

## THE USE OF KAHOOT! APPLICATION TO TEACH ENGLISH VOCABULARY LEARNING IN RURAL AREA

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**Abstract:** The purpose of this study was to find out the effectiveness of Kahoot! application in teaching vocabulary at the eighth grade of MTs NWDI Lepak in the academic year 2021-2022. This study refers to mix method where a pre-experimental design using one group pre-test and post-test was used to find out the effectiveness of using Kahoot!, then observation was used to find out the students' attitude on Kahoot! The sample of this study was the eighth-grade students consisting of 30 students. The data were collected from students' pre-test and post-test by using multiple tests. The data were analyzed by using SPSS version 22 for Windows. After submitting the data to a paired sample t-test, it was found that there was a significant difference in the mean score between the pre-test and post-test,  $t(df=22) = -14.31$  at  $p=0.00$  which meant that the alternative hypothesis was accepted and the null hypothesis was rejected. Thus, Kahoot! The application was significantly effective in teaching students' vocabulary in the eighth grade of MTs NWDI Lepak in the academic year 2021-2022. Considering the process and result of this study, it was suggested that English teachers use this media in teaching English vocabulary, both in urban and rural areas.

**Keywords:** *kahoot!, application, rural area, vocabulary*

### INTRODUCTION

Vocabulary learning becomes the basic gate for a language learner to learn a new language. According to Susanto (2017), in English language teaching, vocabulary lies in the first position as the most important thing to learn for language learners. It is a

tool that has to be understood in learning English. However, mastering English vocabulary is a difficult thing and needs a long process.

At least, there are four difficulties in learning English vocabulary. The first difficulty is when students have to understand and remember English vocabulary. Many students achieve toughness once they communicate due to the fact restrictiveness of their vocabulary (Ng et al., 2022). Second, the absence of media employed exclusively relies on the speaking approach without regard for media. The students are not interested and tough to recognize vocabulary (Kuśnierek, 2016). Third, learning the English language is a vital component that has made students despondent or fearful of expanding their vocabulary ability. Fourth, students lack memorization management when learning English vocabulary. They are easy to overlook the vocabulary that has been taught or learned (Susanto, 2017). Thus, one way to minimize the difficulties of students in learning English vocabulary is by using media technology that is Kahoot! application.

Kahoot! is a platform enriched with a game-based learning tool. It is used as educational technology starting from the basic level of education until the university level students. The use of Kahoot! application in teaching vocabulary facilitated them to understand an object that want conveyed, memorized, and interested in learning vocabulary. It can improve their vocabulary mastery. According to Almanar (2019), Kahoot! had a substantial impact on students' vocabulary mastering and provided students with experiences of integrated language learning in their vocabulary acquisition. It implies that utilizing the Kahoot! program to help pupils increase their vocabulary knowledge is a suitable solution to the students' problems.

Nonetheless, some studies from Indonesia found that the use of Kahoot! application to teach English vocabulary learning is effective (Purnawan et al., 2022; Almanar, 2019; & Pahamzah et al., 2022). In Purnawan et al. (2022), the quantitative approach was used in the study, while descriptive and inferential statistics were used to analyze the data. This research included fourth-grade pupils from SD Dana Punia Singaraja. Then, the second study was revealed by Pahamzah et al., (2022). The researchers used qualitative research by implementing mixed methods and using classroom action research on students of the Postgraduate Program of Sultan Ageng Tirtayasa University. The third relevant study was conducted by Almanar (2019). This

previous research about students' vocabulary mastery by using Kahoot! at Universitas Muhammadiyah Tangerang where Holmesglen's English class were the population and sample of the study.

Moreover, the differences of the previous research from the present research are in the sample and the setting of the study. All of the setting of the previous studies were conducted in public schools in the urban city where the similarity among these researchers on the use of Kahoot! application to improve students' vocabulary mastery in urban city. Mostly urban cities had a high ability in using technology, meanwhile while areas tend to avoid technology (Salemin et al., 2017). Thus, this research tended to reveal how Kahoot! Application work in rural area students.

However, most urban cities had a high ability in using technology. It is especially important for urban schools and communities to provide effective technology education to foster greater diversity in the field of information and educational technology, thereby expanding students' potential sources of employment and meeting the rapidly growing demands of tomorrow's information technology (IT) workforce (Haleem et al., 2022). While in rural areas tend to avoid technology while learning. Limiting their success percentages with rural youngsters who have had little to no prior exposure to technology (Shikalepo, 2020).

