

THE EFFECT OF KAHOOT APPLICATION IN IMPROVING STUDENTS' WRITING SKILL (QUASI EXPERIMENTAL DESIGN AT SMAN 1 LURAGUNG)

Icha Amalia

Department of English Education, Universitas Kuningan, Indonesia
Email: ichaamalia518@gmail.com

Dadang Solihat

Department of English Education, Universitas Kuningan, Indonesia
dadang.solihat@uniku.ac.id

Endang Darsih

Department of English Education, Universitas Kuningan, Indonesia
endang.darsih@uniku.ac.id

APA Citation: Amalia, I., Solihat, D., & Darsih, E. (2022). The effect of Kahoot application in improving students' writing skill (quasi experimental design at SMAN 1 Luragung). *Indonesian Journal of Learning and Instruction*, 5(1), 23-30. doi: 10.25134/ijli.v5i1.5873.

Received: 16-01-2022

Accepted: 25-02-2022

Published: 30-04-2022

Abstract: The research aimed to find out whether or not there is an effect of using Kahoot Application in improving students' writing skills. The method used in this research was quantitative method with a quasi-experimental design. The population of students at the Second grade was 134 students of Senior High School 1 Luragung with two sample classes which have 12 students in each class. Both classes are assigned into experimental and control class. In obtaining the data, the researcher conducted pre-test, treatments, and post-test. The treatment was given to the experimental class 4 times assisted by Kahoot application. Meanwhile, in control class there is no treatment given. The teaching was assisted by Google classroom. The result of the data showed that the mean scores of the experimental class pre-test and post-test rater 1 was 56.44 and 78.66 from rater 2 was 56.58 and 79.75. On the other hand, the mean scores of Control group pre-test and post-test rater 1 was 50.55 and 68.00 from rater 2 was 52.00 and 67.83. The students' better achievement toward writing ability can be seen on the mean score from descriptive statistic of the post-test the experimental class rater 1 and 2 was 67.85 higher than the mean score of post-test in the control class which was 59.58. It can be concluded that, the students who got treatment using Kahoot were higher than the students' from the control class. Kahoot application given a positive effect on the students' writing skills and also the effective online learning during COVID-19 Pandemic.

Keywords: *writing skill; Kahoot.*

INTRODUCTION

English is a subject that delivers its skills into four categories: listening, speaking, reading, and writing (Hashim, Yunus, & Hashim, 2018). Writing skill is an important aspect of language learning refers to the process of encoding words. Writing might be difficult for some people some students can speak English fluently and confidently, although since they have difficulties in conveying their ideas in writing. It cannot be denied that writing is a complex skill because the students need to comprehend spelling, grammar, sentences, vocabulary, and structures as the units in writing.

However, there are a lot of problems faced by the students relating to writing comprehension. They could not convey their ideas clearly in writing because they had limited vocabularies, low proficiency, use of correct grammar in writing, and were less motivated in learning English. These factors made them difficult to express their ideas through writing. Consequently, teachers need to find the best approaches to make the students easily in learning writing and make them enjoy when they are engaged in writing activities. An alternative media that the teachers can use is a game-based learning platform.

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Furthermore, since the end of 2019, the world has been rocked for Corona Virus or COVID-19. Hence, the entire system that runs like a government, the economy, including education in Indonesia are disrupted. As of March 15, 2020, the president of Republic Indonesia, adopted a policy of temporarily closing the teaching and learning process at schools and universities urged them to study at home, and replacing them with online learning to break the chain of viruses. This challenge for all of the teachers, especially English teachers how to teach writing during pandemic COVID-19 and make the learning activities are enjoyable and interested in the students.

Nowadays, almost teenagers prefer going along with the smartphone to spend time as well as learning English. Especially, during the current pandemic situation which requires learning to be carried out online. so that, the role of technology and E-learning models are very much needed to achieve effective learning and teaching activities. Based on the fact, modern learners are very much engaged with technology and that education can not ignore the idea that games can be one of the platforms of learning. Digital games that can be used for education are evolving rapidly. Kahoot is one of the well-known game-based learning platforms that are very user-friendly for both educators and learners.

