

THE EFFECT OF KAHOOT AS A LEARNING MEDIA ON STUDENTS' VOCABULARY MASTERY

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Abstract: The purpose of this study was to investigate the impact of using Kahoot as a learning tool on students' vocabulary acquisition. The research design was pre-experimental with a pre-test and post-test on 35 eighth-grade students. The findings showed that there was a significant improvement in students' vocabulary mastery after using Kahoot, with an average of 74.85 with a poor category, and the results of student assessment on the posttest or after the application of Kahoot learning media reached an average of 83.00 with a good category. Therefore, there is a difference between the pretest and posttest results. The Shared Sample Test results show that the significant value (sig2-tailed) of 0.006 is below 0.05, which indicates that the t-table is t count. Therefore, H₀ is rejected and H_a is accepted. This result indicates that Kahoot can be a useful tool for enhancing vocabulary acquisition in EFL classrooms for SMP IT Daarul Istiqlal Marindal I students in grades VIII-3.

Keywords: *EFL Classes; Kahoot application; Vocabulary; Vocabulary Mastery*

INTRODUCTION

English is the language of international communication even if it isn't the most commonly used language worldwide. In Indonesia, English is now a mandatory subject in middle schools. Learning other mother tongues, especially English, still poses difficulties, nevertheless, as some Indonesians consider English to be the main foreign language. However, the level of English proficiency in Indonesia is inferior. According to Valentina (2017), Indonesia was ranked 39th in the world in 2017 based on the English First English Proficiency Index (EF EPI) among 80 nations. Unfortunately, Indonesia is still rated poorly for English competence in light of these facts. As a result, learning English is crucial since as society develops, people are driven to improve their abilities and become more qualified, and students can compete with one another.

According to Susanto (2017), learning vocabulary—especially in a foreign language cannot be compared to learning vocabulary in one's native tongue. It went on to say that learning vocabulary in English must be separated from studying the language's four core skills: speaking, listening, writing, and reading. Vocabulary

knowledge is one of the elements that people who wish to learn English must take into consideration. Gaining vocabulary mastery must come before understanding the four components. Munawaroh (2022) asserted that vocabulary is the most crucial component to master before everything else. According to Kusumaningrum & Lapasau (2021), having a strong vocabulary is essential since it's the first step toward building sentences, comprehending what others are saying, and avoiding misunderstandings. One's ability to communicate will be impeded if their vocabulary is inadequate (Ariffin, 2021).

A language's vocabulary is its collection of words and expressions that are used to express meaning and facilitate communication. There are several different word forms in this word category, such as verbs, adjectives, adverbs, and nouns. One of the most important aspects of a language community's linguistic system is the vocabulary that members use to communicate with one another. Speaking, listening, reading, and writing all involve vocabulary, which is the most crucial component of language activities (Abdullagevna, 2020:325). Because vocabulary has an impact on all four language skills—

writing, speaking, listening, and reading—it is therefore the most significant aspect of language. Since vocabulary comprehension improves speaking, listening, reading, and writing skills, it is a precondition for acquiring the other four language skills.

As per the findings of Hummer and Rohimajaya (2018:169), vocabulary development in students is widely regarded as a crucial aspect of language acquisition. Students' use of terminology affects how they interact with others as well. When children master terminology, they can communicate effectively. Vocabulary can be described as the words that the student needs to know to communicate effectively, according to Neuman and Dwyer (2009:385). Students' spoken words and their heard words.

Vocabulary is one of the hardest parts of English for students to fully grasp, according to Nur (2020), thus it's crucial when studying EFL. The emphasis should be on teaching pupils the English language that they will need in the actual world. Thus, vocabulary acquisition is essential to learning English. Those who work with pupils must inspire them and support them in building a sizable "word bank" and useful media-based vocabulary learning techniques.

In actuality, a lot of students still have difficulty learning languages, particularly vocabulary. Because instructional methods are poor, children still struggle to pick up new language. It is typically required of students to seek up challenging terms online, recognize definitions in dictionaries, and commit words to memory. When they hear or read unusual words in texts, students often struggle to remember them. Learning new words and grasping the meaning of unfamiliar terms are challenges for students. As a result, when teaching vocabulary to their students, teachers ought to employ certain engaging methods.

