

Applying Online Gamification as the Media in Online Learning for Enhancing Learners' Vocabulary

Ella Aprilia Tiana

Universitas Muhammadiyah Gresik

East Java, Indonesia

Khoirul Anwar

Universitas Muhammadiyah Gresik

East Java, Indonesia

Ulfatul Marifah

Universitas Muhammadiyah Gresik

East Java, Indonesia

ellaaprilia_170403@umg.ac.id

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Abstract

(Lynn & Holderness, 2013) acknowledged that vocabulary is an important part of student education. Without learning vocabulary, students can lose the ability to read and understand. This study aimed to find out the significant differences in applying Kahoot, Quizziz and Google form as the media of exercise in online learning for enhancing learner's vocabulary. The design of this study was quasi-experimental. The population of this study was the 8th grade of junior high school 17 Gresik. There were 2 Experimental groups and 1 control group consisted of 32 students each. The instruments of the study were a pre-test and a post-test of vocabulary mastery and using an online media called Kahoot, Quizizz and Google form. The data were analyzed using SPSS 16.0. The finding showed that there were significant differences by using Kahoot and Quizizz as media of exercise to the students' vocabulary, while there was no significant different using google form. Further testing using Anova showed that there were no any significant differences among those 3 media.

Keywords: *Vocabulary, Kahoot, Quizizz, Online Learning.*

1. Introduction

Vocabulary learning is a part of important element in language teaching. In same opinion with Schmitt (2000) mentioned that learning vocabulary has become one of the most important parts of second language acquisition. So, vocabulary should be learned and acquired in second language. According to Schmitt and McCarty (1997: 6) describe that vocabulary has an essential role for learners to master 4 skills in English. For example in Listening, with enough vocabulary mastery, it will make easier for learners to understand what is expressed by others. In speaking, having enough vocabulary can allow students convey their thoughts or interact with others. In reading and writing, with adequate vocabulary, students can write their ideas smoothly and understand the text they read easily.

Online learning is a system that facilitates student learning in a broader and more diverse way. The facilities provided by the system allow students to study anytime, anywhere, regardless of distance, space or time. More diversified teaching materials. Not just words, but also images, sounds and movements (Riyana C, 2020) The strenght of online learning is saving time, saving cost, learning is more effective and efficient, the students are easy to learn and they can access the material they want, the students can discuss with their teacher outside the class but besides the strenght, online learning has weakness also such as, difficult to apply if the facility does not support, the internet access is not distributed well.

Learning and teaching process in online learning also need media. Media is a tool for teaching and it can support the process of learning. Paul and David (1999) argued that the use of media can give the facility for the learning process.

Some previous study showed the media used in online learning is Quizizz. Hanan (2021) the researcher explored the effect of using gamification on 68 Egyptian EFL university students' vocabulary knowledge and their attitude toward gamification use. Researcher thinks that Quizizz as the media in online learning still has weakness such as the question and



answer presented in different order. In Quizizz, the students' score can be down even if they have already finished with their questions it is because of other friends can answer the question quicker. The students can log in with two accounts, it will make the teacher feel difficult to control them. The students can not join if they are late.

So, to cover the weakness of Quizizz above, the researcher want to use Kahoot! as the media for online learning. Kahoot has advantages such as give fun activities, give positive environment, and boost energy. Kahoot! is an educational online application where the teachers can create their own quiz and presented in the format of game. Students can play with their friends and gather in screen or projector to enhance social interaction and it will create competitiveness among them. The students can have chance to join in kahoot even they are late. Kahoot! Is an excellent teaching choice especially for practicing vocabulary in a language class. Based on the previous study (Masoud et al., 2020) examined the impact of Kahoot! as Web Based Learning to Improve Vocabulary Learning for EFL in secondary school.

In this research, the researcher wants to add Google form as the media in online learning. So, the reseacher will see the differences from three media of exercises are Kahoot, Quizizz and Google form in enhancing learner's vocabulary. According to the background of the study above, the research question is "Are there any significant differences in applying Kahoot, Quizizz and Google form as the media of exercise in online learning for enhancing learners' vocabulary?"

Vocabulary Learning

Asbeck (2012, p.6) explained that the vocabulary knows the words and their meaning. Siriwan (2007) argued that to know a word, it is necessary to know at least its basic meaning, form and use in context, in a receptive and effective way. Know the form of a word, including spelling, tone and part of the word. Knowing the meaning of a word means relating its form and meaning and knowing the definition of the word and its meaning. (Lynn & Holderness, 2013) acknowledged that vocabulary is an important part of student education. Without learning vocabulary, students can lose the ability to read and understand, making it even more difficult to learn, to read and understand.