Furthermore, the statement about rural area students' reaction to the technology before, is proven by what happened in the class. Mostly, students and teachers from the rural area have no idea what media can be used for teaching and learning. They also did not know how to use and hardly learn new technology. Thus, while learning, the teachers in the rural area only used a traditional teaching method, like a teaching center, and used a single media which is a module or a book from the government.

From the problem above, the researcher sought to ascertain the impact of utilizing Kahoot! program to educate pupils on English vocabulary proficiency. As a result, the researcher is interested in carrying out the investigation named "The Use of Kahoot! Application to Teach English Vocabulary Learning in Rural Area".

## **LITERATURE REVIEW**

### **Teaching of English Vocabulary**

Teaching English vocabulary cannot be judged as a simple job. Even though the vocabulary is just a meaningful letter range on a piece of the word (Yu, 2020), since it has different characteristics from the other field of knowledge, thus a teacher has to learn and know vocabulary teaching techniques. Furthermore, teaching English vocabulary is based on two teaching techniques, namely teaching the form and teaching the meaning of the vocabulary (Dakhi & Fitria, 2019).

In teaching the form technique, there are at least three visual ways by touch, and by oral. The visual teaching technique, it can be done by showing the written form of the word, showing the movement associated with the word mentioned, moving the hand in the air while writing the letters, or showing letters made of wood or plastic to spell. However, by touch technique, teaching vocabulary with touch (tactilely) can be done using letters made of wood, sandpaper, and others, so that students can feel the shape of letters arranged into words. In addition, you can also use a writing system for blind people such as Braille, or by writing word by letter on the student's hand. Then, the last is oral, teaching vocabulary orally can be practiced such as by saying words or other oral forms.

However, for the second technique, which is the vocabulary meaning teaching technique, there are at least three techniques that can be used as a reference. The first is a demonstration technique which can be done by showing an object. Second is, the picture technique, which can be done with photos, drawing something on a whiteboard, or illustrations from newspapers and magazines. And the last is the explanation technique which can be practiced by explaining synonyms or antonyms of words, defining them, or translating them.

### **Kahoot!**

Kahoot! application accommodates some tools for having a quiz, survey, and discussion that is supported by gamification mechanics. Kahoot! was originally a joint project between teams consisting of Johan Brand, Jamie Brooker, and Morten Versvik with the Norwegian University of Technology and Science in March 2013 (Madej & Studniarek, 2019). There are prerequisites for Kahoot's interactive quiz tool. It can be done by the availability of electricity, laptop devices, InFocus, mobile phones, and most

important the availability of an internet connection. Six months after the project is complete, Kahoot! thrown to the public and became a game page education that is free of charge and accessible to anyone, especially educators and students.

### **Kahoot! as a learning tool**

Kahoot!, as the smartphone application, can be called an educational website that can be used in the teaching and learning process in schools, learning activities that can take advantage of the Kahoot online game, such as pre-test, post-test, practice questions, material reinforcement, remedial, or enrichment. In choosing answers that will later be represented by images and colors, participants are asked to choose colors or images that represent the right answer. The highest score is obtained by the participant who answers the fastest and correctest. This method can support student competition in answering questions given by teachers.

On the other part, Kahoot! also serves as a simple procedure for the students. There is no need to answer on the answer sheet as usual. The teacher only has to display exam questions/materials via laptop displayed through the LCD screen while students give answers through their mobile phones. Moreover, this free platform makes it easy for teachers to conduct quizzes/exams without the need to dictate in front of the class and students as well (Kaur & Naderajan, 2020). Because of its complete tools and easiness, thus Kahoot! application nowadays became a tool that was used in learning, especially in English learning. The classroom atmosphere can be more pleasant, students are trained to use technology as a medium for learning, and students are trained in motor skills.