The use of digital media teaching resources can be an excellent resource for vocabulary learning since they provide a variety of engaging and innovative techniques for teaching and using new vocabulary (Firmansyah et al., 2020). The following are a few examples of online learning tools that can be used to teach vocabulary: (1) Digital flashcards: Anki and Quizlet are two websites where you can make them. To aid students in understanding the meaning of the word, they can provide definitions in visual, auditory, and textual formats. (2) Vocabulary-learning applications and games: Memrise, Quizlet Live, and Kahoot are just a few of the

many apps and games available online that are made expressly to teach vocabulary. These apps provide students with an entertaining and engaging approach to reviewing material and picking up new vocabulary. (3) Interactive whiteboards: Teachers can rapidly and visually appealingly introduce vocabulary words and definitions by using interactive whiteboards, which enable them to show and update text and images in real time. (4) A vast range of words and their context-based meanings can be introduced to pupils through digital reading resources including news articles, electronic novels, and online stories. (5) Digital visual representations of words called word clouds show the frequency or importance of each word based on its size. It can be used to draw attention to important vocabulary words and how they relate to one another. (6) Internet forums and social media: Students can converse with native speakers on these platforms and gain practice using freshly learned terminology in real-world contexts.

All things considered, learners can enhance their language proficiency and learn new vocabulary through the use of dynamic and interesting digital teaching materials (Yu et al., 2021).

There are many ways to help children become more proficient in language. Among these is using the Kahoot app to play games. Using game apps, Kahoot is an educational technology platform that improves learning in classrooms and other educational settings. Seventy university students who used Kahoot! for vocabulary learning in the classroom were surveyed by Medina and Hurtado (2017). The children were then divided into control groups and subjected to scientific testing. The post-test findings showed that students in the experimental group did better than those in the control group.

Kahoot! is different, according to Almanar (2019), in that it helps students retain the material covered in the prior assembly. Consequently, the teacher uses Kahoot! to include the energetic pupils in vocabulary survey sessions. Teachers can use gamification to not only increase student engagement and motivation but also to provide students with rapid feedback and adjust their lesson plans to some extent based on quiz results. (Licorish, Daniel, Owen, George, & (2018)) Quizzes, polls, and debates are examples of game-based learning tools that are enjoyable to use (T. W. Lestari, 2019). According to the findings of the first study by Mansur & Fadhilawati (2019), high school student's vocabulary in the material

introducing themselves might be improved by using Kahoot media. Additionally, it's claimed that kids can enhance their vocabulary enrichment by using Kahoot (Ahmed et al., 2022).

Second, studies on the impact of Kahoot on learning have been carried out by Wang & Tahir (2020). According to the study, Kahoot helped kids perform better in the classroom by lowering their anxiety levels. Reading comprehension and linguistic component grammar make up one of them.

The two studies mentioned above suggest that Kahoot improves learning, which in turn improves students' skills. Nonetheless, Kahoot is used in this study at various levels and directly in the classroom. The research gap arises from the fact that students' levels are different and the material to be taught covers English vocabulary appropriate for junior high school.

Research indicates that students' attitudes also contributed to an improvement in their scores, so educators acting as facilitators should concentrate on offering guidance to students during the game's implementation in the classroom in addition to Kahoot's potential to improve student learning (Mansur & Fadhilawati, 2019). Instructors may need to take extra precautions to ensure that instructions are clear and concise while using Kahoot as a digital medium.

The aim of this study was to ascertain the impact of using the Kahoot program as a teaching tool on students' vocabulary knowledge. This study's research question is, "Does the use of Kahoot application as a learning media affect students' vocabulary mastery?" The Kahoot app was utilized in this study to evaluate eighth-grade students' English vocabulary.

METHOD

This study employed a quantitative methodology. Pre-experimental research design was employed in this study methodology. Experimental research is utilized by authors to ascertain possible causation between independent and dependent variables. This implies that variations in the surroundings result in cause-and-effect outcomes. The pre-experimental technique was employed in this study to ascertain how Kahoot, as a tool for learning, affected students' vocabulary mastery.

Table 1. *Explanation*

O ₁	X	O ₂
Pre-Test	Treat-ment	Post-Test
Description:		

O₁: Observation before treatment.