Teaching vocabulary in Junior high school according to the previous study conducted by (Farkhi & Hakim, n.d., 2019) the reseacher conducted study about using Telegram for facilitating the students of Smpn 1 Surabaya in their vocabulary learning. The use of learning strategy for vocabulary acquisition is very important and many researcher have implemented of strategy in teaching vocabulary such as using media. Based on the previous study (Jafari & Chalak, 2016) the reseachers investigated the role of Whatsapp in improving Iranian junior high students' vocabulary learning. The usage of appropriate or interesting media in teaching vocabulary can make learning and teaching process will run effectively and it can increase the student's vocabulary achievement. (Kent David Bradley & Brandon Sherman, 2013) the researcher investigated the use of Memrise in blended learning at Korean junior high students.

The Effectiveness of Media in Learning Vocabulary

(Ruth Lautfer, 1999) stated that the media learning is one of the teaching tools for teachers to deliver the materials, improve students' creativity and it can increase their attention in the learning process. By using the media, the students will be more motivated to learn, encourage them to write, speak and their imagination is getting stimulated. So, through media can create a teaching and learning process more effective and efficient and make a good relationship between teacher and the students. In addition, using media in learning process can overcome boredom.

As the technology progresses, then the development of media learning is so fast. The following are the types of learning media according to Briggs, (in Arif Sadiman, 1993) There are 13 kinds of media, namely: (1) Object. (2) Model. (3) Live voice. (4) Audio recording. (5) Print media. (6) Programmed learning. (7) Whiteboard. (8) Transparency media. (9) Series films. (10) Frame film. (11) Film. (12) Television. (13) Picture. Meanwhile, the types of learning media stated by Ashar (2011: 44-45) they are :

1) Visual media, is the type of media used only rely on the senses of vision, for example print media such as books, journals, maps, pictures. 2) Audio media is a type of media that is used only relying on hearing. For example tape recorders, and radio. 3) Audio-visual media are films, videos, TV programs. 4) Multimedia is media that involves several types of media and equipment that are integrated in a learning process or activity. For example, game.

Kahoot as Media in Teaching Vocabulary

Kahoot is used in schools and other educational institutions as an educational technology and can be accessed via mobile devices such as computers, smartphones and tablets (Pede, 2017). In addition, kahoot can be used for enhancing social learning because the students gather around shared screens such as interactive whiteboards, projectors, and computer screens to improve social learning (Pede, 2017)

The use of Kahoot as media in learning and teaching process has been implemented in some previous study. (Pratiwi & Susilawati, 2020) the study aim is to find out that kahoot can improve the students' mastery of simple present tense in the form of verb (tobe) and verb (s, es) used in descriptive text in SMA Islamiyah Pontianak. The use of Kahoot as media in teaching vocabulary has been implemented in some previous study. Fouad & Mohammed (2019) they analyzed the importance of using Kahoot as a web 3.0 application in classroom to enrich university student's vocabulary which contributed to enhance language skills in writing and speaking.

Quizizz as Media in Teaching Vocabulary

Quizizz is a game based online testing tool and it can make fun learning, fun activity in classroom. By using this application, the students can be interested doing exercise and compete with their classmates. (Zhao, 2019) said that Quizizz can boost students' interest and they will be active participate in learning. Quizizz also appropriate for teachers to know their students score after doing exercise. Some previous study used Quizizz for teaching English. (Priyanti et al., 2019) the research's objective was to investigate the effect of Quizizz towards the eleventh grade students' reading comprehension. The researcher used a quasi-experimental utilizing a post-test only control group. Arttirmark & Samet (2018) the researchers conducted study about using Quizizz for enhancing 60 engineering faculty student's vocabulary knowledge at University in Turkey.

Online Learning

Online learning involved presenting and delivering materials using the Web. Therefore, the author defines online learning as accessing educational materials using the Internet. Interact with content, instructors, and other students. Get support in the learning process, gain knowledge, create personal meaning and create learning experiences (Riyana, C, 2020). Online learning requires some requirements for students, they are : (1) ICT literacy: students must have basic skills ICT mastery as a tool for learning, (2) Independence: online learning requires condition of students who are usually to do independent learning, like utilizing online learning facilities to learn the material, do quizzes and practice competencies without having to be guided by the teacher. (3) Creativity and Critical Thinking : facilities online learning is very diverse, students can learn various available tools such as browsing, chatting, group discussions, videos conferencing, online quizzes, online drills and others, this can boost students' creativity to utilize optimally (Riyana, C, 2020)

The use of media as a supporting for online learning also important, based on previous study conducted by (Qamar et al., 2019) the aim of their study was discuss about utilization of WhatsApp application as discussion media. This study used qualitative method. (Anwar, 2021) conducted study about the usage of Edmodo in collaborative writing and result showed that there was an influence using Edmodo in collaborative writing. Next is about the use of media in online learning to teach vocabulary. Based on the previous study conducted by (Damaiyanti & Sari, 2017) this study aimed was improving student's vocabulary by using online learning and Edmodo as the media.