### **METHOD**

This study refers to mixed-method research. The population was the eighth grade of MTs NWDI Lepak, east Lombok island in Indonesia, which consist of two classes. The present researchers took one class with 30 students as the sample. The dependent variable was teaching English vocabulary learning and the independent variable was Kahoot! application. This research was investigated how the dependent variable influenced by the independent variable which is to investigate how the effectiveness of using Kahoot! application to teach English vocabulary learning after the treatment. Reading and vocabulary exams were utilized as study instruments by the

researchers (Zohrabi, 2013). The reading test assessed students' comprehension with a series of 30 multiple-choice questions. The T-test, homogeneity, and test reliability were used to determine validity. Then, this test was given to the students in the pre-test and post-test. Pre-test which was given before doing the treatment and post-test which was given after doing the treatment.

In this study, the present researchers used multiple-choice tests and interviews in collecting the data. The researcher directed the following method of data collection: (1) Pre-test: a test administered to MTs NWDI Lepak students before therapy. (2) Treatment: Following the pre-test, students at MTs NWDI Lepak were taught vocabulary using Kahoot! program. (3) Post-test: a test administered to MTs NWDI Lepak students following therapy. An instrument was used to assess the effectiveness of therapy by determining if there was a significant difference between the pre-test and the post-test. The treatment was given in the form of a vocabulary lecture that followed the lesson plan. However, by observation, the researcher find out the students' attitude toward using Kahoot!

The researchers used descriptive statistics in analyzing the data. The mean score and standard deviation were used by the researcher to determine the student's ability. Using the SPSS 22 for Windows application, the present researchers determined the mean score and standard deviation. The result of the data was shown after the present researchers compared the result of the pre-test and post-test. Furthermore, the present researchers analyzed the hypothesis testing which was aimed at knowing whether the alternative hypothesis was accepted or not. In this study, it is used Paired Sample T-test of SPSS version 22. The SPSS statistic shows the result of the procedure that indicates whether the alternative hypothesis is accepted or rejected (Ostertagová & Ostertag, 2013).

## **FINDINGS AND DISCUSSION**

### **Findings**

Before giving a treatment, the researchers collected and calculated the data. Then, the calculation found that the highest score on the pre-test was 60 and the lowest score was 16 with the main score being 35.07 and the standard deviation being 12.15.

After that, as the treatment, the students were asked to download Kahoot! application on the play store. In Kahoot!, the rural area students were given some basic and common English vocabulary games that can be used in simple present tense sentences that have been prepared by the teacher. Those vocabularies refer to four general parts of speech verbs, adjectives, pronouns, and nouns. The students in groups of three were working together to find the answer. On the next days, when the students have been understanding the way, then they were asked to learn by having the quiz by themselves one by one. This treatment was held 3 times a week.

While doing this treatment, the students were seen as enthusiastic. They actively asked for some Kahoot! procedure questions to the teacher. They also joyfully commented on their friends' work, made applause when seeing their work, and opened and read the English dictionary while finding the answer.

Meanwhile, the result of data collection in the post-test showed that the highest score of the post-test was 100 and the lowest score was 60 with the mean score being 79.7 and the standard deviation being 11.68.

Referring to the result of the pre-test and post-test, it could be seen that the mean score and the standard deviation of students' post-test were higher than the mean score and standard deviation of students' pre-test. It indicated that there was a difference between students' vocabulary after and before doing the treatment by using Kahoot! application. A detailed description of the result of descriptive statistics was shown in Table 2.

**Table 1. Descriptive statistics of Pre-test and Post-test**

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Variance</b>
<b>Pre-test</b>	30	16	60	35.07	12.15	147.51
<b>Post-test</b>	30	60	100	79.7	11.68	136.48
<b>Valid N (listwise)</b>	30					

To determine if the distribution of data in the pre-test and post-test was normal or not, the normality testing computation was utilized. Moreover, based on the result of normality testing, the values in the pre-test and post-test were higher than the values of the significance  $p=0.05$ . The value of Shapiro-Wilk in the pre-test was 0.07, while the value of significance in the post-test was 0.14. It showed that the data were normal.

Then, to determine if the data were homogenous or not, a homogeneity test was performed. Furthermore, the data were homogenous if the value of the significance level was higher than  $p=0.05$ . Based on the calculation of One-Way ANOVA, it was found that the value of the significance level was 0.84. It meant that the distribution of data was homogenous.

