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# APPLICATION OF THE KAHOOT! TO IMPROVE VOCABULARY MASTERY FOR 8<sup>th</sup> STUDENTS AT SMP N.7 TOULUAAN

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Abstract: This study raises a problem that occurs in SMP Negeri 7 Touluaan, namely that difficulties experienced by students while learning English, especially vocabulary mastery. As for some students who still have difficulty understanding, reading, and also having difficulty expressing their ideas in English due to a lack of vocabulary mastery. This research was appointed to examine eighth grade students at SMP Negeri 7 Touluaan. This study aims to measure that students who are taught the Kahoot application have a higher vocabulary mastery or not than those who are taught without using the Kahoot application. The research used was a one group pretest-posttest design. The research design of the group pre test and post test design was measured using the pre test carried out before being given the treatment and the post test which was carried out after given treatment. The instrument used is a test. The questions are in the form of multiple choice, matching and essay there are 25 items of various vocabulary questions. The populations in this study were 20 students of class VIII SMP Negeri 7 Touluaan.

#### Keywords: Kahoot, Learning Media, Vocabulary Mastery

#### INTRODUCTION

In general, education is a conscious effort process that is planned to realize and develop physical and spiritual innate potentials in accordance with the values that exist in society and culture. So that the progress of a nation cannot be separated from the educator factor, because education has an important role in efforts to improve human resources which is an important element in the development of a nation. Efforts to achieve educational goals (Luh & Ekayani, 2021); (Andries & Lengkoan, 2023); (Nur et al., 2023).

Currently English has been added to subject at school and get positive feedback from students or the general public. The most important factor in learning English for students, namely teachers who are able deliver learning with a sense of comfort and

understand the needs of their students. In practice, learning English still has many shortcomings (Kumayas & Lengkoan, 2023); (Lumentut & Lengkoan, 2021); (Lengkoan & Hampp, 2022). Thus, it is necessary to have the right theory to support this English learning, for example the selection of strategies appropriate learning methods, methods or techniques so that learning English becomes more fun for students so that students easily accept this English learning (Deporter, 2005:40).

With the existence of interesting learning media such as impressions or displays produced from learning media, students will easily remember and absorb the learning material delivered by the teacher. (Luh & Ekayani, 2021). Learning media is used in an effort to improve students' understanding in learning. Where after we determine the choice of media that we will use, then in the end we are required to be able to provide understanding to students in the learning process effectively.

Media in the learning process is needed because in essence the learning process is a communication process, namely the delivery of messages from the introduction to the recipient (Liando & Tatipang, 2023); (Liando et al., 2022); (Liando et al., 2023). Messages in the form of content/teachings are poured into communication symbols, both verbal and non-verbal.

In learning English, there are four skills must be mastered by students, such as; reading, speaking, writing and listening skill. Furthermore, these four skills, students are also required to master sub-skills namely grammar and vocabulary. According to Sulastri (2011, p.103) as cited in Nia M. (2018),

One of the most crucial language elements that learners should mastered is vocabulary. To be able to communicate well in English, learners will acquire a sufficient amount of vocabulary and student must also know how to use them accurately. This is an essential component of understanding and acquiring a foreign language. When learners acquire a number of vocabulary words, it will make it easier for them to understand the meaning of what they read, write, listening to or also make it easier for them to convey their ideas and enable students to express their ideas in a foreign language.

In addition to learning media, students' ability to remember is also tested. Vocabulary can be acquired in many different ways. One way is through word memorization. The words in your vocabulary are those you understand and

use.(Sabudu, 2019). Using Kahoot media can also make students interested in the quiz given and they will remember every vocabulary given. As quoted from (Sabudu, 2019) method of teaching also is another reason. Words taught visually are easier to remember than words taught through verbal illustrations.

SMP Negeri 1 Touluaan is one of the schools in Touluaan District, Southeast Minahasa Regency, Indoneisia. Teachers who teach at this school apply a lecture system for learning vocabulary and have never tried using applications as learning media. Therefore, based on the description above, the researches is interested in conducting a research entitled Application of the Kahoot! To Improve Vocabulary Mastery For 8<sup>th</sup> Students at SMP N. 7 Touluaan.

