Teacher and Students' Perception on Using Kahoot! for English Learning

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Abstract— **The purpose of this research was to determine (1) Teacher's perception on using** *Kahoot!* **for English learning; (2) Students' perceptions on using** *Kahoot!* **for English learning; and (3) Constraints encountered while using** *Kahoot!* **for English learning. This is a quantitative descriptive research. The research subjects were one English teacher and 32 students of Class X MIPA 1 of SMA 4 Singaraja. Data collection was conducted using a closed questionnaire, structured interviews, and non-participatory observation. The results highlight teacher and students' perceptions on the use of** *Kahoot!* **is very good. The constraint encountered by the teacher is slow internet connection when accessing** *Kahoot!*

Keywords—perception; kahoot; english learning.

I. INTRODUCTION

Today, technology is used in almost every aspect of our lives. Technology can influence the way we live, work, play, and learn. The using of technology has taken a crucial part for work, and it also demands schools to begin using technology for enhancing teaching-learning activities in the classroom. There are various reasons why students need technology in learning, among them; (1) technology when being used properly can help students prepare for their future careers; (2) integrating technology in the classroom is an effective way to get connected with all students using various learning styles; (3) technology can provide opportunities for students to enhance interaction with their classmates and teachers through collaboration; and (4) technology facilitates students to access the latest information more quickly and easily [1].

Some learning media use the concept of gamification to attract students' participation in classroom learning. The term gamification might be a new one, but the concept itself has been known for a long time. For example, military service has been using the game's concept and simulation to attract audiences for a long time. Gamification is "The process of game-thinking and game mechanics to engage users and solve problems" that is the process of thinking games and how it works in a game to attract users and solve problems.

Games were used to enhance intelligence by stimulating our brain. Games can also get people more interested to participate and gain more motivation [2]. Reference [3] stated

that gamification uses the aesthetics and functionality of games to attract, educate, and motivate students. All users are the active participants and their development is recorded and sorted by ranking. There are also those who give reward in the form of virtual badges. Gamification can increase intrinsic motivation when the questions used provide a sense of control, including their competencies, and ease them to interact with other students. Gamification also makes students see failure as as a formative opportunity rather than a negative thing.

One of the interactive learning media that uses the concept of gamification is *Kahoot!*. Reference [4] mentioned that *Kahoot!* is a free game-based learning media that can be used for any subject, on any device, and for any age of users. *Kahoot!* was designed to make learning more fun and it is suitable for learning outside the class. There are millions of people using *Kahoot!* every month with hundreds of different backgrounds, from classrooms to business meetings, charity fundraising, awards events, and other activities. *Kahoot!* is unique because of its content, illustrations, and its features that allow us to determine the game by ourselves. There are various *Kahoot!* available in the public library section which can be adapted if we don not have time to make it from the scratch.

Reference [5] stated that *Kahoot!* is used in a multitude of settings – in K-12 and university classrooms, corporate offices, social settings, and major sporting and cultural events. *Kahoot!* mission is to unlock the deepest potential of every learner, regardless of age or context, by making learning fun, magical, and engaging through game-based learning and trivia platform. In 2018, *Kahoot!* announced its platform has reached more than 70 million unique monthly active users at the end of 2017, growing at a rate of 75% percent year over year. More than 1.6 billion players have played on the *Kahoot!* platform cumulatively since its launch in 2013. This makes *Kahoot!* become one of the most widely used technologies in K-12 classrooms in the world. In a recent study published by EdWeek Market Brief, *Kahoot!* was listed no. 5 out of 40 most popular digital learning tools in K-12 schools accessed by a browser, and ranked no.1 in the assessment category.

There are several studies that are relevant to the topic of *Kahoot!* viewed from various points of view. Reference [6] examined the students' perceptions on using Kahoot! as an ice

breaker in the Movie Interpretation class. This research used survey research type. Questionnaires were distributed to 66 Movie Interpretation class students. The results showed that students' perceptions were positive. Students felt that using *Kahoot!* as an ice breaker truly helped them learn in a fun way. In addition, students also became more motivated in learning.

Reference [7] examined the students' perceptions on *Kahoot*! as a formative assessment tool in the medical department. Questionnaires were distributed to 113 students. The results showed that students have a positive perception on Kahoot!, for it is considered fun and effective. *Kahoot*! is a promising formative assessment tool because it is practical and makes learning more fun. However, Kahoot is not the best option for simplifying more complicated materials in the medical department.

