THE APPLICATION OF KAHOOT! IN QUIZ AS A LEARNING MEDIA FOR ENGLISH LITERATURE SEMIOTIC MATERIAL FOR GAME-BASED TESTS

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ABSTRACT

This study aims to determine the benefits of Kahoot! in the application of learning through games, and how the responses obtained from Kahoot! games are applied in English literature. The method used in this study is convenience sampling. In this study, it includes 3 (three) steps, such as: (1) watching YouTube videos containing material about stylistics (2) filling in the Kahoot! (3) filled out a questionnaire about the experience of participating in the Kahoot! The results of this study show several Point results such as: (1) the display of the quiz questions are categorized in Attractive options with a percentage value> 50%. The usefulness of the quiz with Kahoot! Media was obtained by 93% of respondents from the Good category, (2) According to students Kahoot! Games tend to be more fun than boring with an average rating of 4.33 and with 83% of respondents stating that the game is fun, useful as much as 93%, attracts as much as 83% and only 10% of respondents say they experience obstacles when playing Kahoot! (3) Gamification in Learning, the results of the assessment of respondents' perceptions with a differential semantic scale show that for gamification students are interesting with a value of 87% pleasure, and adding variations to the value and Gamification is suitable to be applied in 80% of language learning, in addition gamification is more fun 77%, and appropriate gamification is applied in general learning with a percentage of 67%.

Keywords: *gamification learning, Kahoot, semiotics*

1. Introduction

Continuous advancement in information technology have transformed every facet of daily lives, including education. In the context of education, especially learning, educators now have the opportunity to introduce and integrate play-based learning activities via technology in their instruction. According to Zarzycka-Piskorz (2016), play-based learning refers to the use of game elements and game design techniques in non-game contexts—particularly in learning. Game based learning or gamification rests on the experiential nature of a game that allows learners the opportunity to be fully involved in the learning cycle. Platforms that are play-oriented and infused with learning elements are often designed with defined outcomes related to the teaching and learning aims of a particular lesson or series of lessons. Although games are play-oriented, the designing principles behind such games are based parallel to relatively specific teaching and learning context aims. The engagement and fun factors of game-based learning have been found to boost learner motivation and sustain retention. Zarzycka-Piskorz (2016) highlighted that there exists strong evidence showing a relationship between game-playing and increased motivation as well as persistence.

According to Kapp (2012) gamification is "using game-based mechanics, aesthetics and games thinking to engage people, motivate action, promote learning, and solve

problems." Gamification is the use of thinking games, approaches and elements in a different context from the "real" game. Using game mechanics improves motivation and learning in formal and informal conditions. Games have some distinctive features which play a key role in gamification, particularly when applied in education and learning Firstly, users (i.e., students in educational setting) are participants, making learning more engaging. Secondly, with tasks and challenges, participants perform and progress towards defined objectives. Thirdly, points can be accumulated as a result of executing tasks or completing objectives. Fourthly, there are levels that participants pass depending on the points. Lastly, badges serve as reward signals for completing actions and the last is ranking of users according to their achievements.

The previous study by Susilawati and Dewi (2019) entitled "Reasoning Ability Through Challenge-Based Learning Kahoot!". The main objective is to analyze the improvement of mathematical reasoning ability through the challenge-based learning with Kahoot! application. An experimental study, pre-test and post-test control group design. The population subjects were all students of class XI of the SMAN 26 Bandung, by involving a sample of three classes through random sampling techniques from five parallel classes available. The result of this study is there was improvement in mathematical reasoning abilities of students who obtained a challenge-based learning assisted by the Kahoot application, challenge-based learning without a Kahoot!, and conventional learning. Improvement of mathematical reasoning abilities of students who obtained a challenge-based learning with Kahoot application is better than challenge-based learning without the Kahoot, and expository learning. Challenge-based learning Kahoot applications can facilitate conflict processes, discovery, social interaction, and reflective to improve students' mathematical reasoning abilities.

