

## KAHOOT! AND USERS' VIEWS OF ISLAMIC JUNIOR HIGH SCHOOL IN YOGYAKARTA

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### Abstract:

The student motivation can be created from a novel learning experience such as implementing a modern game application to access the competence. This study identified students' teaching and learning process in term of assessment emphasizing on a gamification approach construction surrounding to a student response category, called Kahoot! application games. The main objective of this analysis was to discover the influence of Kahoot! on motivation, engagement, studying outcome, and attitudes concerns to ICT integration in future learning experiences. Quantitatively, the study conducted to 28 students belonging to the 9<sup>th</sup> grade student of an Islamic Junior High School in Yogyakarta, Indonesia. The data collected by using a likert scale questionnaire survey whose validity was tested with r-table score 0,05. We used Kahoot! Games as an application tool in this research. This study has shown that a significant proportion of students are generally positive towards gamification approach used in educational activities, in general, and especially Kahoot! application games. Kahoot! contributed to more student engagement and enthusiasm, better learning performance, and more desire and willingness to try Kahoot game application in the world of learning experiences. This study recommended to all educators in every level of education to elevate the way of teaching to the new era of technology so the student was more engage to learn in teaching learning activities. This study also recommended to all students in Junior High School, Senior High school and University level. They can learn something more enthusiastic by this game. The originality of this study is that this study focus on Junior High School students in Indonesia, whereas the way in teaching and learning in Indonesia is definitely different with the other abroad students such curriculum and even the teacher way in teaching and the students' learning. Moreover, this study also focus on how the student views' in applying this game.

**Keywords:** Kahoot!, student views', gamification approach, Quantitative Research, application.

## **INTRODUCTION**

Gamification method in education increasingly improves the engagement, motivation, and ambition of students to success (Bicen and Kocakoyun, 2018). In educational environment, they added, the gamification have given a positive impact on student motivation and benchmarked the Kahoot application as one of the educational games that effectively increase student interest, as well as elevating the student quality in classroom learning. Besides, the influence is the highest in the dynamic of classroom, and improved learning experience (Licorish et al., 2018). In addition, it provides the student to deal with the challenges and a potential failure into a change to develop their fellowship (Cameron and Bizo, 2019).

The educational gamification duties equip student to vied their competency with their classmate while finishing the duties related to their subject content. Kahoot is one of the new applications in the educational environment that has been trending in several years for both K-12 and Higher Education (Graham, 2015). He said, it is the free online classroom that allows easily and fast the teacher to write question-based learning games that can be used to game the student learning, teach new material, and/ alleviate classroom conventions.

Kahoot is as a system tool gives an opportunity to student to comment, evaluate, and even see the 'rate' their quiz work in a plain ways. Cetin (2018) proved in his study that the 23 students had been surveyed, then there were 91% said Kahoot is easy to used, bigger that it 95,7% for useful, related to students feeling 95,7% for enjoyable, even the student got a better understanding after using Kahoot application 69,8%, and 87% response that Kahoot was interesting. However, the challenges are the difficulties in accessing the Kahoot! website, such as internet connection problem, the difficulties in reading board, and selecting the answers and even the disconnection from the application because of the connection timeouts (ÇetİN, 2018; Deterding, 2015).

Many researchers had revealed that Kahoot! Used in the educational environment could be useful part of the learning. This was based on the fact that Kahoot! application provided a student competition through multiple choice and allowed them to rate their duty. They also had found that Kahoot! increase student engagement, motivation, and positively impacted to their achievement (Barata et al., 2017; Lestari, 2019; Licorish et al., 2017; Tan et al., 2018)

In line with those previous studies, this study also discussed about the students' perceptions using the Kahoot application that provided by the teacher to assess the course content. Unfortunately, the previous researchers did not focus on Junior High School students in Indonesia, whereas the way in teaching and learning in Indonesia is definitely different with the other abroad students such curriculum and even the teacher way in teaching and the student in learning. Thus, the present study was to investigate students' views and this study was the first probationary study in the different context regarding to the Kahoot application in MTs Negeri 6 Bantul, Indonesia (one of Islamic Junior High School in Yogyakarta, Indonesia). The main objective of this analysis was to discover the influence of Kahoot! on motivation, engagement, studying outcome, and attitudes concerns to ICT integration in future learning experiences.

## **RESEARCH METHOD**

The research "Analysis of the Character Education of the Main Character of the Novel Dear Nathan by Erisca Febriani" belongs to the form of descriptive research. As Moeloeng said, the descriptive method is a way of managing data by systematically compiling, so as to obtain conclusions from the data collected. Then the data is analyzed one by one by

outlining the quotations. The approach used is a descriptive approach because the results of data analysis obtained from researchers are in the form of quotes from sentences in the novel.