Reference [8] examined students' perceptions of the gamification approach using *Kahoot!* as a case study. Questionnaires were distributed to 65 students studying in the early childhood education department. The results showed that the use of gamification increased students' interest and ambition in achieving success.

Based on the research by [9], the respondent who started to use e-learning was disappointed with the technical abilities of tools available at that time. The slow speed internet also added to the impression that e-learning is not easy to implement. Unfortunately, it is hard to change that impression later. This respondent does not even consider trying e-learning again. In addition, such disappointed users will spread information on disappointing attempts among other colleagues. Therefore, it is crucial to provide first-time users with adequate technical support.

In Indonesia, Kahoot! is started to be used in senior high schools, one of them is in SMAN 4 Singaraja which is one of the favorite high schools in Buleleng. Foreign language learning, with English language learning as one of them, is strongly supported at SMAN 4 Singaraja. Therefore, English teachers, one of them is Ms. SU (a disguised name) uses various methods to attract students to learn English. Based on the interview results, Ms. SU uses various types of teaching media, such as ppt, songs, video *Quizizz*, *Schoology*, *Padlet*, and the last is *Kahoot!*. She learned about Kahoot! at a training in May 2019. In the training, Ms. SU won a title as the best training participant because she was able to master *Kahoot!* well and was even able to provide a simulation of using it to other participants. Therefore, it is interesting to analyze how teachers' and students' perceptions on using *Kahoot!* in the classroom so that the findings can be used as suggestions to improve the use of innovative online teaching media in high school stages of foreign language learning.

Based on the description, the research problem formulation are:

1. How is the teacher's perception on using *Kahoot!* for English learning in class X MIPA 1?

2. What is the student's perception on using *Kahoot!* for English learning in class X MIPA 1?

3. What are the constraints found while using *Kahoot!* for English learning in class X MIPA 1?

II. METHODS

This research was a quantitative descriptive research. The research subjects were one English teacher and 32 students of Class X MIPA 1 of SMA 4 Singaraja. The data collection is conducted with questionnaire, interview, and observation.

Questionnaires were distributed to 32 students of Class X MIPA 1 SMA 4 Singaraja and to Ms. SU as the English teacher. The questionnaire was a closed and open questionnaire. The closed questionnaire was adapted from User Experience Questionnaire (UEQ) by [10]. The contents of UEQ involve 6 aspects namely attractiveness, perspicuity, efficiency, dependability, stimulation, and novelty. In the closed questionnaire, these 6 aspects were translated into a total of 16 questions. The closed questionnaire was then calculated and converted using the formula from [11].

TABLE I. LIKERT SCALE

Respons	Numerical Value
Strongly disagree	1
Disagree	2
Neither agree nor disagree	3
Agree	4
Strongly Agree	5

TABLE II. CONVERSION FORMULAS SCORE

Score	Criteria
$X \geq Mi + 1.5\ Sdi$	Very Good
$Mi + 0.5\ Sdi \leq X \leq Mi + 1.5\ Sdi$	Good
$Mi - 0.5\ Sdi \leq X \leq Mi + 0.5\ Sdi$	Fair
$Mi - 1.5\ Sdi \leq X \leq Mi + 0.5\ Sdi$	Less Good
$X < Mi - 1.5\ Sdi$	Bad

Note:
a. $Mi = \frac{1}{2}$ (Score Max + Score Min)
b. $Sdi = 1/3$ (Mi)
c. Mi = the Ideal Mean
d. Sdi = the Standard of Deviation
e. X = The Score of the teacher

Semi-structured interviews were conducted to Mrs. SU as the English teacher. Meanwhile, non-participatory observation using the observation guidance instrument was conducted on May 29, 2019, when Ms. SU tried to use *Kahoot!* for the first time in class X MIPA 1.

III. RESULTS AND DISCUSSION

A. Results

The following are the results of teacher and students' perceptions collected using a questionnaire.