In a study aiming at analyzing the gamified learning environment according to its design, application and other variables, it was aimed to design an online learning environment which includes different gamification components and also to identify the flow, emotional participation, motivation and success of the participant on this environment and lastly to search elements which give importance to success on these online environments. A route model was tested which included the effects of variables on each other and related hypothesis and also how much did the emotional participation and motivation estimate the success was tested in the study. According to the correlation analysis results in the study; the flow and emotional participation explained %68 of the motivation variant. Also; the flow, emotional participation and motivation explained %22 of the success variant. In addition to this; the flow towards motivation and success has a positive and meaningful effect and also the emotional participation had a positive and meaningful effect on the motivation (Caglard, 2017).

Another study aimed at determining the effects of online game Kahoot which was about scientific word learning. The objective is to analyze the effect of scientifically word learning based online game –Kahoot!- on students who had difficulty in learning physical science lessons in secondary schools. The results show that; all students' word distribution increases when the Kahoot! is played twice a week. The use of Kahoot! increased students' focus and task behaviors. The results of student satisfaction research showed that, the students liked playing Kahoot! and found it easy to use (Pede,2017). Gamification is not only limited in terms of game design and game research. Many scientists wanted to have a more systematic research about the gamification tools, tools and methods [Deterding, 2015].

Kahoot! is one form of educational game platform as a learning media that uses quizzes and games to create contents where educators and students can communicate through game-like interface using existing PC and smart mobile technologies. Kahoot!

is based multiple choice questions using pictures or videos, whether the other study material is on the quiz screen or not, and all students/participants can compete to earn points by answering questions related to the lesson being done correctly and quickly (Wang in Karlina, 2019). In addition, according to Lime (2018), Kahoot! can also be interpreted as an interactive learning medium because it can be used in teaching and learning activities such as holding pre-tests, post-tests, question exercises, material reinforcement, remedial, enrichment and others. One of the requirements to create a Kahoot! quiz or survey is to sign up using a valid email address or Facebook profile. Users do not have to sign in to participate in the quizzes or games.

Lime (2018) further explains that Kahoot! had four features namely game, quiz, discussion, and survey. For games, the types of questions can be made and determine the answer and the time used to answer the question. Uniquely, the answers will be represented by images and colors. Participants are asked to choose a color or picture that represents the right answer. In addition to finding the right answer, participants must ensure that they do not touch (click) when choosing an answer. Because of this, the use of Kahoot! media in the English literature learning quiz is expected to provide a new perspective, which is a more fun quiz.

In terms of gamification in learning, the educational content should to be interactive, engaging and rich in multimedia elements. The training activities should be developed tailored to the learning objectives and allow (Simões, J., R. Díaz Redondo, A. Fernández Vilas, 2013): (1) Multiple performances – the learning activities need to be designed so that students can repeat them in case of an unsuccessful attempt. It is very important to create conditions and opportunities to achieve the ultimate goal. As a result of repetitions students will improve their skills. (2) Feasibility – the learning activities should be achievable. They have to be tailored and adapted to students' potential and skill levels. (3) Increasing difficulty level – each subsequent task is expected to be more complex, requiring more efforts from students and corresponding to their newly acquired knowledge and skills. (4) Multiple paths – in order to develop diverse skills in learners, they need to be able to reach the objectives by various paths. This allows students to build their own strategies, which is one of the key characteristics of the active learning.

The present study aims to determine the benefits of Kahoot! in the application of learning through games, and how the responses obtained from Kahoot! games are applied in English literature, in knowing the extent to which students of English literature understanding about subjects studied in English literature and will also be surveyed about more interesting which quizzes are filled through Kahoot! media and conventional media through google form.

