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**IMPLEMENTATION OF KAHOOT ONLINE AND GOOGLE FORM TOWARD STUDENTS' VOCABULARY COMPREHENSION ENHANCEMENT**

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**ABSTRACT:** Vocabulary is one of the fundamental components learned in language learning. The teachers should prepare good English materials to support the students' learning activities during vocabulary instruction. Kahoot Online application and Google Form can be used as learning alternative to facilitate the process of vocabulary instruction. This study was intended to find out (1) the students' vocabulary achievement after being treated with Kahoot Online and Google and (2) the significant difference in implementing Kahoot Online Application and Google Form toward students' vocabulary comprehension enhancement. The researcher used quasi-experimental method to conduct the research. The population of this study were all elementary students of SD Manggala in academic year 2020/2021. All fourth grade students had been involved in this study as the sample. The sample of this study used purposive sampling. The independent sample t-test results showed that the value significance (2-tailed) 0.096 was higher than the value significance 0.05. While, the value of t-obtained (1.319) was lower than t-table (1.6909) with degree of freedom was 34. In other words, there was no any significant difference on vocabulary comprehension between the third grade students of SD Manggala who were taught by using Kahoot Online Application strategy and Google Form (Vocabulary Quiz).

**Keywords:** *Kahoot Online Application, Google Form, Vocabulary Comprehension*

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**PENERAPAN APLIKASI KAHOOT ONLINE DAN GOOGLE FORM TERHADAP PENGUATAN PEMAHAMAN KOSAKATA**

**ABSTRAK:** Kosakata merupakan satu dari sejumlah komponen dasar dalam pembelajaran bahasa. Guru perlu mempersiapkan materi ajar yang baik untuk mendukung Kegiatan belajar siswa selama pengajaran kosakata. Aplikasi Kahoot dan Google Form dapat menjadi alternatif yang dapat memfasilitasi pengajaran kosakata. Tujuan dari penelitian ini adalah untuk mengetahui pencapaian kosakata siswa setelah diberi perlakuan Aplikasi Kahoot dan Google Form dan (2) perbedaan signifikan dalam perbedaan penerapan dalam melaksanakan Aplikasi Kahoot Online dan Google Form terhadap penguatan kosakata. Peneliti menggunakan metode Kuantitatif Quasi Eksperimen untuk melakukan penelitian. Populasi studi ini adalah seluruh siswa SD Manggala tahun akademik 2020/2021. Seluruh siswa kelas IV dijadikan sampel. Sampling yang digunakan adalah purposive sampling. Hasil penelitian menunjukkan nilai signifikans 0.096 lebih tinggi dari nilai signifikans 0.05. Selanjutnya, nilai t-hitung (1.319) lebih rendah dari t-tabel (1.6909) dengan df 34. Dengan kata lain, tidak ada perbedaan signifikan pemahaman kosakata siswa SD Manggala yang diajarkan dengan Strategi Aplikasi Kahoot Online dan Google Form (Vocabulary Quiz).

**Kata Kunci:** *Kahoot Online Application, Google Form, Vocabulary Comprehension.*

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## INTRODUCTION

Vocabulary is then an essential component learned in language learning. In relation to this, Thornbury (2002, p. 13) stated that without grammar very little can be delivered, without vocabulary nothing can be communicated. The most important point of the statement above is that mastering vocabulary for the students is the main component in order to learn a language successfully. In listening, students' vocabulary influences their understanding towards teacher's speech, class discussion, and other speeches. Vocabulary is one of important language components in any languages. We would never be able to listen, speak, read, and write without comprehending vocabulary. For example, the students need to listen to some sources; the students need to find the meaning in each word in order to convey the meaning. They may be able to pronounce or read to some unfamiliar words; yet they would not be able to understand the context and the value of the text. Therefore, they obtain low scores in speaking, listening, writing, and reading which leads to the unmotivated in learning English.