To determine if the alternative hypothesis ( $H_a$ ) was accepted or rejected, hypothesis testing was done. It was performed A paired samples t-test to investigate whether there was a significant difference in mean score between the pre-test and post-test. After calculating a paired samples t-test, the present researcher found that there was a significant difference in the mean score between the pre-test and post-test  $t(df=29)=-14.31$  at  $p=0.00$ . It meant that the alternative hypothesis ( $H_a$ ) was accepted and the null hypothesis ( $H_o$ ) was rejected.

After collecting and calculating the data, it was found that Kahoot! The application was effective in teaching students vocabulary in the eighth grade of MTs NWDI Lepak in the academic year 2021-2022. It could be seen from the result of descriptive statistics in the mean score and standard deviation of the post-test were higher than the mean score and standard deviation of the pre-test.

## **Discussion**

From the finding section above, a new concept had been taken. Kahoot! was not only suitable for every level of age but also in all different areas. Learning a language will be a piece of cake challenge because of the mosquito's resources and easy-downloaded applications on the internet, starting from preschool to universities and professionals (Ayumi & Chan, 2021). On the same side, rural area students have a huge willingness and curiosity in using technology-based games in learning. But, the problem is about the financial barriers and the logistical challenges. As said (Kormos & Wisdom, 2021), financial hurdles made students tend to be concerned about their basic needs rather than think about their learning style.

Thus, even though some challenges were found in the use of technology in rural areas, the idea is that an interactive learning application like Kahoot! can boost the students' activeness in the classroom. This finding is also supported by (Hadijah, et. al., 2020). They said that Kahoot! application tends to enlarge the motivation, interest, and activeness of the students in learning. By using new and interactive tools in monotonous



learning, the participation of the students tends to surge. Same as what was provided by Kahoot! application. As said by Kadarwati et al., (2021), when the students participate and use the Kahoot! application by using their account, students feel eager to achieve the highest score and answer in the shortest amount of time because all of the participants' names with the best results can be shown on the screen. Of course, this method acts as an indirect reward for participants when their friends see their names displayed on the screen.

However, particularly for rural area students, this application is found more particularly for a vocabulary test, rather than a reading test. A previous study conducted by Hadijah, et. al. in 2020 found that Kahoot! is more particular for a vocabulary test rather than a reading test. This is because students in rural areas have a low level of knowledge rather than students from urban areas. Thus, giving a basic English vocabulary is simpler than giving a complex reading text which consists of various vocabularies. Moreover, learning vocabulary by using games can take the students to feel the context to use real words (Ayumi & Chan, 2021), including expanding their vocabulary score (Suryadi, 2022).

Besides giving the rural area students a new learning experience in learning a vocabulary, it is found that this application also helps the teachers to bring a fresh teaching and learning atmosphere. Kahoot! is a gaming platform that allows teachers to easily see whether the students can achieve the learning goal or not and can convey concepts, provide material, and as a media in focusing on and communicating ideas (Wang & Tahir, 2020). Furthermore, it makes the teachers able to build an enjoyable and inventive learning process and also includes students' active involvement in classroom activities (Irwan et al., 2019).

Furthermore, this research also finds that rural area students need a longer time in learning to use Kahoot! application for the first time. They felt odd in using learning applications because they were more often using a printed book from the government. This finding is also supported by Kadarwati's findings. They found that some students felt quite challenging in using the application for the first time.

In respect of the result of this research and previous research, Kahoot! application is useful in teaching and learning vocabulary. Teachers can teach vocabulary will be more easily through this media because this media provides students with

vocabulary in the application shown. As said by Al-Halim & Arifin (2022), media for learning can boost the students' achievement and interest in learning.

## CONCLUSIONS AND SUGGESTIONS

The findings above give some insights that technology may be used to make language learning more fascinating and enjoyable, both in rural and urban areas as long as the students know how to use it. This is also proof that Kahoot! application has a good impact on students' and teachers' engagement while having a learning and teaching process. How the students compete, their responses on the screen, the rapid questions that were asked, and their applause, when answered correctly, was the indication that the Kahoot! does not only demonstrates engaging and fun learning but also can boost the students' scores in English vocabulary courses.

Given the approach and outcome of this study, it was advised that English teachers employ this application in teaching English vocabulary, whether in an urban or rural setting. On the other hand, finding that Kahoot! also can increase the number of students from rural areas, thus the next researcher could discuss the other specific issues about Kahoot!, such as the students' and teachers' rural areas' perception of Kahoot!

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