O₂: Observation after treatment.

X: Treatment of experimental group.

Without comparing the results to the control group, the impact of treatments or effects is determined in this design by the difference between the pre-test and post-test or one experimental group observed the dependent variable (pretest), after which it was administered a stimulus, and then it was observed once more (posttest), with no control group.

The instrument in this study was a vocabulary test consisting of 20 multiple-choice questions, where all the vocabulary contained in the multiple-choice questions was taken based on the goals and objectives of English subjects at their level. All the vocabularies were found in the main textbook of grade 8 of SMP IT Daarul Istiqlal Marindal I.

To determine the main objective of this study, the researcher tested the extent of students' vocabulary mastery in grade 8 of SMP IT Daarul Istiqlal Marindal I, a series of vocabulary tests were required. The purpose of this initial test is to evaluate students' understanding of the subject matter before they receive further intervention or training. The test consisted of multiple choice with 20 questions tailored to the student's ability level.

Kahoot is a globally recognized interactive learning tool used by instructors and students. Users can create, distribute, and take part in interactive online tests with it. Kahoot sessions are conducted in class using the Kahoot online platform. It involves the presentation of questions related to the subject matter that has been studied or is being studied. Students in grades 8-3 engage in the game by answering the questions that appear on the screen using their own devices.

A post-test is an assessment conducted after the administration of therapy. Its purpose is to evaluate the student's abilities and ascertain whether the treatment has affected them in any way. After the Kahoot session is over, students are given a post-test to measure their understanding or skills after the intervention. The solution to the research question will be found in the posttest results. The posttest has the same format, number of questions, and difficulty level as the pretest.

This study sought to ascertain how the Kahoot! Application, used as a learning tool, affected the vocabulary knowledge of eighth-grade students at SMP IT Daarul Istiqlal Marindal I. Students in the

eighth grade at SMP IT Daarul Istiqlal Marindal I made up the population of this study, and the sample consisted of 35 students from classes 8–3.

This information was collected from the students' post-test scores after three treatments. This test aims to find out how students' understanding of vocabulary is affected when they use the Kahoot program as a learning tool. After obtaining the scores, the scores were processed by calculating normality and hypothesis tests. The findings can be used to determine whether the use of the Kahoot program has a different effect on students' vocabulary across the classes that use it by interpreting the final results using the T-test formula.

In data analysis, normality tests and t-tests are used by researchers. Normality tests are used to determine if the data you have is normally distributed. Normal distribution is important because many statistical methods assume that the data comes from a normally distributed population. To determine this there are steps in performing a normality test. The first step in checking data normality is to visualize the distribution of the data. The method used by researchers is to use the QQ plot (Quantile-Quantile plot). Then, the next step is to look at the descriptive statistics of the data by checking the mean, median, and standard deviation to get a rough idea of the data distribution. After visualizing the data and looking at the descriptive statistics, the next step is to conduct statistical tests to test for normality. If the $p\text{-value} > \alpha$, then there is not enough evidence to reject H_0 , which means your data follows a normal distribution. If the $p\text{-value} \leq \alpha$, then you can reject H_0 , which means your data is not normally distributed.

The t-test is the ultimate statistical method for comparing two means as it can be used even with a minimal sample size. After data collection, the researcher proceeded to analyze the data to ascertain if there was any improvement in students' vocabulary achievement after the intervention. The researcher chose to conduct a repeated measures t-test to measure the impact of the treatment. The criteria for evaluation are described as follows: H_0 states that there is no significant difference in students' vocabulary achievement before and after instruction through the Kahoot application. The criterion for accepting H_0 is when the alpha level exceeds 0.05

($\alpha > 0.05$). In contrast, H_1 states that there is a significant difference in students' vocabulary achievement after instruction through the Kahoot app. H_1 is considered accepted if the alpha level is below 0.05 ($\alpha < 0.05$).

RESULTS AND DISCUSSION

This study was carried out at SMP IT Daarul Istiqlal Marindal I with a sample size of 35 students in each class. Pre-experimental research design and quantitative methodology were employed in this study. The 8-3 class was the one that was used as the pre-experimental. For two weeks, the students participated in Kahoot-based vocabulary learning sessions. Vocabulary tests administered both before and after the intervention period were used to gather data on vocabulary learning.