2. Method

This research method includes respondents from this study, population and sample, data collection techniques, and data analysis. This research uses descriptive method that aims to describe all responses given by students through given a list of questions. Two measurement scales were used in this study. Firstly, respondents were asked to give a rating from the scale of 1 to 5 on a semantic differential scale, i.e., placing adjectives with opposite meanings on each end of the scale then asking the respondents to rate their experience based on the pairs of words. Secondly, a Likert scale with 5 indicators was used with the following values: 1 (Strongly Disagree), 2 (Disagree), 3 (Neutral), 4 (Agree) and 5 (Strongly Agree). This was to measure the respondents' level of agreement with certain statements pertaining to the use of Kahoot! and gamification for learning.

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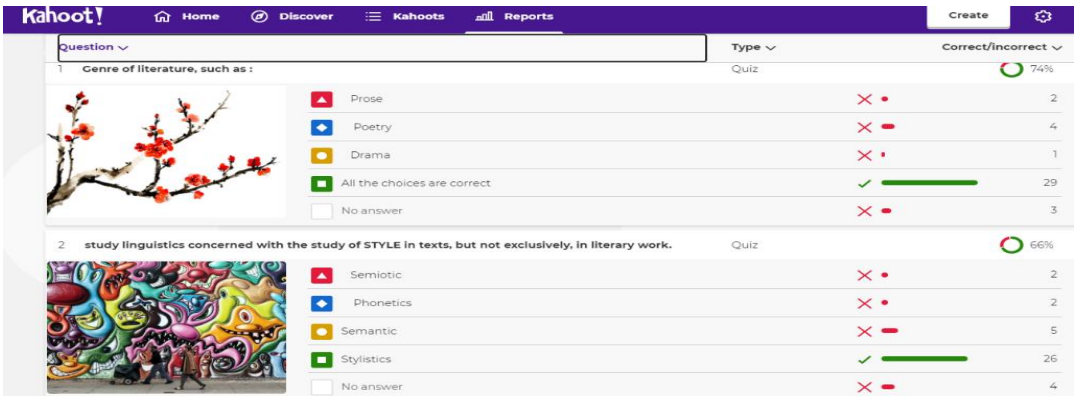
The total population in this study were all students of English Literature Study Program at Dhyana Pura University. The study was conducted in May 2020. Using convenience sampling method, the sample size for the study was 30 students in the program who participated in all three steps of this study. The participants were asked to firstly watch a YouTube video on the topic of stylistics, then secondly participate in a Kahoot! game designed specifically for the content of said video, and thirdly complete a questionnaire on their experience using Kahoot! and regarding the use of gamification in language learning. The Data obtained from the results of the questionnaire contained 10 statements to 30 students from all semester of English Literature at Dhyana Pura University, while the statements were grouped into 2 parts. The first part asks their opinion about the Kahoot! media, the second part asks about which one is more interested in filling out the English quiz using the Kahoot! method or the conventional method. The entire data collection process was conducted online, due to the limitations and social distancing measures observed during the Covid-19 Pandemic.

3. Results and Discussions

Demographic Data

The research data collection through a questionnaire was carried out online in May 2020, considering health and safety reasons during the Covid-19 Pandemic period. The population in this study were students of the S1 English Literature Study Program at Dhyana Pura University, amounting to 50 people. The sampling technique used was convenience sampling, ie the samples were obtained from members of the population who were willing to take part in the research data collection process. In this study, it includes 3 (three) steps such as : (1) watching YouTube videos that contain material about English Stylistics study (https://youtu.be/AmmDV8IojsI), (2) filling in online games prepared by special researchers about YouTube video content on the page Kahoot.it with pin 02833170, and (3) fill out a questionnaire Regarding the experience of participating in the game Kahoot! Online on the Google form: https://bit.ly/gamification_undhira page.