According to Kapuler (2015), listed Kahoot is one of the top 100 new online apps to use in the classroom. Kahoot came in at number 36 on the list of apps rated for their effectiveness and usefulness for teaching and assessing students in the classroom. Added Jhons (2015) Kahoot is a popular e-learning tool that can easily be used and helps in students' engagement and activeness in learning. Kahoot is a free online learning platform that has gained wide acceptance in learning and it is based on current user-centered use.

Furthermore, Kletnikov, Popovski, & Tomova (2019) state it is a free student-response tool for administering quizzes, facilitating discussions, or collecting survey data and it is a game-based classroom response system played by the whole class in real-time. Hence, Acquah & Katz (2020) state game-based learning is one of the best approaches to be an effective tool. It tends to create more engagement compared to another approach because it stimulates the verbal and visual components in learning. Through this study, the

researcher applied Kahoot application as the effective E-learning of teaching writing during pandemic COVID-19. Therefore, this research is entitled "The effect of Kahoot application in improving students' writing skill".

Based on the rationale of the study above, the problem of study is formulated as: Is there any effect of using Kahoot application in improving students' writing skills?

Therefore, this particular study aimed at finding out whether or not there is an effect of using Kahoot Application in improving students writing skills.

The definition and theories which are related to the variables of this research divided into five parts those are, writing (definition writing and writing components), teaching writing (writing assessments, Kahoot Application and Google Classroom).

In writing, the main product is a written text The main function of writing is for communication by Langan (2005) one as a writer should be able to make their readers understand the message they convey. Thus to express ideas, thoughts, and feelings clearly and effectively, the understanding of the graphic system is not enough, the writer requires knowledge of grammar and the art of using rhetoric such as arranging words, phrases, sentences, and paragraphs to produce a well-written text. In writing, the writer must also master the rules of vocabulary, spelling, grammar, morphology, and syntax. Therefore, many learners think that writing is difficult.

Kahoot is one of game-based learning platform as a part of digital learning media that can tests students' knowledge of course content. The game is free and user- friendly for both teachers and student. Furthermore, Kahoot is a simply requires a multimedia tool to participate the quizzes contain questions that have up to four possible choices, and questions can contain various multimedia contents such as pictures or videos (Siegle, 2015).

Kahoot's features offer the ability to earn points, engaging sound effects, and motivational music (Wang & Lieberoth (2015). This feature of Kahoot can attract students' participation and makes the learning process fun. Research also suggests that Kahoot's audio and music create a positive learning experience for the users that encourages participation (Wang & Lieberoth (2015).

In this research the classes were assigned into experimental and control class, The treatment was

given to the experimental class 4 times assisted by Kahoot application. Meanwhile, in control class there is no treatment given. The teaching was assisted by Google classroom.

Negara (2018) Google Classroom is an online application promoted by Google for schools intended to facilitate teachers in assorting, creating, share, collect and valuing the task in a paperless way, and assess student assignments complemented by automatic document storage

In this research the teaching assisted by google classroom was applied in the control class, the researcher create lessons, upload the subject video provide students with the ability to distribute the assignment to submit feedback quickly.

However, both of them had a similar characteristics for example, in joining the online class there two modes to join the online class via application by inserting code or just by link that teacher shared, the application is FREE. There is no cost for creating, playing and sharing the online class, we can add some videos material and picture also the teacher can assessing. Furthermore, the teaching assisted through these two application can applied in online class with a similar characteristics.

METHOD

The method used in this research was quantitative design with a quasi-experimental study. There two sample classes which have 12 students in each class. Both classes were assigned into experimental and control class. In obtaining the data, the researcher conducted pre-test, treatments, and post-test. The treatment was given to the experimental class 4 times assisted by Kahoot application. Meanwhile, in control class there is no treatment given. The teaching was assisted by Google classroom. It was supported based on the table 1 that showed the design of Nonequivalent Control Group by Fraenkel and Wallen (2009).

