

The Effectiveness of Kahoot! as an Assessment Media in English Lesson

Muchammad Sofyan Firman Syah¹⁾; Mohammad Alfian²⁾; Syaefani Arif Romadhon³⁾

^{1, 2, 3} Applied Bachelor of Public Sector Accounting Department, Politeknik Harapan
Bersama

^{*)} Corresponding Author: Email: syaefani1984@gmail.com

ABSTRACT

Entering the 4.0 industrial revolution, many electronic-based learning media occur to make the learning process becomes more colorful compared to the one-way learning process. Game-based learning is one of the new media that occurs nowadays. Kahoot! is one of the popular game-based learning media that is popularly played in the class. However, the effectiveness of Kahoot! as an assessment media of English lesson is rarely conducted. In this research, the simple linear regression is used as the method. Furthermore, SPSS was used to check the validity and reliability of the questions given to the respondents. Even though there were 65 respondents, the questionnaires could be collected only 39 questionnaires. From the statistic test, the value of t is $5.405 > t$ table which is 1,998 made H_0 is rejected. According to the statistic analysis, it can be concluded that the effectiveness of Kahoot! as an assessment media is only 30%. Some of the respondents argue that it is not very effective especially while showing the rank of the participants.

Keywords: Kahoot!, assessment media, English lesson, higher education

INTRODUCTION

Nowadays, English becomes a lesson that must be learned by students. The importance of English as a language has been realized by all people, especially those who realized that it is very important for global communication. Many people want to be able to master English a language not only for the sake of communication but for supporting their career, etc. They learn from many sources as possible as they can access to learn it. Some of them learn from formal and informal education such as the extra lesson and school, meanwhile, some people learn from the book, the television, through the internet as they can easily access.

In the college, the English materials given must be up to date, so that the students get the exact skill that will help them to understand the textbooks, manuals, or instruction as they can write or complete a brief report in English. Grammar or structure is needed importantly to increase learner's understanding of English (Richards & Renandya, 2011).

Furthermore Hermida Julian added that the ability in reading, writing, and oral presentation can support the students' success not only in their study period but for their future also (Hermida, 2011). However, for learning grammatical, students are usually working on the exercises or assignments given by the lecturer. The exercises such as multiple-choice, sentence completion, and correcting the verb in the bracket becomes boredom and too conventional for the students and lecturer to be conducted.

There must be a solution that may boost the interest and curiosity of students in learning English. Many teaching methods, learning strategies, and assessment media have been developed to maintain the students' motivation and self-confidence to improve students' English ability. Using games as an assessment media is one such new method to learn foreign language learning. Along with the development of technology that is used in language teaching, the improvements in students' achievement are expected to grow along with the good assessment media. This study will find out the effectiveness of KAHOOT! as an assessment media to measure students' achievement in learning English.

The use the technology in the learning process as the technology is quick growth nowadays. The material about grammatical can be taught in various ways as it can boost the interest of students' understanding of it. In line with that argument, the researcher wants to maximize the use of the media provided from the campus as, LCD, Projector, and Wifi along with the smartphone which is connected to the internet to support the use of KAHOOT! as an assessment media (Richards & Renandya, 2011). Using the internet connectivity, the researcher wants to apply the technology as a support to KAHOOT! as assessment media to measure the students' understanding of learning English. The use of technology helps the students understand the materials better, makes them critically think, have a high curiosity rather than the implementation of the conventional method (Koesnandar, 2019).

Entering the millennial age, students' characteristics are very different. Traditional learning approaches make students consume the passive content, therefore there must be a change or at least a complexion with a more interactive and creative learning process (Trebješanin, Jovanić, & Stajić, 2016). From that opinion, it can be said that the teacher must be able to adjust the characteristics of millennial students by combining a conventional methods with something that can make the learning process becomes more interactive. To answer the challenge, interactive media such as KAHOOT! can be used as an assessment media to create a fun atmosphere on learning as well as to motivate students

to learn.