Online data collection from respondents is limited for 1 (one) week, and at the end of the week collected data from 30 valid respondents. Respondents were active students of the English Literature Study Program S1 Dhyana Pura University from the first year to the fourth year, consisting of 10 men and 20 women. 26 respondents (87%) have participated in the Kahoot! game before, but only 27% of respondents (8 people) said that they often played Kahoot! This shows that respondents are familiar with the use of games like Kahoot! in learning, but this has not been applied too often so that more students report that they rarely use participating in gamification such as Kahoot.



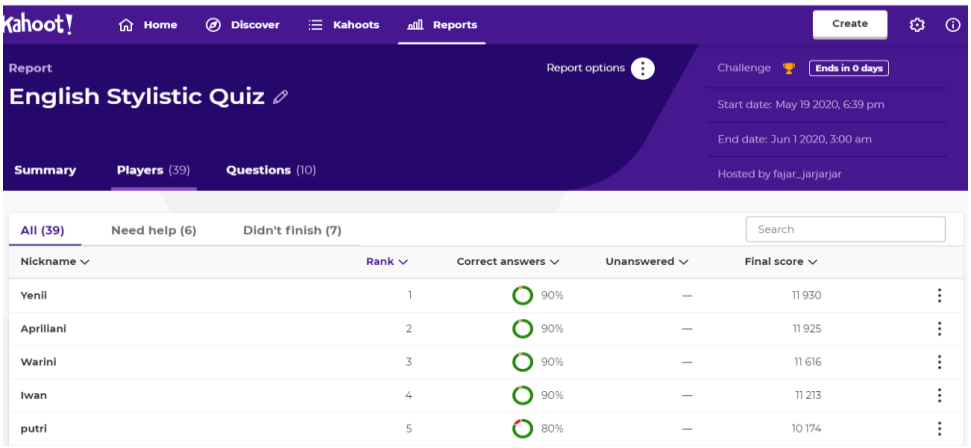


Figure 2. Illustration of the Kahoot Game

Student Perceptions about the Kahoot! *Game*

Perception is a person's view of an object. Everyone has different perceptions in assessing things. This is influenced by many factors. By Notoadmojo (2010) in his theory of perspective there are two factors that influence someone's perception, namely internal and external factors (Septiaji, 2014). To find out students' perceptions about Kahoot! games, four statements were divided into how fun it was to play Kahoot, the use of Kahoot elements, the obstacles in playing Kahoot, and how interesting Kahoot quizzes were. Every statement from the questionnaire submitted will affect perceptions of the Kahoot! application! on stylistic subjects.

Table 1. Semantic differential about the perception of students about Kahoot! game

The perception of students about Kahoot! game						
x	1	2	3	4	5	y
Boring				4,33		Fun
Useless				4,53		Useful
Difficult			3,75			Easy to use

The results of the assessment of respondents' perceptions with a differential semantic scale indicate that for Kahoot! tends to be fun rather than boring with a mean value of 4.33 (on a scale of 1 to 5), and with 83% of respondents saying that the game is fun (as many as 25 out of 30 respondents choose grades 4 and 5). In addition, the majority of respondents also rated that the game Kahoot! useful (28 of 30, or 93%), with a mean value of 4.53 (on a scale of 1 to 5). Regarding the perception of whether the game Kahoot! considered interesting, as many as 83% of respondents stated that the game was interesting and 17% stated neutral. On a scale of 1 to 5, the average perceived value of the interesting Kahoot! is 4.30. Meanwhile only 10% (3) of respondents said that they experienced have obstacles while playing Kahoot! Constraints faced include. Lost connection, still lack of time to think, Error when inputting names, and Timing game is too fast, so participants rush in answering it. From the constraints conveyed by the respondent, it can be overcome like a game obstacle too quickly can be overcome by educator can set the timer to be longer. Can be 60 seconds each question instead of 20 or 30, and lost connection the educator must notify the participants to find a comfortable and full network place before working on the quiz.

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Furthermore, respondents were asked to state their level of agreement with 7 (seven) items of perception regarding the use of the Kahoot! for learning. The findings can be seen the table below.