Analysis of pre-test and post-test

Table 1. Shows descriptive statistics for students' pre-test and post-test scores after using Kahoot

Description	Pre-test	Post-test
Mean	74.85	83.00
N	35	35
Min	40	65
Max	100	100
Std.D	14.4	9.3

The average post-test score (83.00) is greater than the pre-test score (74.85) in the preceding table, indicating a considerable increase in vocabulary acquisition following the usage of Kahoot by students as an instrument for learning.

Test of analysis statement

The dependent variable, Kahoot as a learning medium, and the independent variable, Students' Vocabulary Mastery, were analyzed using a paired sample t-test to test the hypothesis in this study. The normality test, which is part of the Paired Sample t-test analysis requirements test, was used to first assess the data from the research findings before the analysis was performed.

Test of normality

The normality test, which establishes whether or not the data is normally distributed, is one of the prerequisite tests for doing the Paired Sample t-test. The following are the results of the normalcy test for the idea of comprehending post-test data:

Table 2. Normality test results of pre-test and post-test data of students' vocabulary mastery

<i>Tests of normality</i>	
Kolmogorov-Smirnov ^a	Shapiro-Wilk

	Statistic	df	Sig.	Statistic	df	Sig.
before treatment	.104	35	.200*	.965	35	.327
after treatment	.145	35	.061	.960	35	.231

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Based on the table above, the results of the normality test using Kolmogorov-Smirnov show that the significance value of students' vocabulary mastery before being given treatment or pretest is 0.200, this means that the pretest results are normally distributed and the post-test results are 0.061, thus the pretest and posttest significance values are greater than 0.05 (0.200>0.05, 0.061>0.05). This means that the data on students' vocabulary mastery is normally distributed.

The hypotheses in this study are: H_0 : Before and after utilizing the The Kahoot app as a teaching tool, pupils' command of terminology did not significantly differ. H_a : Students' vocabulary mastery before and after utilizing the Kahoot program as a learning tool differs significantly.

The findings of the paired sample t-test analysis, which were shown in the table below as paired sample statistics, paired sample correlation, and paired sample test (sig-2tailed), were used to assess the aforementioned hypothesis.

Test of hypothesis

Table 3. Paired sample statistics

		Paired Samples Statistics			
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	before treatment	74.8571	35	14.42454	2.43819
	after treatment	83.0000	35	9.33053	1.57715

According to the t-test findings above, the average score after using the Kahoot program as a learning tool is higher than it was before, with the average pretest score being 74.85 and the

average posttest score being 83.00. This indicates that after using the Kahoot program as a learning tool, students' vocabulary mastery has increased.

Table 4. Paired sample correlation

		Paired Samples Correlations		
		N	Correlation	Sig.
Pair 1	before treatment & after treatment	35	.074	.671

The results of the paired sample correlations test show that the significance value is 0.671, where the sig value is > 0.00, this means that the

pretest and posttest have a relationship or there is a significant relationship.

Table 5. Paired sample test

		Paired Samples Test				t	df	Sig. (2-tailed)
		Paired Differences						
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference			
					Lower	Upper		
Pair 1	before treatment - after treatment	- 8.14286	16.58692	2.80370	- 13.84066	- 2.44505	- 2.904	.006

H_0 is rejected because the significant value of the t-test, as shown by the Paired Sample Test findings, is less than 0.05, or 0.006. This indicates that there was a difference in the vocabulary mastery of students before and after they used Kahoot as a learning tool. Therefore, it can be concluded that students' vocabulary proficiency before and after utilizing Kahoot as a learning tool

differed significantly.

The purpose of this study is to ascertain how Kahoot, a learning tool, affects the vocabulary knowledge of eighth-grade SMP IT Daarul Istiqlal Marindal I students. This study aims to ascertain how Kahoot, as a learning tool, affects vocabulary knowledge. Pre-experimental research design with pretest-posttest one experimental group

design is the methodology employed. According to the research, 35 students in one class, class VIII-3, were employed in the study, and each student received a pretest and a posttest.