Media is a tool or a form of non-personal communication that is functioning as a container for learning information that will be delivered to students. Media can also attract interest and attention to students to achieve learning goals well (Hosnan, 2014). Many media that can be used by teachers, whether it is created by the lecturer himself or the media provided by education activists. One of the media that can be used by the lecturer in the *KAHOOT!* educational game. *KAHOOT!* is a free-accessed online game and it is easy to operate. *KAHOOT!* itself has 4 features which are quiz, jumble, discussion, and surveys that can be a choice to make learning more interesting and engage students to act in the learning process.

The implementation of *KAHOOT!* as an alternative assessment media in learning English as a language is expected to make learning process has a pleasant atmosphere where students can be more active and easier in understanding the delivery of material by lecturer compared to conventional learning methods. The learning media can improve quality learning (Uno, Lamatenggo, Nina, Satria, & Koni, 2010). This research has a purpose for knowing the effectiveness of Kahoot! assessment media in English lessons. Based on the explanation above, the problem found in this research is formulated as is *KAHOOT!* effective to be used as an assessment media to students' achievement in learning English?. Furthermore, the purpose of this research is to know the effectiveness of the use of *KAHOOT!* as an assessment media to measure the students' achievement in English lessons.

LITERATURE REVIEW

Many people already know that English is needed for communication. For academicians, the ability to speak English is now a must because it will help the students to face their future careers. English learning has entered into various curriculum lessons in schools and colleges. Even children in kinder-garden have begun to be introduced to English as a second language. English is no longer considered as a foreign language nowadays. We as Indonesian are already familiar with English, even though we do not directly learn it. It can be said that we read and speak English every day as English has been used in some aspects of our lives.

However, to truly master this English language ability, intensive learning is needed. The 1994 curriculum which was changed to the 2004 curriculum and then refined to the

2006 curriculum requires learning oriented to the development of 4 language skills, namely: listening, reading, speaking, and writing. Learning orientation on the four skills aims to improve students' ability to communicate both orally and in writing (Ginanjar & Syahputra, 2014). Thus, a good assessment media is needed to measure students' achievement in learning English as a language. This assessment media should cover all the four skills that relate to each other.

Assessment Media

Some lecturers may be already applied various assessment media into their way in measuring students' understanding of the material. However, there are still many lecturers that do not implement any of the assessment media into their classes as they just teach using the conventional way of assessment such as using paper. This learning media becomes something that may help lecturers to grow the curiosity and to focus on their students.

The existence of new assessment media is very helpful to measure students understanding of the materials given. It can make the assessment process will become more lively as the lecturer and students communicate with each other. It helps students to show their achievement totally while they are being tested. The most important thing is to make students actively cooperate in the assessment process by the appliance of this learning media.

In this millennial era, students could not be said to be able to speak (English) properly and correctly, both oral and written, at every level of the school, starting from elementary to high school (Ginanjar & Syahputra, 2014). Students tend to be curious about something related to technology, online and game. This kind of student will easily feel bored when the lecture did a conventional assessment method, such as writing essays or choosing on multiple choices. They want to actively join the assessment process full of music and picture.

KAHOOT!

Let us begin this chapter with a question, “what is *KAHOOT!*?”. The answer to it had been given by the developer of *KAHOOT!* itself, as they stated it that “Kahoot! is a free game-based learning platform used by millions of people around the world every day to discover, create, play and share learning games” (K! Academy:2016). In line with the statement given by the developer of *KAHOOT!*, Kahoot is an online application that is free

and accessible for the lecturers of all subjects that can be used at various levels (Zarzycka-Piskorz, 2016). *KAHOOT!* is an online game which can be played through internet connectivity. Based on the explanation above, we know that *KAHOOT!* is a free platform online-game that can be used to be a learning media.