The subject of this research is the novel *Dear Nathan* by Erica Febriani. The primary data source of this research is the primary data source, namely a document in the form of the novel *Dear Nathan* by Erisca Febriani. The data collection procedure used reading and note-taking techniques. The researcher used reading techniques by reading the novel *Dear Nathan* by Erisca Febriani repeatedly to identify which sentences were included in the value of character education. The note-taking technique is an activity to collect data by recording important parts of the novel. Therefore, in this case, the researcher records sentence or story quotes that contain elements of character education.

### **Research Design**

This study aimed to investigate students' views regarding to the Kahoot game application in educational process. In this term, the quantitative process was used. It is able to be seen that the quantitative methodology is as a kind of inquiry method used to search the trouble or a central phenomenon through word description in which the report uses flexible, emerging structures and evaluative criteria, and including the researchers' subjective reflexivity and bias (Creswell, 2012, p.16). The questionnaire was shared to the students to get their views. The questionnaires included 10 closed-questions and they had answer options variety (checked, five choice as likert scaled questions theory) (Cresswel, 2014). The kinds of choice performed in questionnaire are strongly agree, agree, indecisive, disagree, and strongly disagree. As this is an evaluation of an educational intercession, questions were derived from the purpose of the intercession, i.e. to increase the resources access and use, and to elevate motivation.

### **Research Participant**

The sample was taken by using cluster random sampling. As (Fraenkel et al., 2007) said that cluster random sampling is a technique of sampling by choosing groups, not individuals, and randomly selected. Thus, the participants come from the Islamic Junior High School students in MTs Negeri 6 Bantul ( $n=28$ ). The selection of the sample used the lottery method as proposed by Singh (2003, p. 4). He said that all the items of population are numbered and then put in the box. The last, the sample in the box was mixed and the result was IX.

The students were given a game through Kahoot by the teacher previously. The implementation of Kahoot game application as a media to deliver some questions to the students was felt as an awfully happiness, the students want to the additional time for Kahoot game (Widayati, 2019). All students were invited to participate in paper shared surveys. The questionnaires contained of how Kahoot had influenced on acquisition, including motivation and whether they premised their instructional had been adapted.

### **Research Procedure**

For the procedure, the Kahoot game application was conducted by the teacher previously. Then the instruments were paper-based questionnaire and all students were asked to complete and submitted at the time. Completion was not mandatory. Students' identities were anonymous. Besides, the writers were loyal to ethical guidance in gathering, analyzing, and producing the reports in which the involvement was anonymous, voluntary, and non-involvement did not outcome in any fee or the risks to the students.

Each item in questionnaire was tested by validity test in Microsoft excel. Validity is a measurement in which shows that the measured variable is actually a variable to be investigated by the writers (Brumbaugh, 2014). The validity test uses the formula of product moment or called Pearson correlation. Then, the significance of the correlation result was tested by t-test. There is the criterion to determine the significance that is by comparing the

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score of t-test and t-table. If  $t\text{-test} > t\text{-table}$  ( $\alpha=0.05$ ), the questionnaire items were valid. The formula of t-test was.

$$t_{\text{hit}} = \frac{r_{xy} \sqrt{(n-2)}}{\sqrt{(1-r_{xy}^2)}}$$

The analysis of data collection was descriptive analysis such as simple computation, categorization and have presented in the explanations and frequencies.

The computation provided as follow.

1. Determining scale number and answer score

The writers determined scale five (5) containing strongly agree, agree, indecisive, disagree, and strongly disagree. Whilst, the answer score is five for strongly agree, four (4) for agree, three (3) for indecisive, two (2) for disagree, and one (1) for strongly disagree.

2. Computing the total score of participants' assessment.

The total of chosen answer from participant (T) is times to the answer score (Pn). The formula is  $T \times Pn$ . Later on, all the results are summed up.

3. Interpreting the computation score.

Before getting the interpretation results, it worth to know the highest score (X) and the lowest score (Y) for each items. The formula is as follow.

X = the likert highest score x the total of respondent

Y = the likert lowest score x the total of respondent

4. Computing index %

*Pre-completion*

Before completing the index, the writers need to know the interval score and interpretation of percentage to know the assessment by finding interval score percentage (I).