TABLE III.   TEACHER AND STUDENTS' PERCEPTION

No.	Indicators	Teacher's perception	Students' Perception (32 people)	
			Total score	Average Students' score
	A. Attractiveness			
1	*kahoot* display is attractive	4	133	4,15
2	*Kahoot* game is fun	4	139	4,34
3	I like using *kahoot*	4	129	4,03
Average		**4**	**133,6**	**4,175**
	B. Perspicuity			
1	It is convenient to use *kahoot* for learning	4	128	4
2	*Kahoot* is easy to operate	4	129	4,03
Average		**4**	**128,5**	**4,015**
	C. Efficiency			
1	*Kahoot* game is efficient	4	129	4,03
2	*Kahoot* game perception is fast	4	127	3,96
3	*Kahoot* game is practical	3	136	4,25
4	*Kahoot*'s chronology / order of use is well-organized	4	132	4,12
Average		**3,75**	**131**	**4,09**
	D. Dependence			
1	*Kahoot* game fulfilled my expectations for a good interactive learning media	4	120	3,9
2	By using *kahoot*, my students can interact well during the learning process.	4	123	3,84
Average		**4**	**124**	**3,875**
	E. Stimulation			
1	*Kahoot* game is exciting	4	141	4,4
2	*Kahoot* game is fun	4	140	4,37
3	*Kahoot* game can motivate my students in learning English	4	130	4,06
Average		**4**	**137**	**4,28**
	F. Novelty			
1	*Kahoot* game is creative	4	136	4,25
2	*Kahoot* game is innovative	5	138	4,31
Average		**4,5**	**137**	**4,28**
TOTAL		**64**	**2115**	**66,08**
Average in general		**4**	**132,18**	**4,13**

Teacher and students' perception in table 3 can be illustrated with the bar diagram as follows:
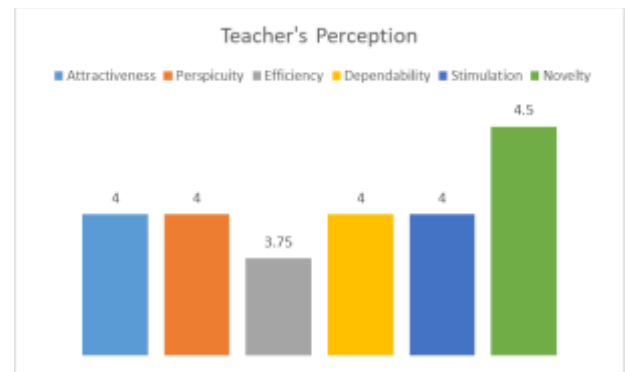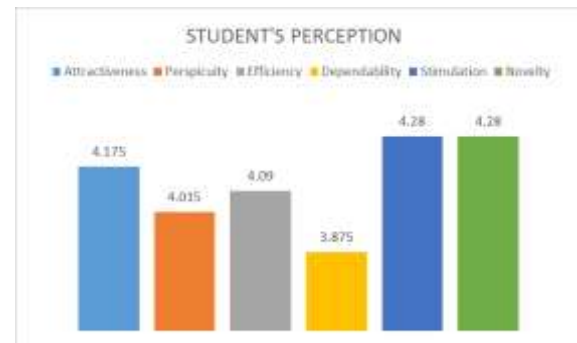

Fig. 1.   Teacher's Perception

Fig. 2.   Student's Perception

The results of the teacher and students' assessments through questionnaires are calculated and then converted using the formula from.

The results of the closed questionnaire were converted as follows.

TABLE IV.   TEACHER'S PERCEPTION

No.	Note	Teacher's Perception
1	X (total score)	**64**
2	Mi	Formula: Mi= ½ (Score Max + Score Min)
		½ (80+16) = ½ (96) = **48**
3	Sdi	Formula: 1/3 (Mi)
		1/3 (48) = **16**

After finding X, Mi, and Sdi, X is then converted in accordance with Table 2. and the results are as follow:

TABLE V.   CONVERSION OF TEACHER'S PERCEPTION

X ≥ Mi + ½ Sdi
64 ≥ 48 + 16
64 ≥64
Very good

TABLE VI.   STUDENT'S PERCEPTION

No.	Note	Attrac-tiveness	Perspi-cuity	Effi-ciency	Dependa-bility	Stimu-lation	Nov-el-ty
1	X (total score)	133,6	128,5	131	124	137	137
2	Mi	Formula: Mi= ½ (Score Max + Score Min)					
		½ (160+32) = ½ (192) = **96**					
3	Sdi	Formula: 1/3 (Mi)					
		1/3 (96) = **32**					