Table 2. Respondent approval rates

QUESTIONS	Scale				
	5 (Strongly agree)	4 (Agree)	3 (Neutral)	2 (Disagree)	1 (Strongly Disagree)
Kahoot! is more fun and challenging	13%	53%	30%	0%	3%
Help the learning process	17%	47%	33%	3%	0%
Recommends Kahoot for language learning	30%	57%	10%	0%	3%
Love Kahoot!	23%	60%	17%	0%	0%
Supports the achievement of learning objectives	17%	47%	30%	7%	0%
Easy to understand and complete	17%	43%	40%	0%	0%
Also recommend Kahoot for learning media in general	27%	47%	27%	0%	0%

The results obtained tend to be positive. The majority (> 50%) of respondents expressed agreement for all points of perception. Table 2 shows the respondents' agreement on the points of perception regarding the use of the Kahoot! As many as 87% of respondents stated that Kahoot! more fun and challenging, 83% of respondents agreed that Kahoot helped the learning process and 17% of respondents chose neutral, besides the respondents also recommend Kahoot! for language learning with 73% and recommend Kahoot! for learning media in general with a percentage of 60% agree, then the remaining 40% are neutral. On the other hand, respondents 67% of respondent's favor Kahoot (neutral 33%), there are 63% or 15 respondents who support the achievement of learning objectives, and 15 (63%) respondents also easily understand and do quiz stylistic in Kahoot! The table above can be represented in a graph as seen in Figure 3 below.

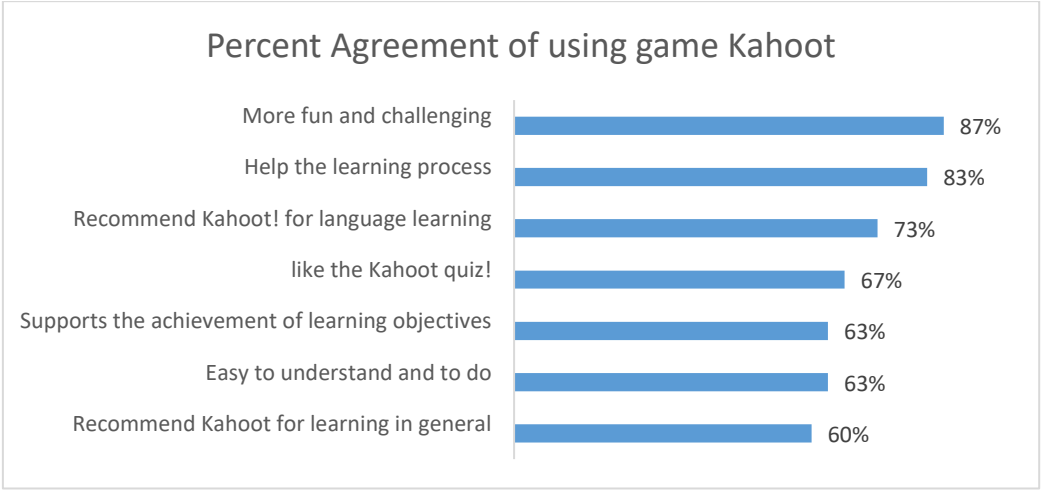

Figure 3. Percent Agreement of using game Kahoot

The data above shows that the thing that has the highest agreement value is that this game is fun and challenging. So, educators can use this feature to engage students, increase student creativity and learning motivation, make learning subjects not boring and games can also be used to express themselves. When respondents are given the opportunity to express their opinions regarding the application of the Kahoot! for learning in the form of open questions, found a number of interesting things. Almost all respondents liked the Kahoot! game based on learning, among others the respondents considered the Kahoot! game to be challenging and interesting and not boring, difficult lessons would be easier because it was done in the form of a game, learning using Kahoot! can eliminate boredom in students, Kahoot! is a learning system that makes students find it interesting and interesting because it looks like a game-based quiz, and Kahoot! can make the learning atmosphere more enjoyable. It can also make students feel challenged to keep on learning many things, so that when playing quizzes, they can achieve high points.