#### RESEARCH METHODOLOGY

This research was conducted using quantitative research. Quantitative research is a kind of experimental or pre-experimental investigation in which data are acquired via the use of numerical values. Experiment is a process that has been carefully regulated or factors that can be influenced by the behavior of students by manipulation. Quantitative research is the process of finding data in the form of numbers to analyze information about what you want to know (Mukhlis 2020).

This study was conducted in experimental design, by using quantitative approach with one group pretest – posttest design. This study used experimental because to know the effectiveness using Kahoot to improve students Vocabulary Mastery. The researcher just took one group or class and used pretest and posttest to see the result of the treatment.

This study was classified as experimental design because it was little or no control of extraneous variables. In the one group pretest posttest design, the dependent variable was measured or observed not only after treatment of some sort, but also before the treatment.

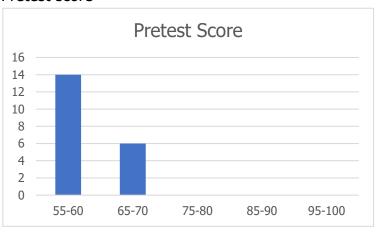
Tabel 1 Rumus desain one group pretest dan posttest

Pretest	Treatment	Posttest

 Y1	X	Y2

#### Data

### 1. The Result of Pretest score



**Pretest score of Students** *Figure 1 The Pretest Score* 

Based on the bar chart above, the frequency distribution of pretest scores are classified as follows: fourteen students scored 55-60 indicating that the students" English vocabulary mastery was weak. Six students received a score of 65-70, indicating that their English vocabulary mastery was sufficient. The following steps are the results of the mean, median, and mode of the students" scores, as well as the standard deviation and standard error calculated with the SPSS 25 program:

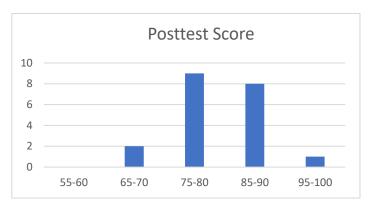
Table 1 The Calculation of the Mean of the Students' Score, Standard Deviation, and Standard Error of Using SPSS 25

#### Pretest Ν Valid 20 Missing 0 Mean 59.00 Median 60.00 55ª Mode Std. Deviation 6.806 Kurtosis -1.002Std. Error of Kurtosis .992 Minimum 50 Maximum 70

Statistics

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#### 2. The Result of Posttest Score



**Posttest score of Students** 

Figure 2 The Pretest Score

The average score of the students" English vocabulary mastery in post-test was 81.75. It was concluded the students" English vocabulary was improved. The next step was to use SPSS 25 to determine the mean of the students" scores, standard deviation, and standard error:

Table 2 The Calculation of the Mean of the Students' Score, Standard Deviation, and Standard Error of Using SPSS 25

### Statistics

Posttest						
N	Valid	20				
	Missing	0				
Mean		81.75				
Median	Median					
Mode	80					
Std. Devia	7.122					
Kurtosis	836					
Std. Error	.992					
Minimum	70					
Maximum	95					

According to the data above, the lowest score was 70 and the best score was 95. The mean pre-test score was 81.75, the median was 70.00, the mode was 80, the standard deviation was 7.122, and the standard error of mean was 0.992, according to the results of the calculation using SPSS 25.

## 1. Testing of Data Normality

The researcher next looked at the data's normalcy using the following formula:

Table 3 Normality test of Pretest and Posttest by Using SPSS 25

	Kolmogorov-Smirnov <sup>a</sup>				Shapiro-Wilk	
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest Vocabulary	.172	20	.125	.906	20	.054
Posttest Vocabulary	.147	20	.200*	.944	20	.290

Tests of Normality

The significance value for the pretest score was 0.054 based on the data above, whereas the significance value for the posttest was 0.0290, based on the data above. Because the significance value for pretest and posttest is higher than 0.005, it was determined that the data was normally distributed.