After finding X, Mi, and Sdi, X is then converted in accordance with Table 2. and the results are as follow:

TABLE VII.   CONVERSATION OF STUDENT'S PERCEPTION

Aspect	Score of Appropriate Conversion	Criteria
Attractiveness	X ≥ Mi + ½ Sdi	**Very Good**
	133,6 ≥ 96 + 16	
	133,6 ≥ 112	
Perspicuity	X ≥ Mi + ½ Sdi	**Very Good**
	128,5 ≥ 96 + 16	
	128,5 ≥ 112	
Efficiency	X ≥ Mi + ½ Sdi	**Very Good**
	131 ≥ 96 + 16	
	131 ≥ 112	
Dependability	X ≥ Mi + ½ Sdi	**Very Good**
	124 ≥ 96 + 16	
	124 ≥ 112	
Stimulation	X ≥ Mi + ½ Sdi	**Very Good**
	137 ≥ 96 + 16	
	137 ≥ 112	
Novelty	X ≥ Mi + ½ Sdi	**Very Good**
	137 ≥ 96 + 16	
	137 ≥ 112	

From the score conversions, it is found that the teacher and student's perception on the use of *Kahoot!* is very good.

2)   Observation Results

Here are the observation results when the teacher uses *Kahoot!* in the classroom. Several disadvantages were found, namely:

a)   It did not use any speaker

b)   It did not use any picture

c)   There was no glimpse of the questions and answers

d)   The teacher might not be able to confirm whether all of the students have entered

e)   The teacher might mention the website incorrectly when asking students to sign in to *kahoot.it* instead of *kahoot.com*

f)   Each question in *Kahoot*! took time (some are up to 90 seconds), hence students can possibly ask their friends for answers

g)   Students had not been given a good explanation of *Kahoot!* before starting using it. For instance that the score is based on the right and the fastest answer or the students are not given a little time to see the best score (at the end of each question)

h)   Teacher might not be able to confirm whether the letters are clearly read. For example, there are students who sit in the back seat and cannot read clearly, whether what was written is 1973 or 1993,

i)   Teacher did not give any appreciation to the 3 best scores at the end of the quiz

However, there are also some advantages in using *Kahoot!* for the teacher, namely:

a)   Teacher gave practice before the real quiz begins

b)   Teacher could easily ask students to keep silent when they were noisy

c)   Teacher changed the duration of the quiz per question according to the needs (type of questions)

d)   There were various kinds of questions used, some are filling proverbs (i.e: a biography is .... recount), some are filling in the right forms, some are arranging short sentences by choosing and filling the right vocabulary in order (question sample: you-have-ever-to-Europe-?-before)

3)   Interview

In semi-structured interviews, the following research results were obtained.

The teacher has been teaching since 2002. The daily teaching media used are generally PowerPoint, songs, and videos. Before trying to use *Kahoot!*, the teacher has used multimedia learning media, namely *Quizizz*, *Schoology*, and the *Padlet*. However, the teacher considered that *Padlet* was less practical. Its usage depends on the needs. The teacher considers *Schoology* is rather comprehensive because everything needed is there. The teacher sometimes asks students to upload papers in *Schoology*. For *Quizizz*, the question can be in the form of discourse, it has more space than *Kahoot!* and it can only be sent to students, thus no need to face to face. The teacher learned about *Quizizz* from one of the *PPL* (teacher training program) students.

According to the teacher, *Kahoot!* has more advantages because it is in the form of games and it is fun to be played in the class. However, the drawback, *Kahoot*! question is limited to 95 characters only. Therefore, it is difficult to give questions in the form of discourse. In addition, the answering process also

requires eyes and hand coordination which according to the teacher is rather inconvenient. The teacher plans to use *Kahoot!* more so that students can learn something new. When it comes to *Quizizz*, the teacher assumes that students already know the trick. Evidently, when they have finished answering questions, they can see the problem and tell their friends. However, the teacher has not found any similar weakness in *Kahoot!*. The teacher also claimed not to have difficulty when learning to use Kahoot!