Finally, Studies of Kahoot have shown that the application is user-friendly, and that it is a platform from which both teachers and students can benefit. Kahoot! was shown to be the best application for teachers to promote students in the classroom and integrate competition into the educational environment. Kahoot! encourages learning and creates a fun and competitive environment. Thomas (2014) states that Kahoot! allows fast and easy access and is recommended for educators. He stated that creating activities with Kahoot! is beneficial because they can be used to review old lesson content. He also noted that Kahoot! can be used in many different fields and for different forms of evaluation, including research projects and presentations. According to Turan & Goktas (2015) observed that one of students' most enjoyed elements in flipped classrooms is the Kahoot! gamification application. In light of this, it can be concluded that gamification activities especially game Kahoot should be considered when designing lessons like as giving motivation of learning in education or making the lesson fun and challenging.

Student Perceptions about Gamification in Learning

Gamification is a learning approach using elements in games or video games with the aim of motivating students in the learning process and maximizing the enjoyment and engagement of the learning process, besides this media can be used to capture things that interest students and inspire them to continue to learn. In determining students' perceptions about gamification in learning, there are several questions given in the questionnaire, for example such as gamification is suitable for language learning. The following will be explained in table 3 about students' perceptions of gamification in learning.

Table 3. Students' perceptions of gamification in learning.

QUESTIONS	Scale				
	5 (Strongly agree)	4 (Agree)	3 (Neutral)	2 (Disagree)	1 (Strongly Disagree)
The learning process that is made like a game makes it more interesting	33%	43%	23%	0%	0%
The gamification approach to learning is fun	37%	50%	13%	0%	0%
Gamification make more variety of learning	33%	47%	20%	0%	0%
Gamification is suitable to be applied in language learning	27%	40%	33%	0%	0%
Required methods and approaches engaging and fun in learning.	33%	47%	20%	0%	0%
the learning process involves more exciting gamification elements	23%	43%	33%	0%	0%
Gamification is acceptable to applied in general learning	37%	43%	20%	0%	0%

The results of the assessment of respondents' perceptions with a differential semantic scale indicate that for Kahoot! game students, Tends to be interesting rather than boring with a value of 87% of respondents agree. 80% of respondents agreed with using the gamification approach in fun learning, gamification made the lesson more varied, and Gamification was suitable to be applied in language learning, besides that 77% of respondents agreed with the methods and approaches involved and fun in learning, where the learning process involved more elements of gamification fun is 67%, as well as suitable gamification applied in general learning with a percentage of 67%. The table above can be represented in a graph as seen in Figure 4 below.