*Interval formula*

$I = 100 / \text{total score of likert}$

So,  $I = 100 / 5 = 20$

This is the interval for the range 0% until 100%. This is the criteria of score interpretation based on interval are shown in Table 1:

Table 1. Criteria of Score Interpretation on Interval

Rate %	Meaning
81-100	Strongly agree
61-80	Agree
41-60	Indecisive
21-40	Agree
0-20	Strongly disagree

*Final completion*

The writers compute the percentage of score throughout items by using the index formula.

$\text{Index} = \text{score total} / Y \times 100$ .

The percentage of score in each item represents the meaning category of the interval scale.

## RESULT AND DISCUSSION

### Results

Prior to conducting any statistical analyses, the writers computed validity t-test of the questionnaire items to check for possible validity (i.e. validity t-test > 0.05 t-table). All the items had been identified. Preliminary analyses showed that all the items were valid.

#### Users' Views Concerning Kahoot Usage

The views given by Islamic Junior High School students to questions about the use of Kahoot! game application as media to deliver the quiz. After the application of Kahoot! was used, students gave their views. The examination of the data showed that the input of Kahoot!-based game increase the students interest in the lesson. It was proved by strongly agreed (87%). The students agreed that Kahoot improves success (69%). In addition, 86% students strongly agreed that the activities created using Kahoot! are more interesting, however the effectiveness of collaborative learning becoming the lowest percentage (71%) although the students still agreed to use kahoot! game application. Even though, Kahoot! increases the lessons effectiveness for the students (79%). The effectiveness of the Kahoot Application is in Table 2:

Table 2: The Effectiveness of the Kahoot Application

No.	Questionnaires' Items	(%)	Interpretation
Q1	Kahoot increases the lesson interest	87	Strongly Agree
Q2	Kahoot improves success	69	Agree
Q3	Using Kahoot creates activities more interesting	86	Strongly Agree
Q4	The collaborative learning is more effective by using Kahoot	71	Agree
Q5	The effectiveness of lessons increased by Kahoot	79	Agree
Q6	The comfortable of self-expression is allowed by Kahoot	74	Agree
Q7	The student motivation in education is increased by Kahoot	81	Strongly Agree
Q8	Kahoot enables active learning	77	Agree
Q9	Question techniques in the activities performed by Kahoot provides the students with different perspectives	75	Agree
Q10	Kahoot improves the rapid-thinking abilities of students	78	Agree

Related to the comfortable of self-expression, the students gave 74% out of 28 participants agree to the statement. The Q7 showed, the students strongly agreed that Kahoot elevated student motivation in education (81% out of 28 participants). Active learning was enabled by Kahoot game application (77% out of 28 participants agreed). Besides, the question techniques in the activities performance gave the different perspective at students' views (75% out of 28 participants agreed). Also Q10 showed 78% out of 28 participants agreed that Kahoot improved the rapid-thinking abilities of students.

Many studies have found that Kahoot application in term of game could be used to give the impacts of student motivation and their capabilities of the thinking skills and behavior. The evidence was clear, considering that all respondent delivered the idea that they agreed with the impact of Kahoot in their study such as interest, motivation, successful, and collaborative learning.

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Hereinafter, we explained about discussion. There were 28 students have been questioned about their views of the Kahoot application to identify the influence toward their classroom learning quiz which was delivered by their English teacher. Deal with this study, there are some benefits who have been experienced while the students used Kahoot game application that could be a discussion. However, all students also experienced about some lacks of using the Kahoot game application.

### **Discussion**

#### **Students' interests toward Kahoot! game application.**

The interests of the students, after using Kahoot, provided 87 % out of 28 participants strongly agreed which was congruent with Dellos's study (2015) and Hazwani's study (2018) indicating that through the evident proof from the elevation of the more innovative technologies of Kahoot application mounting the students' interest in their usage in the educational environment. Whilst, even more 94% out of 28 participants found that they were interested in Kahoot! game application, although it appeared a tiny minority (12%) decided that it was either quite or very depressed (Zarzycka-piskorz and Podchor, 2016).

#### **Kahoot! game application improves students' success**

The success of English learning was also elevated by using Kahoot game application. This study was proven that 69% out of 28 participants agreed. In line with this, it increased the student ambition of success (Bicen and Kocakoyun, 2018).

#### **Activities created using Kahoot are more interesting**

Some of the students for a total 86% out of 28 students strongly agreed who was using Kahoot makes more interesting in delivering any activities. It was supported by Plump and LaRosa's study (2017), they said that this eLearning platform can provide an engaging environment that supports learning and adds active participation in the classroom and indicate that students welcome the use of this game

#### **The collaborative learning is more effective by using Kahoot**

71% out of 28 students agreed with Kahoot makes collaborative learning more effective. It is marked by seven students strongly agreed and 16 students agreed. In this term, the Kahoot! application game facilitates students-created quiz so that it could encourage students to create and share their own Kahoot to gain deeper knowledge and participate in peer-led conversations with themselves and their peers, which can contribute to their ability to interact and to lead (Le et al., 2019). The results could be clarified by Kahoot! allowed a lot of room and space for students to connect and communicate with teachers and classmates alike, particularly when students were motivated to see their names at the top of the leader board (Plump and LaRosa, 2017; Wang and Zhu, 2016).

