test scores were higher than the pre-test scores, it would indicate a significant difference, The analysis procedures are as follows:

1. *Scoring Technique*

To determine the students' scores, the following scoring technique is employed. There are a total of 25 questions, and for each correct answer, the students receive a score of 4. Therefore, if all questions are answered accurately, the students will achieve a perfect score of 100.

2. *T-test*

In order to assess the impact of using Flashcards on Wordwall as a teaching tool, the researcher employed a T-test to compare the pre-test and post-test data of the students, aiming to identify any significant differences in their scores. The effectiveness of using Flashcards on Wordwall for learning vocabulary can be determined by comparing the post-test score with the pre-test score. To assess the students' vocabulary mastery, the researcher administered a test after implementing the Flashcards on Wordwall treatment. The data collected from both the pre-test and post-test were analyzed using the non-parametric T-test, specifically the Wilcoxon test, in IBM SPSS 25.

C. FINDINGS AND DISCUSSION

Research Finding Facts

After analyzing the data collected from the pre-test and post-test (refer to appendix 7), it was found that the students' scores ranged from a minimum of 20 to a maximum of 100 in the pre-test. The post-test scores ranged from a minimum of 80 to a maximum of 100, showcasing the full spectrum of student' performance.

Table 4 Calculation of the Average Scores Using SPSS

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	Pretest	Postest
Mean	60.6154	91.6923
N	13	13
Std. Deviation	27.70541	7.90975

The data computation results, which produced an average value (mean), were displayed above. The Pre-test had a mean score of 60.6154 and a standard deviation of 27.70541. In the meantime, the standard deviation of the post-test was 7.90975, and the mean value was 91.6923.

Before analyzing the students' scores, it is essential to ensure that the data is normally distributed in order to assess the impact of using digital flashcards on Wordwall on the students' Vocabulary Mastery.

1. Normality testing

The normality test was conducted using Shapiro Wilk. To assess the normal distribution of the sample data, pretest and posttest examinations were performed. The researcher employed SPSS version 25 software to conduct this analysis. If the normality value exceeds the significance level of 0.05, it indicates that the scores adhere to a normal distribution. The following outcomes display the results of the normality test conducted using the SPSS 25 application.

Table 5 Normality Data Result

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Pretest	.214	13	.106	.907	13	.169
Postest	.322	13	.001	.806	13	.008

a.Lilliefors Significance Correction

Table 5 is a normality test based on Shapiro-Wilk, If the significance value is

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greater than 0.05, it indicates that the data is considered to be normallydistributed. The significant values on the pretest and posttest are 0.169 and 0.008. It means that the significant value in the pretest is > 0.05 and post test is < 0.05. Based on the findings of the pre-test and post-test, it was determined that one of the tests had a significant value of less than 0.05. As a result, it can be inferred that the data does not follow a normal distribution.

2. *T-Test*

In order to examine the hypothesis, a t-test was conducted at a significance level of 0.05 (5%) to determine its validity.

a. If $p < 0.05$, it means null hypothesis (Ho) is rejected. So, digital flashcards on wordwall affects the students' vocabulary mastery at the 7th grade of Islamic junior high school Sejahtera Badas.

b. If $p > 0.05$, it means null hypothesis (Ho) is accepted. So, digital flashcards on wordwall does not affect the students' vocabulary mastery at the 7th grade of Islamic junior high school Sejahtera Badas

The Asymp. Sig. (2-tailed) of the pre-test and post-test scores was calculated in this study using the SPSS 25 software. Due to the non-normal distribution of the data., it is continued with the Wilcoxon test as follows:

Table 6 Wilcoxon Test

Test Statistics[a]

	Postest – Pretest
Z	-3.066[b]
Asymp. Sig. (2-tailed)	.002

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

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Table 5 presented above displays the outcomes of the Wilcoxon test, indicating a p value or Asymp. Sig. (2-tailed) for the pre-test and post-test scores. The Asymp. Sig (2-tailed) value has yielded a result of 0.002, indicating that the value of Asymp. Sig (2-tailed) is less than 0.05, it can be concluded that using Digital Flashcards on Wordwall affects the Students' Vocabulary Mastery at the 7th Grade of Islamic Junior High School Sejahtera Badas.