2.Method

This research was quantitative and used the quasi-experimental design. In this research, there were 3 groups which were the first experimental group received a pre-test, treatment using online learning with Kahoot! as media of exercise and also a post-test. The second experimental group received a pre-test, treatment using online learning with Quizizz as media of exercise and a post-test. The control group received a pre-test, treatment using online learning with Google form as media of exercise and a post-test. The population for this research was the whole of the eight grade of Junior high school 17 Gresik. The sample was taken by purposive random sampling. The researcher decided to choose 8G as the first experimental group, 8H as the second experimental group and 8B as the control group.

Instrument was the tool that used for collecting the data. In this research the researcher used test. There were pre-test and post-test. The test was multiple choice and consisted of 20 questions with 4 options. The questions for pre-test and post- test covered the same topic "Bigger Is Not Always Better" in the book of junior high school "When English Rings a Bell" but the items were different. There were 2 validity, the first was content validity in order to check test with syllabus, basic competence or the test could be checked by the teacher. The second one was construct validity, the test would be tried out to other class with the equal ability in order to check whether there was question which too difficult or too easy. For the result would be counted using validity test and it would know which items were valid and invalid, then there were the reliability is used to measure the test reliable or not. In order to know the criteria of reliability, the researcher used Pearson's Interpretation of Correlation Coefficient.

Data Collection Procedure

First meeting, the researcher gave a pre-test for the two experimental groups and one control group. Because of pandemic, a pre and post-test distributed via google form by the researcher. Second meeting, the researcher gave material about degree of comparison and focused on positive degree. Third meeting, the researcher focused on comparative degree. Fourth meeting the researcher focused on superlative degree. The fifth meeting the researcher reviewed all of the type of degree of comparison. Sixth meeting, the researcher gave a post-test for 2 experimental groups and 1 control group.

Data Analysis

The researcher used quantitative data analysis. Quantitative data were analyzed by using statistical methods. The researcher decided to use T-test and Anova one way for analyzing the data. The researcher used SPSS 16.0

3. Findings and Discussion

Descriptive analysis for each group

Descriptive analysis was used in analyzing the data by describing the data that had been collected from the three groups. The researcher analyzed mean, median, mode, standard deviation, minimum, maximum, kurtosis and skewness using SPSS program version 16.0.

Validity and Reliability

The trial test conducted to the students of 8I class of SMPN 17 Gresik which consisted of 31 students. It was conducted on April, 17th 2021 for the trial of pre-test and April, 19th 2021 for the trial of post-test. There were 20 numbers were valid because the significance value was below 0.05 and the r-result was bigger than r-table (0.355). For the reliability of pre and post test was reliable because it was above 0.600 and according to Pearson's Interpretation of Correlation Coefficient was very reliable because it was above 0.80 – 1.00.

Normality and Homogeneity

For the normality, the researcher used Kolmogorov-Smirnov. Normality of the 3 groups were normally distributed because the significance value was bigger than 0.05. For the homogeneity the researcher used Levene's test. Homogeneity of the 3 groups were homogeneity because the significance value was bigger than 0.05.

1. Paired sample T-test

Paired sample T-test was used to know whether there was distinction of mean of two samples that were paired.

Table 1. Paired sample T-test of first experiment group using Kahoot

T-Test

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRETEST	48.7931	29	22.18651	4.11993
	POSTTEST	65.6897	29	21.82414	4.05264

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	PRETEST & POSTTEST	29	.830	.000

Paired Samples Test									
		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	PRETEST - POSTTEST	-16.8966E1	12.84619	2.38548	-21.78298	-12.01012	-7.083	28	.000

Based on the table 1 showed that the significance value is $.000 < 0.05$ so, there is enough evidence to conclude that pre-test and post-test are significantly different.

Table 2. Paired sample T-test of the second experiment group using Quizizz

T-Test**Paired Samples Statistics**

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 PRETEST	52.1875	32	20.74956	3.66804
POSTEST	70.1562	32	18.16077	3.21040

Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 PRETEST & POSTEST	32	.782	.000

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 PRETEST - POSTEST	-1.79688E1	13.06679	2.30990	-22.67983	-13.25767	-7.779	31	.000

Based on the table 2 showed that the significance value is $.000 < 0.05$ so, there is enough evidence to conclude that pre-test and post-test are significantly different.

