Quizizz and Kahoot! for Online-Learning Engagement in Elementary School

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Abstract. Quizizz and Kahoot! are well-known online game-based learning platforms that can be integrated into any lesson irrespective of the educational level. This study aims to uncover the experience of students and teachers of an elementary school using Quizizz and Kahoot! after the teacherstake the workshop. Data were collected through focus group interviews using zoommeetings and WhatsApp open-ended questions. This study revealed that teachers and studentspreferred Quizizz to Kahoot! However, the teachers will use both games to create a different atmosphere. The games help teachers to engage students to participate in class. Some of the issues associated with using these game-based learning platforms are network access, quota availability, and reliance on parents for their mobile devices.

Keywords: game-based learning platforms; elementary school; Quizizz, Kahoot!

1 Introduction

Game-based online platforms such as Quizizz and Kahoot! is an academic platform applicable at all levels of education. This creates a completely different atmosphere from traditional textbook-based learning. Quizizz and Kahoot! increase students' interest in learning [1], regardless of whether each has advantages and disadvantages. Quizizz provides more facilities such as library (teleportation) and various types of questions, such as multiple choice, checkbox, fill-in-the-blank. , polls, and open-ended. Meanwhile, Kahoot! has two types of questions: true-false and multiple choice. Students stated that using this platform made them feel like fighting with their opponents to win the game was like playing in an internet shop. A happy atmosphere is created from music, pictures, emoji, and attractive colors. Ratings are also fair because teachers tend to assign grades to each question carefully.

Based on the results of this study, it is a known fact that students prefer Quizizz [2] because it is more motivating, engaging, challenging [3]; [4];[5], entertaining and competitive [4],with a positive impact on them[6]; [7]. Similarly, teachers have a positive perception of Quizizz, and they are highly interested in using it in the classroom [8], even applying it during exams [9].Degirmenci (2021) stated that Quizizz is effective in language learning and positively affects teaching and activities. Students understand the topic better and enthusiastically answer questions in this platform[10]; [5]. From the community service activities held in Jakarta, teachers reported that students gain a very different learning experience from answering questions on Quizizz compared to answering questions on google form[11]. Similarly, Amalia (2020) stated that this platform is preferable in answering traditional formative tests. This study is a continuation of Quizizz and Kahoot! workshop at an elementary school in Cisauk Subdistrict, South Tangerang,in early 2021. Initially, 77.4% of

teachers admitted having no prior knowledge of these games [11]. After the workshop, students and teachers exhibited adequate ability and expertise in designing the quiz[11].This study aims to uncover the experience of students and teachers of an elementary school using Quizizz and Kahoot! after the teacherstake the workshop.

2   Method

This study design employed qualitative methods based on community service activities in early 2021. The participants were teachers and students from different public elementary schools in Cisauk Subdistrict. Data were collected through the focus group interview (FGI) through zoom meeting, involving two teachers comprising of I (male) and R (female), who taught fourth and fifth grades, respectively. Even though I and R were only 1.5 and 6 years old teaching experience,they participated in the Quizizz and Kahoot! activities initially organized by the team and implemented these learning apps in each class post-training. In addition, the participants also consisted of students taught by I and R. Both teachers selected twostudents each from their respective classes based onspecific considerations, namely those who have taken the quiz and obtained a parental permit. A total of four students, two girls and two boys, participated in FGI without being accompanied by their teachers or parents.The results are analyzed by adopting qualitative descriptive models proposed by Creswell and Creswell [12].

3. Result and Discussion

3.1Experience using Quizizz and Kahoot!

Teachers admitted that using technology in elementary school learning inevitably involved parents. They needed to guide and monitor their children and remind them to do specific tasks, thereby creating a conducive learning atmosphere at home..Quizizz and Kahoot! were perceived as a new experience by teachers. Initially, when teachers applied Quizizz and Kahoot! in their classrooms, some parents and students had difficulty learning the numerously recommended new platforms, as disclosed in this interview.

> Students failed to participate in Quizizz because they were initially engaged in virtual learning through google meet and zoom meetings. Therefore, the use of other platforms required practice and training. The fourth graders usually participated in zoom meetings and google meet when they were with me. However, it took students and parents a long time to adapt to Kahoot! or Quizizz (I, male).

Creating a fun and conducive learning environment is one of the factors that participants consider when implementing Quizizz and Kahoot! in class. The goal is that students are faced with a completely different academic environment because studying for months at home, only listening to tutorials, watching videos, doing assignments, and interacting a little with friends and teachers seem monotonous. Kahoo applies Quizizz! games in class and practice them with students. The aim is not to record quiz scores but rather to familiarize them with these tools to create a pleasant learning environment, as the following quote states.

> [...] Children were not bored during learning; therefore, I do not emphasize that they need to get good grades. I employed a variety of processes (R,female).

Although the participants had no initial knowledge of Quizizz and Kahoot!, they participated in the quiz games. This finding is consistent with previous studies, which argued that both teachers and students prefer Quizizz to Kahoot! [3]; [4]; [5].