DISCUSSION

In this section, the research results will be discussed. All data collected from the research instruments. The data is categorized as quantitative data due to its numerical form, which is derived from both pre-test and post-test conducted at Islamic Junior High School Sejahtera Badas. given to 13 students of 7th grade as samples of this study. For both the pre-test and post-test, the researcher provided a total of 15 multiple-choice questions and 10 matching questions, allowing for a comprehensive assessment. This aims to find out whether there is a significant difference in student scores before being taught using Digital Flashcards on Wordwall and after being taught using Digital Flashcards on Wordwal on students' vocabulary mastery. Researchers conducted a validity test for questions that will be used for pretest and posttest. There are 50 items of questions and the results of the validity test 28 items of questions declared valid and as many as 22 items of questions declared invalid. Based on the results of the reliability test, the r-count value was 0.899 and the r-table was found to be 0.499. So, it is considered reliable because it is very high and can be used for testing.

Based on the results of the pre-test, the author obtained the research. The pre-test results show that students' vocabulary mastery in grade 7 Islamic Junior high school is low. It happens because learning vocabulary mastery requires innovative media or strategies to attract students' interest in learning vocabulary mastery and provide different and varied learning experiences. This finding supports Ash-sholehah's research which concluded that with digital flashcards students find it easy after learning by using this media. Therefore, digital flashcards can improve students' ability to understand the subject matter easily during the learning process.

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While the use of learning media in the process of learning activities can arouse new desires and interests, arouse motivation and stimulation of learning activities.

Based on the findings of the post-test, the data shows the vocabulary mastery of students in grade 7 of the Islamic Junior high school sejahtera badas has increased. This is due to the use of fun new media in learning vocabulary mastery. This finding supports research conducted by Ayu Lestari, who concluded that wordwall is useful as a learning resource, media, and assessment tool that is fun for students and increases student activeness. This game can be used through a laptop or smarthphone. allows students to compete in the digital age so that students are more motivated to learn new vocabulary. This is based on the pre- test and post-test results, where the average score of the increased from 60,61 points in the pre-test to 91.69 points in the post-test.

In addition, to find out hypothesis accepted is the null hypothesis, the researcher calculated the resultsusing a t-test. Before knowing the significance of the pre-test and post-test data, the data must be normally distributed. In this study, the researcher used a normality test based on Shapiro Wilk. The data showed that the significant value of the pre-test was 0.169 and the significance post-test was 0.008. This means that the data is not normally distributed. Finally, researchers tested the hypothesis using a nonparametric test based on the Wilcoxon test. The data showed that the significant value of pre-test and post-test is 0.002. It is concluded that Digital Flashcard on wordwall is able to improve the vocabulary mastery of grade 7 students of Islamic Junior High School Sejahtera Badas. The hypothesis was accepted while the null hypothesis (H0) was rejected.

D. CONCLUSION AND SUGGESTIONS

CONCLUSION

After analyzing the data and engaging in discussions, the writer has reached a conclusion based on the research findings:

1. It was observed that students exhibited higher levels of activity and

happiness during flashcard-based teaching and learning. This was evident from the fact that the average score of the students' post-test was higher (91.69) compared to the pre-test score (60.61).

2. To determine the effectiveness of flash cards on students' vocabulary, a t-test was conducted to analyze the data. The resulting Asymp. Sig (2-tailed) value was found to be 0.002, indicating that the value of Asymp. Sig (2- tailed) is less than 0.05, it can be concluded that the data using Digital Flashcards on Wordwall affects the Students' Vocabulary Mastery at the 7th Grade of Islamic Junior High School Sejahtera Badas.

SUGGESTION

Based on the result of this research there are some suggestions as follows:

1. For Students

   In order to make the learning process of English skills easier, students are encouraged to focus on mastering vocabulary. To accomplish this, students should utilize engaging tools like flashcards, as they have the ability to captivate students' interest and motivation

2. For English Teachers

   They hope to make the teaching process fun because students like to learn while playing, when they feel happy then the lesson will become easier. The media that can be used to teach is digital flashcards.

3. To the readers or future researchers

   They are expected to use digital flashcards as a medium for vocabulary teaching, Moreover, future researchers can use the results of this study as an additional reference.

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