Table 1. *Nonequivalent control group design*

Class	Pre-test	Treatment	Post-test
A Experimental Class	O1	X	O2
B Control Class	O3	—	4 O4

(Fraenkel & Wallen, 2009)

Description:

O₁ : *Pretest* in Experimental Class

O₃ : *Pretest* in Control class

X : *Treatment* assisted by Kahoot Application

The treatment was given to the experimental class 4 times assisted by Kahoot application A pre-test was conducted in two classes, such as the experimental class and the control class. In the pre-test, the sample students were taken from the XI Grade of Science 1 and 2. They were given to make a personal Recount text about "Online Learning Experience" A post-test it is done as similar in the pre-test, by giving the writing test to make a Personal Recount text about "Holiday" for the students in two classes such as experimental class and control class it is to see if the students did their best and knew the students' progress in writing skills after being taught assisted by using Kahoot application.

In assessing the students writing ability on Kahoot application reproduced by them. The researcher assessed the students work by writing criteria, the researcher used an analytic scale of students' writing rubric from Jacob, et al.'s ⁽¹⁹⁸¹⁾ p 115-116. There 5 element in this rubric : Content, Organization, Vocabulary, Language use and Mecanism. The researcher calculates all the results of the pre-test and post-test by seeing the scale of the rubric from Jacob, et al.'s ⁽¹⁹⁸¹⁾ p 115-116. The score was from two raters the researcher as the rater 1 while the rater 2 by Mrs. Fristi the English teacher from SMAN 1 Luragung.

RESULTS AND DISCUSSION

Results

Table 2. *The results of Kahoot treatment*

No	N	Subject	Percentage
1	12	Descriptive	53,09%
2	12	Recount	53,10%
3	12	Procedure	58,97%
4	12	Announcement	59,52%

Table 2 showed a description the results of Kahoot material scores obtained in each treatment.

Based on the table there is 4 materials used in this research, namely: descriptive text, recount text, procedure text, and announcement text. the teacher can download this scoreboard to his or her computer.

The following picture is the data related to students score of experiment class:

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Students (X)	Pre-Test Score rater 1	Pre-Test Score rater 2	Post-Test Score Rater 1	Post-Test Score rater2	Categorization in Post Test Score
Bintang	65	68	84	86	Excellent
Tia	52	54	74	77	Good
Hana	50	50	76	78	Good
Lulu	50	49	76	76	Good
Syifa	55	55	81	83	Excellent
Irena	66	67	88	88	Excellent
Salsa	67	68	86	87	Excellent
Firlie	50	52	73	71	Good
Anisatul	49	49	72	71	Good
Putri	46	48	77	80	Good
Septhian	63	62	79	78	Good
Rifqi	64	66	78	82	Good, Excellent (rater 2)
Σ X (Mean)	56,44	56,58	78,66	79,75	

Picture 1. *The students' score of experiment class using Kahoot*

The result of pre-test and post-test from the experiment class, it showed that the lowest score of Pre-test from rater 1 was 46 and the highest score was 67. And the lowest score of Post-test was 72 (Good) and the highest score was 88 (Excellent). The average mean of pre-test was 56.44 and post-test 78.66. While, the lowest score of pre-test from rater 2 was 49 and the highest score was 67 hence, the lowest score of post-test was 71 (Good) and the highest score was 88 (Excellent). The average of pre-test from rater 2 was 56,58 and the post-test was 79,75. Picture 2 presents the results of the scores from the control class.