According to Buckingham (2007), media education is an essential dimension of technology in education. It can help bridge the new digital divide between students experiences of technology outside of school and their experiences in the classroom. The study also found focuses on three ways in which using media can respond to new digital media, by applying and extending existing conceptual approaches to the objects of this new study, dealing with the creative possibilities of digital technology, and the pedagogical challenges it symbolizes and can learn the potential structures of participatory media culture that appear. Ahmad (2012) explained that the response of EFL students to media technology can give influence to develop accent patterns in individual English words and can enhance students writing skills. Furthermore, English teachers strive to be able to integrate media technology in the ELT class to increase student motivation, integrated language skills and an independent learning environment for students (Sari, Putri, Herdi, & Hamuddin, 2018). Moreover, Lee (2016) mentions that using it through new media technology students are highly motivated and can express great interest in the media literacy curriculum. Furthermore, students can use laptop, computers and iPads to explore and discuss media problems in the classroom. They can also strengthen their 4C skills (critical thinking, creativity, communication and collaboration). Using new information technology to teach educational media is very useful because the new curriculum can create "meaning" and "relevance" for students.

The Health Ministry announced 467 new confirmed COVID-19 cases on Monday, bringing the total number of infections nationwide to 26,940. The capital city recorded 137 new confirmed cases, bringing the total tally to 7,485. Meanwhile, East Java reported 65 new cases, Papua 50, South Sulawesi 45 and West Java 34. The virus has spread to all of the country's 34 provinces (The Jakarta Post.com, 2020). The outbreak began in Wuhan, China, in December 2019 Coronavirus disease (Covid-19) is an infectious disease caused by newly discovered coronavirus. Most people who fall sick with COVID-19 will experience mild to moderate symptoms and recover without special treatment. The virus that causes Covid-19 is mainly transmitted through droplets generated when an infected person coughs, sneezes, or exhales (Organization, World Health Organization (WHO), 2020).

Therefore, a number of regions in Indonesia have decided to close schools, including Jakarta, Bandung, Palembang, etc. Technology-based online learning

platforms in Indonesia have committed to help students, especially those living in areas impacted by the novel coronavirus (COVID-19) outbreak, to continue their learning process at home. Educators are struggling to provide that learning continues, in spite of massive disruption. All the teaching learning process should do at home through online learning. To face the problem situation, the teachers should prepare good English materials to support the students' learning activities particularly on vocabulary. Kahoot Online application and Google Form (Vocabulary Quiz) can be used as learning alternative to facilitate the teaching learning process.

Kahoot is a game-based learning platform which used as educational technology in schools and other educational institutions. Its learning games are multiple-choice quizzes that allow user generation and can be accessed via a web browser or the Kahoot application. Kahoot is a game based learning held in the classroom with the learners. It can be defined as the response system of the student. Medina (2017) considered Kahoot as a tool for vocabulary teaching and learning in English classes. Next, in the study also provides further evidence that the use of Kahoot in the learning process can improve student learning motivation and develop student vocabulary. Students' satisfaction shows that EFL learners enjoy using Kahoot in the classroom learning process, and this media is easy to use by students. Moreover, it was revealed that students generally had a positive view of using Kahoot in the learning process and preferred learning using technology. Budiati (2017) also claimed that the study of Kahoot, intended as a mixture of the use of ICT in education and games, is very applicable in English class to develop student learning. Next, after using Kahoot in the learning process, students are very challenging in joining the class, they are more eager to come to class, they are more aware in the world of English and they are attentive in learning more about what they have learned and can deliver to others what they have learned using Kahoot in the classroom.

Next, Google forms can cultivate stronger student engagement in class to help them understand the material better. This meant modifying class sessions to use more active-learning methods. Rather than just passive listening in class, students would engage in activities such as problem solving, exercising higher order thinking, and so on (Kim & Frick, 2011). Google Forms can be used in any course as long as the students have access to computers — they can use laptops or smartphones. Google forms also can help teachers to evaluate learner performance and determine if eLearning course is effectively delivering key concepts and ideas.

The various articles reviewed above served as a catalyst for the following experiment research (comparative) study exploring the benefits of Kahoot Online Application and Google Form (Vocabulary Quiz) to improve students' vocabulary comprehension. This study was intended to find out the students' vocabulary achievement after being treated with Kahoot Online Application and Google Form (Vocabulary Quiz) and also to find out significant difference between Kahoot Online Application strategy and Google Form (Vocabulary Quiz) in enhancing students' vocabulary comprehension.