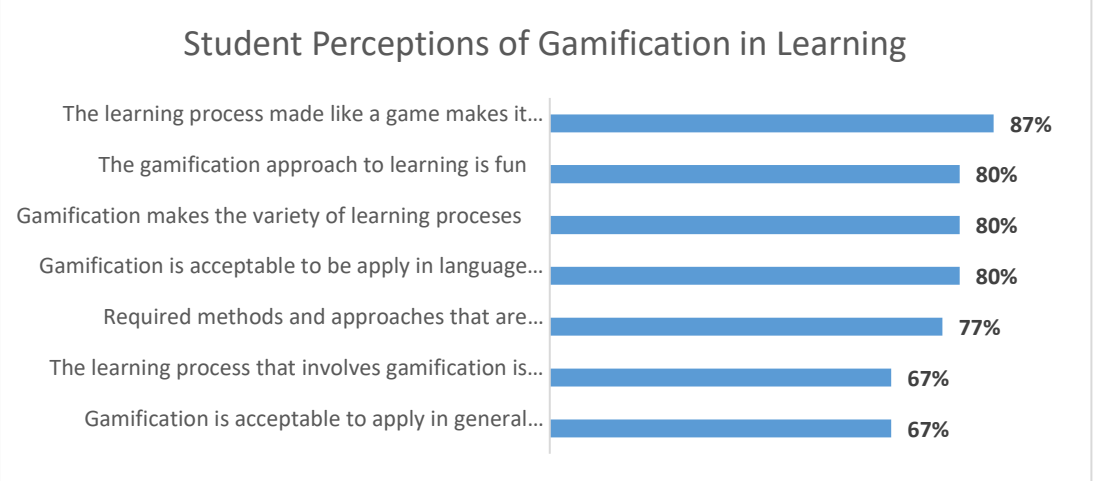

Figure 4. Student Perceptions of Gamification in Learning

From the data above, it can be seen that the learning process using games is more exciting, which has the highest score of 87%. Thus, participants are happier if the educators apply gamification in learning especially learning language.

Gamification can be used during all lessons in which students have difficulties learning, so that students can easily learn by having fun. Gamification can be used in preschool teaching, music and English lessons. It can be used to teach concepts in language department or in all fields of learning. Through gamification, students start to have fun and enjoy lessons that they previously disliked (85%). Gamification can enable participants to learn more easily, in a fun way. It is also important for the participants to be self-confident in their social space and to spend time with their friends. Gamification may be difficult to employ in timing when playing game but it can be used when accompanied by teachers. We can use gamification methods for learning and teaching activities. Gamification helps the students to develop cognitive skills, such as thinking and problem-solving, increases creativity, helps students to experience winning and losing in a competitive environment with friends, and socialize. Perceptions of Students for Gamification of learning: Kahoot use of pictures and the question about the hole knowledge of stylistics. Using gamification, the teacher may create questions and answers on the topic he/she struggles with explaining. In this way, the topic could be consolidated. Gamification methods can be used in all environments that have internet connection and can be used in all fields of education. It is quite an effective method for consolidating topics, imparting a feeling of competition, and facilitating student socialization. Gamification can be used in all lessons in university especially in Learning language. Gamification can be used for various educational reasons and in all lessons. Students learn topics more easily, and tackle difficult material in a fun way; consequently, it was concluded that gamification would be an appropriate learning method for all fields. Similar results were also found in a different study. Although numerical games were primarily used, gamification can be applied to many cases in daily life. Students also reported that English could be used in learning. Motivation, one of the most important factors in foreign language teaching, is defined as a power that initiates and facilitates the language-learning process. Investigation of the evaluations of students from a different study revealed that the gamification application Kahoot! is one of the most popular applications. It was concluded that students like to come to the class prepared, and they are motivated by the presentation of unexpected questions. Turan & Goktas (2015) also reported that students like the Kahoot! application, as well as the fact that lessons are applied.

4. Conclusion

Based on the above research results, it can be concluded the results of this study are as follows. (1) The results of research on the display of quiz questions are categorized in the Attractive option with a percentage value of> 50%. The usefulness of the quiz with Kahoot! media obtained 93% of respondents from the Good category. (2) According to students Kahoot! game tending to be fun rather than boring with a mean value of 4.33 and with 83% of respondents stating that the game was fun, useful as much as 93%, interesting as much as 83% and only 10% of respondents said they experienced obstacles when playing Kahoot! (3) according to Students regarding Gamification in Learning The results of the assessment of respondents' perceptions with a differential semantic scale indicate that for gamification students are interesting with a value of 87% fun, and add variety to the value and Gamification suitable to be applied in 80% Language learning, in addition gamification is more exciting 77%, and suitable gamification is applied in learning general with a percentage of 67%.

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Suggestions for further research can be done research on the use of other types of problem features provided by the Kahoot! in addition to the multiple choice quiz used by researchers, there are still other forms of survey, discussion, and jumble. It is hoped that in future research, it can test the use of these features in using quizzes in the course.

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