Students (X)	Pre-Test Score rater 1	Pre-Test Score rater 2	Post-Test Score Rater 1	Post-Test Score rater2	Categorization in Post Test Score
Dimas	53	55	62	61	Fair
Dea	57	51	71	86	Good, Excellent (Rater 2)
Septi	54	53	72	73	Good
Siti	52	56	68	66	Fair
Irene	46	52	70	68	Good, Fair (Rater 2)
Rieva	46	49	69	66	Fair
Haerunnisa	48	49	57	60	Poor
Hanas	52	55	70	66	Good, Fair (Rater 2)
Iis	51	49	75	61	Good, Fair (Rater 2)
Imelda	46	49	60	68	Fair
Fasya	60	64	82	79	Excellent., Good (Rater 2)
Pras	41	42	60	60	Fair
Σ X (Mean)	50,55	52,00	68,00	67,83	

Picture 2. *The students' score of control class using Google Classroom*

The result of pre-test and post-test from the Control class, it shows that the lowest score of Pre-test from rater 1 was 41 and the highest score was 60. And the lowest score of Post-test was 60 (Fair) and the highest score was 82 (Excellent). The average of pre-test was 50,55 and post-test 68.00. While, the lowest score of Pre-test from rater 2 was 42 and the highest score was 64 hence, the lowest

score of Post-test was 60 (Fair) and the highest score was 86 (Excellent) The average of pre-test from rater 2 was 52.00 and the post-test was 67,83.

It can be concluded that the data in experiment and control class from rater 1 and 2 the students who got treatment using Kahoot was higher than the students' from control class.

Picture 3 showed the data that has been obtained in the pre-test and post-test of the two groups.

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Eksperimen	24	47.00	88.00	1628.50	67.8542	13.32820
Kontrol	24	41.50	80.50	1430.00	59.5833	10.32901
Valid N (listwise)	24					

Picture 3. *Descriptive statistics*

Based on the table the data above present whether the minimum score of control class was 41.50 meanwhile the maximum score is 80.50. The mean was 59.58. After getting treatment students' used the Kahoot application, the results display the minimum score of Experiment class is 47.00 meanwhile, the maximum score was 88.00. The mean was 67.85. Furthermore, the students' have an improvement score in the Experiment than the score in the Control class of the students'.

The following picture presents the inter-rater reliability between the 2 raters, how strong the level of agreement between them.

		Rater 1 Pretest Experimental	Rater 2 Pretest Experimental
Rater 1 Pretest Experimental	Pearson Correlation	1	.911*
	Sig. (2-tailed)		<.001
Rater 2 Pretest Experimental	Pearson Correlation	.911*	1
	Sig. (2-tailed)	<.001	
N		12	12

** Correlation is significant at the 0.01 level (2-tailed).

Picture 4. *Inter-rater reliability*

The result of the coefficient is 0.911. Based on the table Landis and Koch (1977) that the researcher used as a reference above, the coefficient indicates that the level of inter-rater reliability of the two raters in the experimental pre-test is "Almost Perfect".

Testing assumptions of ANCOVA

Picture 5 showed the distribution of pre- test and post-test in both group are normally distributed.

Tests of Normality							
	Jenis	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	df	Sig.
Eksperimen	Pretest	.194	12	.200 [*]	.858	12	.046
	Posttest	.136	12	.200 [*]	.955	12	.718
Kontrol	Pretest	.211	12	.145	.930	12	.383
	Posttest	.186	12	.200 [*]	.937	12	.463

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

Picture 5. Normality (Sig>0,05)

It can be seen that the sign results from the pretest experimental class 0.46 (Sig. >), pre-test control class 0.383 (Sig. >), post-test experimental class 0.718 (Sig. >), and post-test control class 0.463 (Sig. >). it can be concluded that each data, both of data in the experimental class and in the control class, is the normally distributed. So that, the assumption of normality test has been fulfilled.

The following table presents the research data from two or more data distributions have the same variances or not and shows the variances in each population would be the same.