### **Vocabulary**

Vocabulary is the first and foremost components in learning a new language. Lehr, Osborn, & Hiebert (2004) claimed vocabulary refers to the kind of words that students had to know to improve comprehension in reading text. This is in line with Neuman & Dwyer (2009, p. 385) mentioned vocabulary are words in speaking

(expressive) and words in reading (receptive). Not only understanding the words someone says, but vocabulary also needs to be conveyed. Students use the words they read to make sense of the words they will eventually see printedly. Vocabulary must be more than merely identifying or labeling words. Yet, it is rather be more conveying the meaning of the words we say and to help students build word meaning and the ideas that the words represent.

### **Type of Vocabulary**

Commonly, there are two forms of vocabulary; they are active and passive vocabulary. The active vocabulary usually the word used in conversation and writing, because they are recognized and understood when read. The passive vocabulary is usually rarely or never used in someone speaking or writing but recognized when met them reading and listening. Nurdin (2009) claimed that active vocabulary refers to words that learners recognized and use in speaking, reading and writing. While passive vocabulary refers to words which learners understand in reading and listening, but are not yet able to use them.

Harmer (1991, p. 159) categorizes vocabulary into two kinds, they are active and passive vocabulary. Active vocabulary relates to words that students have learned and are able to use in communication, while passive vocabulary concerns to words that students will know when they meet them, although they will not use them.

### **Principle of Teaching and Learning Vocabulary**

There are many principles in teaching and learning vocabulary as follows: aims, quantity, need, situation presentation, meaningful presentation, presenting in context, learning vocabulary, inference (guessing) procedure in vocabulary learning, technique in teaching and learning vocabulary. Wallace (2002) mentions nine principles of teaching and learning vocabulary, they are:

1) Aims

In the teaching vocabulary, we have to be clear about our aims how to explicitly we must decide the vocabulary that we expect the learner to be able to do. If it is not clear at this point, it will be difficult to assess how success full the vocabulary learning has been.

2) Quantity

Having decided what are involved in vocabulary learning. We may them then decide on the quantity to be taught the number of few students can learn. When there are too many new words, the students may be confused, discouraged and frustrated.

3) Need

The vocabulary that taught the students depend on the course book or syllabus but the teacher should consider the aims of the course and the individual lesson.

4) Situation presentation

The words provided are relevant to the student's situation.

5) Meaningful presentation

The students must have a clear and specific and understanding of what denotes or refers to his required that the presented in such a way the denotation and references are perfectly clear.

6) Presenting in context

The words very seldom occur in isolation, so the students have to know the usual context that the word occurs in.

- 7) Learning vocabulary and in the mother tongue and in the large language teaching the words of the target language the teacher can compare simulating and differences of the words

- 8) Inference (guessing) procedure in vocabulary learning

Inference is also one of strategies in learning in which the learners are heard on a practice by using a definite knowledge to have clear understanding the word they learn. The students infer the meaning of words by listening or reading them used in certain situation.

- 9) Frequent exposure and Repetition

A certain amount of repetition is necessary until there is a proof that the students have learn the largest word. The simply way of the checking that the students have done the learning is to see whether or not the students can recognize the target words and identify their meanings. If the words have to be part of the students' productive vocabulary, they must be given an opportunity to use them often as necessary for them to the words at all with the correct pronunciation and indentify their meaning.

### **Kahoot Application**

Kahoot is a program of game based learning for learners. It is also as educational technology which requires the response system of the student. Multiple choice questions are made in debate format and can be gamed by all learners in the classroom (Bicen, 2018). Kahoot is a technology instrument to manage quizzes, discussions, or surveys. Multiple-choice questions are displayed on the screen. Students can answer the questions with their tablet, computer or smartphone.

Bicen (2018) argued the Kahoot application can be used effectively for the gamification of lessons, giving an influence on learners which makes them more challenging and inspired to study. Using Kahoot application in the learning process can enhance the students' learning benefit in the classroom, with involvement, motivation and developing learning experiences. Finally, implementing Kahoot shows that the use of educational games in the classroom is likely to minimize disruption, thereby improving the quality of teaching and learning beyond what is provided in conventional classrooms.

According to Chen, et al (2017) explained Kahoot fostered wider and active student participation, and yet provided students with the opportunity to retain their most desirable personal choice of participation. In short, Kahoot game can be an alternative solution to have a class engagement become more fun to learn English vocabulary.