The main constraint encountered by the teacher when using *Kahoot!* in the class is the internet connection issue. In order to use IT-based learning media, the school provides LCD and wi-fi facilities. However, the wi-fi speed in the classroom is rather slow, and sometimes it demands students to use their own internet quota. Students' cellphone whose specifications are mediocre takes longer loading process when taking quizzes compared to the cellphones of those who have better specifications. Furthermore, when the quiz was about to begin, students would be noisy because they were enthusiastic. In this case, the teacher should manage the class well.

Previously, there had been an appeal from the principal who persuades all teachers to use IT, even though it was just a Powerpoint. The teacher also mentioned that in the near future there will be a training from Undiksha lecturers in the form of Google classroom training. Two years ago, the *Disdikpora* once asked teachers to use *Jejak Bali Rumah Belajar* by creating virtual classes. The *rumah belajar* website is actually accessible to use, but with the added "*jejak bali*", the website turns out to be unusable. Because it cannot be used yet, teachers were asked to use *Schoology*. The *Quipper* also once gave socialization to the school. There are several teachers in SMA 4 Singaraja who use *Quipper*, especially science teachers because it provides a virtual laboratory in the application.

B. Discussion

From the results of the closed questionnaires, it is found that the teacher and student's perception on the use of *Kahoot!* is "very good". This result indicated customer satisfaction which is aligned with [5] which mentioned that Kahoot! was listed no. 5 out of 40 most popular digital learning tools in K-12 schools accessed by a browser and ranked no.1 in the assessment category.

The highest score among 6 aspects ranging from attractiveness to novelty is for the "stimulation" aspects (Indicators: *Kahoot!* game is exciting, *Kahoot!* game is fun, *Kahoot!* game can motivate students in learning English) which reached 4.28 score (out of 5). This is also aligned with [5] which stated that *Kahoot!*'s mission is to unlock the deepest potential of every learner, regardless of age or context, by making learning fun, magical, and engaging through games.game-based learning and trivia platform.

Based on the observation and interview, it is found that the main constraint encountered by the teacher is the slow internet connection. This result is aligned with the results found by [8] which shows that the respondent who started to use e-learning was disappointed with the technical abilities of tools available at that time. The slow speed internet also added to the impression that e-learning is not easy to implement.

Unfortunately, it is hard to change that impression later. This respondent does not even consider trying e-learning again. In addition, such disappointed users will spread information on disappointing attempts among other colleagues. Therefore, it is crucial to provide first-time users with adequate technical support.

IV. CONCLUSIONS

It is argued at the beginning of this article that the using of technology has taken a crucial part for work, and it also demands schools to begin using technology for enhancing teaching-learning activities in the classroom.

The findings that have been presented suggest that teachers and students' perceptions on the use of *Kahoot!* is very good. Meanwhile, the main constraint encountered by the teacher is slow internet connection when accessing *Kahoot!* Several disadvantages were found from the observations, such as: it does not use any speaker; it does not use any picture; there is no glimpse of the questions and answers; the teacher may not be able to confirm whether all the names of students have entered; and the teacher may mention the website incorrectly. However, there are also some advantages in using *Kahoot!* for the teacher, such as; teacher gives practice before the real quiz begins; teacher can easily ask students to keep silent when they were noisy; teacher changes the duration of the quiz per question according to the needs (type of questions); and there are various kinds of questions used.

This is important for the improvement of how to use the technology for teaching-learning activities because the teacher can learn how to use *Kahoot!* properly by avoiding the disadvantages found in this research. The research raises important questions about how to handle the constraints encountered by the teacher while using *Kahoot!* It is very crucial to provide users with adequate technical support.

As a result of conducting this research, the researchers proposed that the teacher and students' perception on the use of *Kahoot!* (which are "very good") showing the latest trends in educational innovation. As a teacher, do we dare to continue with the changes by keep awakening in your students the curiosity and the desire to learn every day?

Implementing online and digital learning opportunities can help reduce operational costs without taking up more time or compromising the quality or consistency of instruction delivered. With technology, we can prepare students for college and careers while also allowing for a more personalized education. When students learn with technology, they gain skills that will enable them to be lifelong, independent learners. Therefore, it would be fruitful to pursue further research about how the use of *Kahoot!* for English learning affects the quality of teaching and learning.

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