Test of Homogeneity of Variance					
		Levene Statistic	df1	df2	Sig.
Eksperimen	Based on Mean	4.113	1	22	.055
	Based on Median	2.289	1	22	.145
	Based on Median and with adjusted df	2.289	1	19.759	.146
	Based on trimmed mean	4.036	1	22	.057
Kontrol	Based on Mean	.344	1	22	.564
	Based on Median	.340	1	22	.566
	Based on Median and with adjusted df	.340	1	19.500	.566
	Based on trimmed mean	.343	1	22	.564

Picture 6. Homogeneity (Sig>0,05)

To calculate the homogeneity test, the researcher used the Levene statistic test. The result of the value of Sig. is 0.55, which is higher than 0,05. Therefore, it can be said that based on both classes are homogeneous and the homogeneity assumption is fulfilled.

Picture 7 showed the relationship between Covariate (pre-test) and Independent Variables.

Tests of Between-Subjects Effects					
Dependent Variable: Posttest					
Source	Type II Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	1239.327 ^a	3	413.109	24.241	< .001
Intercept	450.576	1	450.576	26.440	< .001
Kelas	56.010	1	56.010	3.287	.085
Pretest	444.483	1	444.483	26.082	< .001
Kelas * Pretest	29.833	1	29.833	1.751	.201
Error	340.830	20	17.041		
Total	131454.750	24			

Picture 7. Homogeneity of regression (Slope) (sig>0,05)

Based on the picture, the Sig value of Class *Pre-test is 0.201 > 0.05. There is no relationship between Covariate and Independent Variables. It

conclude the assumption of Homogeneity of Regression (Slope) has been fulfilled.

The following picture presents the linearity relationship between the covariate (pre-test) and the dependent variable.

Tests of Between-Subjects Effects					
Dependent Variable: Posttest					
Source	Type II Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	1209.493 ^a	2	604.747	34.262	< .001
Intercept	246.245	1	246.245	13.951	.001
Pretest	444.483	1	444.483	25.182	< .001
Kelas	305.715	1	305.715	17.320	< .001
Within groups	370.663	21	17.651		
Total	131454.750	24			
Corrected Total	1580.156	23			

a. R Squared = .765 (Adjusted R Squared = .743)

Picture 8. Linearity test (Sig <0,05=)

In this data the researcher used the pre-test value as a covariate, so what the researcher marked is the pre-test variable. And the value of Sig = 0.001 < 0.05. it can be concluded that there is a linear relationship between the covariate and the dependent variable so that, the assumption of linearity of the relationship between the covariate and the dependent variable has been fulfilled. Table 11 showed the result hypotheses test of ANCOVA.

Tests of Between-Subjects Effects					
Dependent Variable: Posttest					
Source	Type II Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	1209.493 ^a	2	604.747	34.262	< .001
Intercept	246.245	1	246.245	13.951	.001
Pretest	444.483	1	444.483	25.182	< .001
Kelas	305.715	1	305.715	17.320	< .001
Error	370.663	21	17.651		
Total	131454.750	24			
Corrected Total	1580.156	23			

a. R Squared = .765 (Adjusted R Squared = .743)

Picture 9. ANCOVA test (sig <0,05 = Ho rejected, H1 accepted)

The purpose of ANCOVA is to find out and see the effect of treatment or treatment factors on the dependent variable by controlling other variables. After all the assumptions are fulfilled, then hypothesis testing using ANCOVA can be done.

What we see is the results of Sig. Class variable, its showed, Sig = 0.001 < 0.05. it conclude that, Ho is Rejected and Ha is accepted "There is a significant different improvement in students' writing skill between students' who use Kahoot application and Google Classroom.

The following picture presents the last assumption related to parameter estimates.

Parameter Estimates						
Dependent Variable: Posttest						
Parameter	B	Std. Error	T	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	40.838	7.742	5.275	< .001	24.738	56.938
Pretest	.679	.135	5.018	< .001	.398	.961
[Kelas=1.00]	-7.726	1.856	-4.162	< .001	-11.587	-3.866
[Kelas=2.00]	0 ^a					

a. This parameter is set to zero because it is redundant.

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Picture 10. *Hypothesis testing (parameter estimates)*

The hypothesis testing of this study is as follows: (1) (Ho): There is no effect of using Kahoot Application in improving students writing skills. (2) (Ha): There is an effect of using Kahoot Application in improving students writing skills.