Figure 1. Application of Kahoot ([www.kahoot.com](http://www.kahoot.com))

## Google Form (Vocabulary Quiz)

Google form is a useful technology in the classroom for bringing together information from a large set of individuals and displaying that information in a way that makes it easy to use. It also can be used to gather data, receive in-the-moment feedback to students and instructors, engage students' learning (Nguyen, et al, 2018). Furthermore, Yunita (2019) explained that with Google Forms, an instructor (or any user) can create a set of questions and invite students (participants) to respond to those questions, either through e-mail or on a web page. The kinds of questions in the application include text, paragraph, multiple-choice, lists, check boxes, scale, and grid. Then, the response kinds involve joining free-form text, picking from an instructor-defined scale, or selecting from a restricted set of options. In Google Docs, a form can be used to gather responses that feed into a spreadsheet, which can then be used to manage the data collected. Google Forms will reflect the answers directly — responses emerge in a spreadsheet on a screen at the front of the room when learners collect them.

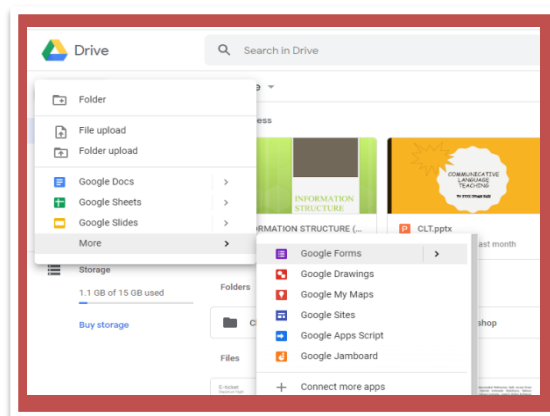


Figure 2. Setting Up a Google Drive Account

## METHODOLOGY

This study used comparative design by measuring the achievement of pre-test and post-test of students' vocabulary achievement. In this research, the researcher used experimental group which is taught by using Kahoot Application Online and for control group was taught by using Google Form (Vocabulary Quiz) to enhance students' vocabulary comprehension.

This study comprises some variables: dependent and independent variable. There are one dependent variable, namely vocabulary and two independent variables, namely Kahoot Application Online strategy and Google Form (Vocabulary Quiz). The population of this study was all elementary students of SD Manggala in academic year 2020/2021. The total population in this study is 174 students. There were 2 classes for the fourth grade of elementary students. However, all fourth grade students had been involved in this study as the sample. The sample of this study used purposive sampling. There are several techniques that used in collecting the data. In gathering the data, the research had been started with the following steps:

### 1. Conducting a Pilot Test

The purpose was to check the validity and reliability.

### 2. Conducting Pre-Test

Pre-test was given toward students before teaching learning processes. The test had been confirmed to be valid and reliable to get an accurate result. Vocabulary test was used to measure students' comprehension in vocabulary.

### 3. Giving the Treatment

After administering the pre-test, the treatment was given to both groups.

### 4. Conducting Pos-Test

It was given to both comparative groups after applying the treatment in order to diagnose students' vocabulary comprehension achievement. Post-test were used to know the differences of students' ability after the conduct of teaching learning processes. The vocabulary test used multiple choices which had four answer options.

Moreover, in this study, there were two kinds validity test to be administered for research instrument, they were construct (using expert judgment) and content validity (test of specifications based on the curriculum and syllabus). Before giving the test to the sample, the researcher conducted the try out to SD Baptis class with 30 students. The result of the try out was analyzed by corrected item correlation. The researcher found the r-table was 0.320 (df=38). The result of validity from 40 items question given in try out test revealed that there were 10 invalid items (question number, 3, 9, 13, 19, 23, 26, 30, 31, 35, 37). Then, there were 30 valid items used as the instrument for pretest and posttest. In measuring the reliability of the test, the writer used split-half reliability. It was found that the reliability coefficient of vocabulary test was 0.840. It meant that the result of this reliability was categorized highly reliable. In analyzing data, the researcher used scoring test, normality, homogeneity test, paired sample test and independent sample test.

## FINDINGS AND DISCUSSION

### Paired Sample T-Test in Experimental Group

Table 1. The Result of Paired Sample T-Test in Experimental Group by Using Kahoot

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Posttest - Pretest	24.167	10.607	2.500	18.892	29.441	17	.000	

The result of paired sample T-Test in experimental group showed the value of t-obtained was 9.667 at the significance level 0.000 with degree of freedom was 17. As the t-obtained (9.667) was higher than t-table (2.1098) and the significance (2 tailed) was lower than 0.05. So, it can be stated that learning vocabulary using Kahoot of experimental group improved significantly.