KAHOOT! as an online-game is easy to be played. The campus's facilities have supported the lecturer and students to use *KAHOOT!* as the media. Today, all campus has modern facilities such as internet connection, LCD, and projector in each classroom. Lecturers are also helped by its free-platform which means it can be played without paying some amount of money to the developer. Kirsta Graham said that *KAHOOT!* is an online-learning media consists of questions which are free, it can be used for learning activities especially for evaluating the result of students' learning process, recalling the materials, and to grow students' interest.

How to use *KAHOOT!*?

Using *KAHOOT!* as a learning media is not difficult. *KAHOOT!* itself had provided the manual book for the people who want to use it as a game or learning media. There are several steps for lecturers to use *KAHOOT!*'s before it can be played by the students. According to Library (2017), the steps are:

- The very first step is accessing <https://kahoot.com/>
- After the webpage opens, click "Sign Up" in the right corner of the webpage.
- Choose "Sign Up as A Teacher" option
- You may sign up through your Google Account, Microsoft Account or Email
- Fill the user form
- After the form fulfilled, you will be directed to a new webpage.
- Choose a topic that is relevant to your materials, and choose a game which the questions represent the material (if you don't want to make your questions)
- Push "choose" and "play" button.
- When the choice between "classic" and "team mode" appear on the screen, press the "team mode" box because this game is played as a team, then press "start".
- After the "start" box is pressed, a "Game Pin" will appear that students must enter on their cellphones or laptops.
- After students are ready to start this game, press the "start" box.

How students play *KAHOOT!*?

Several steps for the students to be able to play *KAHOOT!* according to the manual book provided by *KAHOOT!* entitled K!Library (2017). The steps are:

- Open KAHOOT.IT in your smartphone browser
- Enter “GAME PIN” that showed by your lecturer and click “enter”
- Write your name and click “enter”
- Play it!!

How KAHOOT! works?

After the teacher and the student team are ready to start the game, the teacher presses the "start" button. A question will appear at the top of the screen and there are four or three colorful boxes containing answer choices in the bottom of the screen. There is a "countdown timer" that appears on the left side of the screen where the team can discuss before pressing the box containing their answer choices. However, only three or four boxes with different colors appear on the player's screen. The faster they press the box the more likely they will be ranked top if their answer is correct. Before the top five rankings are displayed, teachers can discuss the problem especially if there are many students answer the questions incorrectly. The game is played until all questions are answered and then the group ranking is displayed on the screen with their scores. For the next stage, the instructor can create the desired questions where the questions can be more varied and adjusted to the level of student ability. For this reason, it requires creative and hard work of the instructor so that the learning process can be done comfortably and fun to make students can simultaneously achieve the learning objectives.

METHOD

The method contains meaning regarding the procedure and how to do the testing data needed to solve or answer research problems. This research uses a descriptive analysis method with a quantitative approach. This research is done by taking the steps of data collection through questionnaire. The 39 questionnaires collected were tested through validity and reliability test before it will be analyzed through a simple regression test. After the data were analyzed through a simple regression test, the next step is making conclusions and reports through the number or score that is obtained.

The object of this research is the two classes of Accounting Diploma department first years students at Polytechnic Harapan Bersama Tegal which consists of 54 students for both classes. The students in both classes are already touched with Kahoot! as assessment

media before they are being questioned in this research's questionnaire. Since the effectiveness of KAHOOT! as an assessment media for English lessons is being underlined in this research.

This research belongs to Quantitative research is research that uses the number method to describe an observation object or variable where numbers become part of the measurement (Sudjana, 2009). Furthermore, it is combined with a Descriptive research method to aim in describing or explaining an event or something that occurs at present which is in the form of meaningful numbers. The quantitative approach is an effort to measure the existing variables in research (variable X and variable Y) to then look for the relationship between that variable. The variable X in this research is the use of Kahoot! as assessment media, the variable Y in this research is the English lesson. This research is focused on the relationship between two variables, especially to the effectiveness of Kahoot! as X variable to English lesson as Y variable. The result from the analysis process is presented in the form of a number which represents the relationship between the X and Y variables. Furthermore, that number will be described in detail information related to the percentage level of Kahoot's effectiveness to be an assessment media for English lesson.