#### 2. Hypothesis test using paired sample T-test by using SPSS 25

The result of data analysis is from student's score of pre-test and post-test as in the following table :

Table 4 Descriptive Statistics by Using SPSS 25

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	59.00	20	6.806	1.522
	Posttest	81.75	20	7.122	1.593

<sup>\*.</sup> This is a lower bound of the true significance.

a. Lilliefors Significance Correction

The data presented above is the performance scores of the one group of students taken as the sample, before and after using Kahoot as the treatment. The mean score of Pretest is 59.00. While the mean score of Posttest is 81.00. The number of students (N) both in pre-test and post-test is 20 The standard deviation of pre-test is 6.806 and the error mean is 1.522. On the posttest, the standard deviation is 7.122 and the error mean is 1.593. Based on the result of mean, it can be concluded that the mean score of Pretest is different from the mean score of Posttest. Thus it can be concluded that there is increase since the mean score of post-test is higher than pre-test.

Table 4 Paired Sample Corelations by Using SPSS 25

# Paired Samples Correlations

			N	Correlation	Sig.
Р	air 1	Pretest & Posttest	20	.608	.004

Based on the table 4.9 above, shows the correlations between two scores of pretest and posttest where it seen that the correlation scores of pretest and posttest 0.608 and sig 0.004. For interpretation of decision based on the result of probability achievement, that is:

If the sig >0.05, means Ho is accepted

If the sig <0.05, means Ho is rejected

It shows that sig 0.004 is lower than 0.05 means that H0 is rejected and Ha is accepted. So, it can be concludes that there is significant correlation between pretest and posttest score.

Table 5 Paired Sample Test by Using SPSS 25

**Paired Samples Test** 

	Paired Differences								
	95% Confidence Interval of the Std. Error Difference Mean Std. Deviation Mean Lower Upper				t	df	Sig. (2-tailed)		
Pair 1	Pretest - Posttest	-22.750	6.172	1.380	-25.639	-19.861	-16.485	19	.000

The way to test whether the null hypothesis can be rejected is by comparing p-value with the standard level of significance, 0.05. The convention to reject the null hypothesis is when the p-value of the obtained statistics is less than 0.05 (Balnaves & Calputi, 2001)

As Table 5 shows, the p-value is less than 0.05 (0.000 < 0.05). Thus, there was enough evidence indicating that the null hypothesis could be rejected, and it could be concluded that using Kahoot was effective on the students' achievement to improve vocabulary mastery.

#### **Discussion**

As stated in the background of the study that students" vocabulary mastery is still low. Kahoot in this study was used to solve the problem and become a media reference solution for teachers in improving students" vocabulary mastery. After going through several stages of data analysis, the findings of this study are in accordance with what other researchers have concluded previously that Kahoot can be used to improve learning. At SMP Negeri 7 Touluaan 8<sup>th</sup> grade, data analysis revealed that students who taught using Kahoot had greater vocabulary mastery than students who did not taught using Kahoot.

The objective of this study was to improve the eighth graders' students' achievement in vocabulary mastery. Then, the result of this study indicated the result of post-test after the treatment of Kahoot was significant different than pre-test before treatment of Kahoot. This result showed that the students vocabulary mastery was higher by using Kahoot.

From the research finding, the output data of *Paired Samples Statistics* shows the the mean of pre-test and post-test was increased from 59.00 to be 81.75. The standard deviation is to measure how much the variance of the sample The standard deviation of pre-test is 6.806 < 59.00 and post-test is 7.122 < 81.75 where if the standard deviation is getting higher than the mean it means that the mean is not homogeny and if the standard deviation is getting smaller than the mean it means that the mean is homogeny. So, it can be concluded that standard deviation of pre-test and post-test was homogeny means that the sample of this research almost has the same mean.

#### **CONCLUSION**

The problem of the study as stated in chapter I is "Do the students taught using Kahoot application give higher vocabulary mastery than those who taught without using Kahoot application at 8<sup>th</sup> student at SMP Negeri 7 Touluaan?. According to the findings of the data analysis, employing kahoot resulted in greater vocabulary mastering in the 8<sup>th</sup> students at SMP Negeri 7 Toulussn. The English vocabulary mastery exam score it has been proven that students' posttest scores are greater than their pretest scores. As a result, Kahoot was proven to be effective.

Based on the findings there is significant different between the result of pre-test and post-test. Mean of pre-test is 59.00 and pre-test is 81.75, and the tcount was higher than ttable (9.950 > 2.032). It was confirmed that Kahoot has a significant effect on the students' achievement to improve vocabulary Mastery of 8<sup>th</sup> students at SMP Negeri 7 Touluaan.

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