Table 3. Paired sample T-test of the control group using Google form

T-Test**Paired Samples Statistics**

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 PRETEST	57.5806	31	27.92463	5.01541
POSTTEST	62.2581	31	24.59128	4.41672

Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 PRETEST & POSTTEST	31	.752	.000

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 PRETEST - POSTTEST	-4.67742	18.74991	3.36758	-11.55494	2.20010	-1.389	30	.175

Based on the table 3 showed that the significance value is $.175 > 0.05$ so, there is enough evidence to conclude that pre-test and post-test are no significantly different.

From the result above, it can be concluded that using Kahoot and Quizizz showed that there is a significantly different. So, it can answer the hypothesis that there are any significant differences in applying Kahoot and Quizizz as the media of exercise in online learning for enhancing learners' vocabulary. For the result of using Google form showed that there is no significantly different

2. Anova one way

The researcher used anova one way for testing the differences of mean of 3 groups from their post-test's score.

Table 4. Result of Anova one way of 3 groups

ANOVA

NILAI POST TEST

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	988.943	2	494.472	1.055	.352
Within Groups	41702.361	89	468.566		
Total	42691.304	91			

Multiple Comparisons

NILAI POST TEST

Tukey HSD

(I) GROUP	(J) GROUP	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
EXPERIMENTAL 1 (KAHOOT)	EXPERIMENTAL 2 *(QUIZZZ)	-4.467	5.550	.701	-17.69	8.76
	CONTROL (GOOGLE FORM)	3.432	5.592	.813	-9.90	16.76
EXPERIMENTAL 2 *(QUIZZZ)	EXPERIMENTAL 1 (KAHOOT)	4.467	5.550	.701	-8.76	17.69
	CONTROL (GOOGLE FORM)	7.898	5.455	.321	-5.10	20.90
CONTROL (GOOGLE FORM)	EXPERIMENTAL 1 (KAHOOT)	-3.432	5.592	.813	-16.76	9.90
	EXPERIMENTAL 2 *(QUIZZZ)	-7.898	5.455	.321	-20.90	5.10

Table 4 showed that the significant value is $.352 > 0.05$ then the mean is same which means that there is no significantly different.

After the further testing using anova one way, the results showed that the level of significance is not too high and even close to insignificant among the 3 groups.

Discussion

The objective of this research was to find out the differences in applying Kahoot, Quizizz and Google form as the media of exercise in online learning for enhancing learners' vocabulary. The finding of this result that there was a significance different in applying Kahoot and Quizizz as the media of exercise in online learning for enhancing learners' vocabulary. The finding supported by Ramos (2021) there was a significance effect using digital learning application especially Kahoot and Quizizz in enhancing vocabulary. All of the students enjoyed the learning process because the researcher used Kahoot and Quizizz as media of exercise in enhancing their vocabulary. The researcher also used Google form, but the result showed that there was no significance different. It might caused by some factors such as, the students felt bored because google form had no interesting appearance, there was no additional music and also there was no interesting wallpaper and background. It also supported by Karim and Shukur (2016, p.241) it should be there was a variant design format like font, sound. The format of google form similar with paper-test.

Anova analysis data explained that there is an enhancement but not too high. Second, not too much enhancement. Evidently, the results were not significant when compared to the control and first, second experimental groups. Then, this slight increasing can make less significant comparison, therefore if the sample is added or the homogeneity test is repeated it may give different results. The researcher admits that this study has a weakness in the selection of a sample that is too small. If the sample is quite a lot and different maybe the results will be different again. Then, this research can be re-tested again for the further researcher to make sure again for this result.

4. Conclusion

Based on the result above, it can be concluded that using Kahoot and Quizizz showed that there was a significantly different. So, it can be concluded that in this research has similarity with previous study that using Kahoot in another level also had a significance value. While for Quizizz in previous study showed that there was no significance value but in this research had a significance value. It might caused by difference environment or level. So, this result reject the previous study. Then, the usage of Google form did not show significance different.

For English teachers, they can use media that is interesting for students so that, they will enjoy the learning process and not get bored easily. For the students, they can use Kahoot and Quizizz, especially for learning vocabulary in degree of comparison because it's so many choices of topic and quiz on that. For further researcher can focus on the other aspect of achievement for example their motivation, engagement and interest. Further researcher also can develop again the Google form for level above junior high school and prove again that there are differences between the results of previous study with this research. Further researcher also can try to compare using Anova for the 3 media but for different level.

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