Before the research was conducted, the researcher first made observations to find out the condition of the class and the learning media used at the school. After that, the researcher prepared as many as 20 items of multiple choice questions which were used as pretest and posttest questions. After the criteria were met, the researcher conducted his research at SMP IT Daarul Istiqlal Marindal I. The research was conducted face-to-face in class VIII-3 with 35 students. This research was conducted using the Kahoot learning application. Furthermore, the results of data analysis on the pretest and posttest of class VIII-3 SMP IT Daarul Istiqlal Marindal I with 35 students. Before being given the treatment, the results of the pretest scores had an average pretest score of 74.85, the highest score was 100 and the lowest score was 40. Meanwhile, after being treated using Kahoot, the average posttest score was 83.00, the highest score was 100 and the lowest score was 65. Thus the posttest average value is higher than the pretest average value.

The researcher employs the Paired Sample Test, which contains the same study sample and is paired, based on the T-test results. The Paired Sample Test yielded a significant value (sig2-tailed) of 0.006 < 0.05, indicating that the t-statistic is less than the t-table. Consequently, H_0 is accepted and H_1 is refused. Thus, Students at SMP IT Daarul Istiqlal Marindal I have a greater command of language when they utilize Kahoot as a learning tool.

Since learning new words requires repetition, Kahoot is a great tool for vocabulary instruction. Additionally, because it offers instant feedback, pupils can identify and fix their faults immediately. This is consistent with research by Masoud et al. (2020), which found that Kahoot is a useful teaching tool for vocabulary. All things considered, Kahoot can be a fantastic resource for teaching vocabulary, particularly when combined with other teaching strategies (Uralova, 2021). It's crucial to keep in mind, though, that no single teaching strategy is enough on its own; educators must employ a range of strategies to guarantee that every student can pick up and retain a new language.

The study's findings demonstrate how Kahoot enhances student engagement and fosters teacher-student interaction in the classroom. This finding supports the research of Wulan Zulfirah,

Darmawan, and Maf'ula (2023) and Raihana Herlis Syahputri and Lenny Solo (2022). Numerous common nouns, verbs, and adjectives were discovered by the students. Additionally, they are adept at using these terms in sentences. This indicates that teaching kids to use nouns, verbs, and adjectives to expand their vocabulary is effective. So, in comparison to when they have not received treatment, their language knowledge can be deemed to have increased.

Additionally, the researchers discovered several flaws in the Kahoot Game's implementation. For example, the strategy's lengthy execution necessitates the preparation of an organized activity schedule to ensure that learning proceeds as planned. Additionally, because this technique only highlights the crucial vocabulary contained in the text, Putri (2019) said that she had trouble focusing students' attention on particular content in the text during the research using this strategy. To put it another way, the researchers encountered the same issue and had to provide additional explanations to the students for them to comprehend the specific content in the text.

This study ultimately supported earlier research by (Zulfirah et al., 2023) titled "The Effectiveness of Kahoot Game in Improving Students' Vocabulary Mastery". It discovered that SMA Negeri 8 Palu pupils' vocabulary mastery can be enhanced by playing the Kahoot game. The experimental group's post-test average score differed significantly from its pre-test average (39.44). Furthermore, the fact that the t-count number (3.31) is greater than the t-table value (1.677) further supports this. This indicates that the study's researcher's hypothesis is accepted. This demonstrates how teachers may use the Kahoot game as an effective teaching and learning tool to help students become more proficient with vocabulary. Students are encouraged to focus on the vocabulary exam because they want to perform well on Kahoot.

CONCLUSION

Based on the previously outlined justification, the researcher came to the conclusion in the study "The Effect of Kahoot as a Learning Media on Students' Vocabulary Mastery" that using Kahoot has a significant impact on students' vocabulary mastery. This is predicated on the data processing outcomes covered in the preceding chapter. The results of the study demonstrate that students who significantly impact vocabulary mastery are those whose post-test scores rose following their use of

Kahoot. This finding shows that Kahoot is a valuable tool for EFL students and should be integrated into vocabulary teaching. Future studies can investigate the long-term impact of Kahoot on vocabulary retention and explore its use in different educational contexts. In addition to providing recommendations to future researchers on how to use Kahoot to train students' speaking or listening skills, the researcher hopes that this study will help teachers investigate several app innovations that can enhance learning.

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