**Paired Sample T-Test in Control Group**

Table 2. The Result of Paired Sample T-Test in Control Group by Using Google Form

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Posttest -Pretest	30.278	9.621	2.268	25.493	35.062	13.352	17	.000

The result of paired sample T-Test in control group showed the value of t-obtained was 13.352 at the significance level 0.000 with degree of freedom was 17. As the t-obtained was higher than t-table (2.1098) and the significance (2 tailed) was lower than 0.05. So, it can be stated that learning vocabulary quiz using Google Form of control group was significantly improved.

**Independent Sample Test**

Independent sample test was used to analyze whether or not there was any significant difference in learning English vocabulary of the students in experimental (using Kahoot) and control group (using Google Form).

Table 3. The Result of Independent Sample Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower		Upper
Score	Equal variances assumed	.645	.428	-1.319	34	.096	-3.333	2.528	-8.471	1.804
	Equal variances not assumed			-1.319	33.37	.096	-3.333	2.528	-8.474	1.808

Based on the table above, the posttest result from independent sample t-test showed the value significance 0.096 was higher than the value significance 0.05. While, the value of t-obtained (1.319) was lower than t-table (1.6909) with degree of freedom was 34. In other words, there was no any significant difference on vocabulary



comprehension between the third grade students of SD Manggala who were taught by using Kahoot Online Application strategy and Google Form (Vocabulary Quiz).

Kahoot Online Application strategy and Google Form (Vocabulary Quiz) was applied to improve vocabulary comprehension third grade students of SD Manggala Palembang. The result of the statistical analysis showed that learning vocabulary quiz using both application, Kahoot and Google Form were significantly improved. By analyzing the data, there was a significant difference of both groups. The result of pre-test and post-test mean scores of experimental group increased higher (from 68.06 to 92.22) than the control group (from 65.28 to 95.56). The difference mean score was so small, that was 6.12. It means both Kahoot Online Application strategy and Google Form (Vocabulary Quiz) could improve vocabulary comprehension the third grade students of SD Manggala Palembang.

Besides, the mean scores comparison of both groups was analyzed by using Independent Sample T-Test. The result showed that the value significance 0.096 was higher than the value significance 0.05. While, the value of t-obtained (1.319) was lower than t-table (1.6909) with degree of freedom was 34. It can be stated that the null hypothesis ( $H_0$ ) was accepted and alternative hypothesis ( $H_a$ ) was rejected. In other words, there was no any significant difference on vocabulary comprehension between the third grade students of SD Manggala who were taught by using Kahoot Online Application strategy and Google Form (Vocabulary Quiz).

Students' perception on using Kahoot application was good but there were also some students were surprised in doing the vocabulary quiz by using Kahoot. The application game had timer limit and song that supported the competition situation. Each student also had answered the questions by clicking the correct options (A, B, C, or D) on the screen fast. Other problems include the technical problems such as unreliable internet connections, hard to read questions and answers on a projected screen, not being able to change answer after submission, stressful time-pressure for giving answers, not enough time to answer and afraid of losing. The main challenges mentioned by teachers include getting the difficulty level of questions and answers right, problems related to network connectivity, scoring based on how quickly the students answer reducing student reflection and cause some students to guess without thinking, that some students can have a problem with failing a quiz, and some teachers find it challenging to use the technology.

## CONCLUSION

The researcher concluded that the use of Kahoot Online Application strategy and Google Form (Vocabulary Quiz) had the positive impact in teaching vocabulary comprehension to the third grade students of SD Manggala Palembang. The students were able to understand the questions and vocabulary. It could improve their English skill especially in comprehending vocabulary.

Kahoot Online Application strategy and Google Form (Vocabulary Quiz) was applied to improve vocabulary comprehension third grade students of SD Manggala Palembang. The result of the statistical analysis showed that learning vocabulary quiz using both application, Kahoot and Google Form were significantly improved. By analyzing the data, there was a significant difference of both groups. The result of pre-test and post-test mean scores of experimental group increased higher (from 68.06 to 92.22) than the control group (from 65.28 to 95.56).

The writer also concluded that there was no any significant difference on vocabulary comprehension between the third grade students of SD Manggala who were taught by using Kahoot Online Application strategy and Google Form (Vocabulary Quiz).

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