#### **Kahoot increases the effectiveness of the lessons**

The lesson could create the effectiveness by using Kahoot as said by five students strongly agreed, 16 students agreed. However, there were seven students hesitated to the statement. The total was 79% out of 28 students agreed. The findings of the study were consistent with the findings of another study (Koivisto and Hamari, 2019) indicating that the gamification was the effective in teaching learning activities.

#### **Kahoot allows for comfortable self-expression**

74% out of 28 participants agreed that Kahoot allows for comfortable self-expression. In detail, five (5) students strongly agreed, 15 students agreed. Unfortunately, four students uncertain to answer the question, three students disagreed, and one student strongly agreed. The comfortable self expression was existed in the eager feelings through the competition and challenge performed by Kahoot! game application. They felt like they were in a live game show. Generally, they were pleased with the game and the impression they felt during the game (Nathania and Sabandar, 2018). Besides, Nathania & Sabandar (Nathania and Sabandar,

2018) claimed that this game would be useful not only to study the content they would share later in the classroom, but also to create a fun and interactive environment.

### **Using Kahoot in education increases student motivation**

The student motivation was also influenced by Kahoot! game application usage. The production questionnaire items result was 81% out of 28. It was a high level of strongly agreed to the statement. From 28 students, there were six students strongly agree, 18 students agreed, and the students' hesitation was only four students. The use of technology also increases students' motivation. The proof was players answer questions that are projected on their personal device at the front of the house, encouraged to respond correctly to earn the most points. Players answer questions which were displayed on their personal device in front of the house, encouraged to respond correctly to earn the most points. The quicker anyone answers the question, the more points they earn Y. The top 5 scorers are show on the leader board at the front between each question and the final winner is shown at the back (Susanti, 2017).

### **Kahoot enables active learning**

The eighth question regarding to the influence of Kahoot! toward active learning which chosen by 77% out of 28 students. Thus, the present study supported the previous study in advocating the use of games in nurturing the activeness of learning in powerful learning environment (Camilleri and Camilleri, 2017).

### **Quest strategies in the exercises carried out by Kahoot provide students with different point of view.**

75% out of 28 participants agreed that the performance of question could create the distinguish point of view among students. In detailed, five students strongly agreed, the highest score was agreed with 13 students, the same score similar with Q10 worried with their answer, however two students disagreed. This agreement was suitable with the reason of gamification. It is a common learning tool from the viewpoint of students, because it gives them the opportunity to control themselves and participate in a fun competitive environment. Gamification approach increases students' ability to attend classes; students who do not have their own devices may use other machines in the classroom (Bicen and Kocakoyun, 2018). Once a problem is shown on the computer, the instructor asked the students to click on the right choice. There was a countdown timer on the board to keep students on the task, under control, and in a competitive spirit (Benhadj et al., 2019)

### **Kahoot improves the rapid-thinking abilities of students**

Related to the rapid thinking abilities, actually the students agreed for the total 78% out of 28 students. Details of eight students strongly agreed, 11 students agreed, eight students hesitated, and the last it was only a one student strongly disagreed. In fact, the Kahoot! game application performs time limit so that the student could enforce their answer analysis (Mansur and Fadhilawati, 2019).

## **CONCLUSION**

The research in question was designed to find students' views of the incorporation of gamification into the instructional-learning process. The purpose of this inquiry was to determine the degree to which Kahoot! It contributed to more student engagement and enthusiasm, better learning performance, and more desire and willingness to try Kahoot game application in the world of learning experiences. The most apparent conclusion of this report was teachers need to educate student Virtual era, the Internet age, the Google generation, or the Millennials as they wanted to know. They wanted to know technologically by games. In

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line with previous research, the simulation of the teaching-learning process had become a requirement, not a choice. In reality, modern technology, the use of ICT in academic instruction, did not make a difference. As I said earlier, Kahoot! It was one of the most influential technology innovations in history that aimed to fundamentally change schooling through the popularization of modern psychological theories of commitment and motivation. ICT development and convergence, in the context of game-based answer schemes, exemplified by Kahoot! The research at hand would significantly boost and enhance teaching activities to move them to the next stage worldwide.

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