RESULTS AND DISCUSSION

Researchers choose two regular morning classes as experimental classes because they are considered to have the same ability in academic aspects. These two classes were chosen because they have not much different pre-test result, therefore the researchers conducted experimental effectiveness of using Kahoot! as an assessment media.

Research Preparation Phase

Before conducting research, researchers conduct a questionnaire test or try out the questionnaire to be used. This questionnaire test was distributed to 60 students who were in two regular classes in the morning of the DIII Accounting department of Polytechnic Harapan Bersama. This questionnaire test aims to test the validity and reliability of the questionnaire distributed.

Table 1. Sample and Rate of Return Questionnaire

Distributed	56
Did not return	17
Returned	39

Were not fully completed	0
Could be processed	39

Based on the results of research conducted on 65 respondents through the distribution of questionnaires, the sampling technique uses simple random sampling, the distribution of samples from April to May 2019. Data analysis methods used are the Normality Test, Validity and Reliability Test, and Simple Regression Test Linear.

Normality Test

The Normality test aims to test whether the confounding variable or residual is normally distributed or not. Statistical results using *Kolmogorov Smirnov (KS)* can be seen in Table 4.4 as follows:

Table 2. Statistical Results of *One-Sample Kolmogorov Smirnov*

One-Sample Kolmogorov-Smirnov Test

		Standardized Residual
cN		39
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	,99215674
Most Extreme Differences	Absolute	,082
	Positive	,058
	Negative	-,082
Test Statistic		,082
Asymp. Sig. (2-tailed)		,200 ^{c,d}

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

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

Based on the results of the analysis of normality tests using the Kolmogorov-Smirnov test shows that the KAHOOT assessment media variable has an Asymp value. Sig. (2-tailed) of 0.200 is greater than alpha 0.05, which means the data is distributed normally.

Validity Test

The validity test is used to measure the validity or validity of each indicator on a questionnaire. Validity test using Pearson correlation can be known by using the level of significance of the results of the correlation of each indicator by comparing the value of $r_{\text{count}} > r_{\text{table}}$ then declared valid. Conversely, if the value $r_{\text{calculated}} < r_{\text{table}}$, then the questionnaire is declared invalid.

From 11 items questionnaire questions regarding KAHOOT as an assessment media, based on the results of the Validity Test shows that the value correlation of each

indicator that shows the value of sig (2-tailed) or the value significance of all indicators is smaller than alpha 0.05 (95 percent of significance level and 5 percent of error rate). This shows that all indicators are valid.

From 9 items questionnaire questions about English Language Skills that have been distributed to respondents, the question items based on the results of the Validity Test show that the correlation value of each indicator is showing the value of sig (2-tailed) or the significance value of all indicators is smaller than alpha 0.05 (95 percent significance level and 5 percent error rate). This shows that all indicators are valid.

Reliability Test

The reliability test is used to measure reliability with the statistical test Cronbach alpha (α). A constructor variable is said to be reliable if it gives a value (α) of 0.60. Questionnaire items are said to be reliable (feasible) if Cronbach's $\alpha > 0.60$ and said to be unreliable if Cronbach's $\alpha < 0.60$.

Table 3. Variable Reliability Test Results KAHOOT Assessment Media

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.633	.631	11

Based on SPSS output results show that Cronbach's Alpha value is 0.633 or 6.33 percent whose value is greater than 0.60 which according to the Nunnally criteria the results can be said to be reliable.

Table 4. Reliability Test Results from Variable English Language Skills

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.652	.653	9

Based on the SPSS output results show that the Cronbach's Alpha value is 0.652 or 65.2 percent whose value is greater than 0.60 which according to the criteria the Nunnally results can be said to be reliable.