To find out whether or not Kahoot is effective in improving student's writing skills, we look at the output parameter estimates. It can be seen as the result of the class variable sig. and Sig = 0.001 < 0.05. it conclude that, Ho is Rejected and Ha is accepted There are an effect of used Kahoot Application in improving students writing skills.

Discussion

The aimed of this research is to find out whether or not there is an effect of using Kahoot Application in improving students writing skills. The treatment was given to the experimental class 4 times assisted by Kahoot application. Meanwhile, in control class there is no treatment given. The teaching was assisted by Google classroom. it can be identified through the result of pre-test and post-test experiment class and control class. The minimum score of control was 41.50 meanwhile the maximum score is 80.50, the mean score was 59.58. After getting treatment students' by use the Kahoot application, the results display whether the minimum score of the Experiment is 47.00 meanwhile the maximum score is 88.00. And the mean score was 67.85, For the lowest score of post-test in the experiment was 71 (Good) and the highest score was 88 (Excellent). While the lowest score of post-test in the control was 60 (Fair) and the highest score was 86 (Excellent). Hence, the data in the experiment and the control class from rater 1 and 2 the students who got treatment using Kahoot was higher than the students' from control class.

The distinguish benefit between Kahoot and other game-based learning platforms is the one who provides the explanation or the questions is the teacher, the application only designs and makes it more beautiful. Furthermore, we can add some videos music, picture and whatever you want, The quiz game can be done not only individually but also in teams at the end of this game the teachers' can see the score of the students' that make the teacher easier to measure the understanding of the students' after they write and complete and arrange

the text. However, both of them had a similar characteristics for example, there two modes to join the online class via application by inserting code or just by link that teacher shared, the application is FREE. There is no cost for creating, playing and sharing the online class, we can add some videos material and picture also the teacher can assessing through these two application.

CONCLUSION

Based on the findings and discussion in the previous chapter, the researcher found that the result of this research shows a statistically there is an effect the teaching was assisted by Kahoot Application in improving students' writing skill. The students' better achievement toward writing ability can be seen on the mean score of the post-test of the experimental class rater 1 and 2 was 67.85 which was higher than the mean score of post-test in the control class which was 59.58. Meanwhile, in control class there is no treatment given. The teaching was assisted by Google classroom.

The students in the experimental can fill the quiz after watching the video material, this minimizes cheating on each other's answers also the correct answer will automatically appear after the students' choose the answer.

The quiz game can be done not only individually but also in teams Kahoot presents a fun and challenging way to engage modern learners in learning. Second, During the treatment Kahoot Application helping the students explore their ability in writing through a deeper understanding of conceptual knowledge by the material through the quiz.

Kahoot quiz game questions may include multimedia visuals such as pictures and videos to further engage students. (Dellos, 2015) Students get to earn points for answering questions correctly and quickly. Kahoot's features offer the ability to earn points, engaging sound effects, and motivational music. This feature of Kahoot can attract students' participation and makes the learning process fun. Research also suggests that Kahoot's audio and music create a positive learning experience for the users that encourages participation (Wang & Lieberoth (2015).

Moreover, the students become an active participation and interest when the teacher shares the link of Kahoot learning. While the students in

the control class that only got google classroom link which was usually used by the teacher in online class during the pandemic situation were not interest in learning activity. The students' in the control class got little bit low post-test scores than a post-test scores of the experimental class. It can be concluded that the Kahoot Application is able toward students writing skills. Most of the XI grade students' in the experimental class had better development in post-test scores than their score in a pre-test.

The result of this research indicates that the used Kahoot Application provides a significant difference toward students' writing skill of what they found knowledge about Language use, Vocabulary, Mecanics Organization and how to make good content. Means that, Kahoot Application can toward improving students' writing skills at XI Grade Students at SMA Negeri 01 Luragung 2020/2021.

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