Simple Linear Regression

The test result of simple linear regression analysis is performed to test the effect of one independent variable on the dependent variable. The simple linear regression equation is used to describe the model of the magnitude of the effect of the dependent variable. Regression equations contain constant values and variable values dependent. The regression equation formula in the simple linear analysis is as follows:

$$Y = a + bx + e$$

Description:

Y = English Language Skills

X = KAHOOT Assessment media

a = constant

b = Regression coefficient

e = Error

Based on the results of data processing simple linear regression analysis then obtained results as follows:

Table 5. Results of the Simple Linear Regression Equation

Coefficients					
Model		Unstandardized Coefficients		Standardized Coefficients	t
		B	Std. Error	Beta	
1	(Constant)	11,007	1,660		6,631
	total_pembelajaran_kahoot	,578	,107	,563	5,405

Source: Data Analyzed, 2019

Based on the results of these calculations, an equation can be obtained simple linear regression as followed:

English Language Skills = 11,007 + 0.578 KAHOOT assessment media. The explanation of the simple linear regression equation is:

a = constant value equal to 11,007 which shows that if the assessment media is KAHOOT (X)0 units then the value of the English Language Skills constant (Y) is 11.007 units.

b = regression coefficient value of 0.578, which shows that each method KAHOOT (X) learning of 1 unit can cause Skills English Language(Y) of 0.578 units.

t-test

the t-test is used to test the effect of partial or individual independent variables on the dependent variable. In the t-test, the level of error or alpha that will be determined in advance used in research is. The error rate that can be used is 1%, 5%, and 10%. Decision-making in the t-test if the value of $t < t_{table}$ then there is the influence of the KAHOOT method (X) to the English Language Skills (Y). Conversely, if the value of $t < t_{table}$ then there is no method KAHOOT (X) to the English Language Skills (Y).

Table 6. t Test Results

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	11,007	1,660		6,631	,000
total_pembelajaran_kahoot	,578	,107	,563	5,405	,000

a. Dependent Variable: total_program learning_kahoot

Source: Data processed, in 2019

Based on the test results t-test can be known as follows:

By comparing arithmetic and tables

How to find **t Table**:

$$df = n - k = 65 - 2 = 63$$

$$\alpha = 5\% = 0.05$$

so the df value = 63 and the value of alpha = 0.05,

$$t_{table} = 1.99834 \longrightarrow 1,998$$

Based on the results of the t-test by looking at the t value shows value t of 5.405 > t_{table} 1.998 then H0 is rejected (Ha accepted). From the results of the analysis, it shows the effectiveness of KAHOOT as an assessment media toward the learning of English Language Skills. Based on the results of the t-test by looking at a significant number indicating the value of Sig. 0,000 < alpha 0.05 then H0 is rejected (Ha accepted). From the

results of the analysis, it shows that KAHOOT learning affects English Language Skills.

The Coefficient of Determination (Adj R²)

The Coefficient of Determination is used to determine the magnitude of the contribution of the independent variable to the dependent variable. The higher the coefficient of determination, the higher the ability of the independent variable in explaining the change in the dependent variable.

Table 7. Determination Coefficient Test Results (Adj R²)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,563 ^a	,317	,306	1,490

a. Predictors: (Constant), total_coefficient_kahoot

Source: Data processed, 2019

It is known that the coefficient of determination that has been corrected by the number of variables and sample size (Adjusted R²) of 0.306 shows that the KAHOOT (X) assessment media against English Language Skills (Y) is 30.6% while the remaining 69.4% is explained by other variables which are not researched.

CONCLUSION

The effectiveness of KAHOOT as an assessment media for English lessons can be seen based on the results of research using SPSS. The result of SPSS shows significant value for KAHOOT 0,000 or smaller than $\alpha = 0.005$ and value t of 5.405 > t table of 1.998, then H₀ is rejected and H_a accepted which means that there is a significant effect of the variable method of KAHOOT as an assessment media to measure students' achievement toward English lesson. Based on the analysis it can be concluded that the use of KAHOOT! as an assessment media(X) against English Language Skills (Y) is only reached 30.6% while the remaining 69.4% is explained the other things rather than that.

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