3.2 Obstacles

Quizizz or Kahoot! offer teachers the option to share either by "play live" (playing together at the same time/ synchronic mode) or "assignment" (homework/ asynchronous mode). Both participants had created these features and eventually realized that obstacles were encountered during its implementation. For example, several students could not select the "play live". They experienced some impediments, such as lack of mobile phones, unavailability of their parents or other family members' gadgets, quotas are not enough, or poor network. The previous study [1] also reported the same obstacles. The following is an excerpt from one of the teacher:

> I gave them homework, which enabled them to use their parents' mobile phones and
> the internet (R, female)

Unlike the "play live," "assign" does not invite students simultaneously within the specified time to do the quiz. This flexible feature provides a period for quizzes work, enabling students to participate when they desire. One of the participants stated as below:

> I prefer the homework feature because students need not bother about any difficulties
> encountered or constrained by access to the internet (lag). It is also more flexible for both
> parties (R, female).

From the statement above, online learning relies heavily on the internet. Under a preliminary study, quizzes do not function effectively with a poor connection [7]. A smooth network signal makes it easy for students to focus without obstacles. Indeed, not all of them are lucky to subscribe to wifi at home, and some rely on quotas. Therefore, it is not surprising that they cannot work from start to finish assuming the synchronous "play live" feature is used. The following statement describes the signal constraints that cause the students' slow pace while answering quizzes.

> Author 1: Are there obstacles or not in trying to answer these quizzes?
> D (boy): The signal is slow
> Author 1: The other?
> K (girl): Same, the signal is not good
> Author 1: Asides from that, is there another problem or not?
> K (girl): When I was using Kahoot! it suddenly stopped in the middle of the process
>   when I tried to answer a question.
> Author 2: What did you do?
> K (girl): I had to start from the beginning.

Those obstacles involve external problems related to quotas or signals, and some also emerged when teachers initially introduced online quizzes. Parents and students were confused about using Quizizz or Kahoot! due to its time constraints while participating in online quizzes, as reported by the following participants:

Students are constrained while entering their game code because they are usually confused whenusing these apps (I, male).

These online quizzes promote students and make them feel superior. They are motivated to answer all questions quickly and try their best to be ranked among the top three on Quizizz or Kahoot! podium. It is a source of pride for the students because both apps have a leaderboard feature that brings up who won the quiz and displays the speed of answering questions for all participants. In addition to the joyful feeling derived from being among the top three, it turns out that students felt stressed and embarrassed when their names appeared at the bottom, as revealed by the following participants:

Author 1: How do you feel when your name is at the bottom?
D (boy): I feel bad once my friends see it
Author 2: Have you ever been at the bottom of the rank?
K (girl): Yes
Author 2: How did you feel?
K (female): Ashamed
Author 1: How about you, M?
M (girl): Me? I am confident
Author 1: Have you ever been at the bottom or not?
M (girl): Once, although suddenly, I was on top again
Author 1: How did you feel?
M (girl): I felt desperate; however, I went up again
Author 1: How about you, A?
A (boy): Indifferent, although, occasionally I was desperate
Author 2: Ever been at the top?
A (girl): Yes, I feel happy

A learning atmosphere that involves emotions and not losing to others is only created when teachers choose a "live" quiz. Conversely, the homework feature hides the students' emotional turmoil. One of the participants used the task feature, ensuring that students are not constrained by network access and have more free time to answer the quiz.This study supports the findings that Quizizz and Kahoot! are tools used to assess learning outcomes and entertaining during competitions. However, certain infrastructural constraints concerning networks and quotas [13].

3.3 Reasons whyselect Quizizz

Previous studiesreported that Quizizz is more interesting and easy to use than Kahoot! [2]; [3]; [4]; [5]; [4]. This study supports these findings because it was disclosed that this platform has more questions types, teleport,and several image options. Many problem features are not installed on Kahoot! rather they are available on Quizziz. In addition, it has question banks (teleport) created by previous users, making it easier for others. This platform also saves the teachers' time in terms of setting questions and reduces their workload. Quizizz has many collections lessons and questions, as the following statement proves this:

Quizizz is more interesting and has many pictures; therefore, I do not have to download more from external sources. If it is Kahoot! I have to find it myself (I, male)

Similar to the teacher, the students admitted to prefer Quiz. This creates an atmosphere for gaming and allows them to repeat wrong answers. Kahoot! do not have these characteristics, as stated by the students' opinions below:

> M (girl): It looks like a game, despite the brain work, because any mistake tend to be corrected and is better understood [...] with brighter colors
> D (boy): Quizizz, Sir. Assuming any answer is wrong, it is corrected. Although Kahoot! is more complicated and I find it difficult to sign in.

Like Amalia's findings [6], these participants showed a positive attitude towards using Quizizz or Kahoot! during learning. This was disclosed by one of the respondents who stated that she used the platformregularly.

> I prefer using Quizizz during learning because the classis more comfortable with this platform. However, I had initially used Kahoot! even though access is limited and paid for, I could not explore it more deeply(R, female).

Both participants in this study are young teachers (under 35 years old). They are highly motivated and intensely interested in using Quizizz or Kahoot! to teach various subjects at any level. Therefore, these findings are consistent with previous studies that interest in using Quizizz is age-related [8].It is also similar to Degirmencia [7]and Yan Mei et al.[10] that Quizizz improves the learning outcomes. The difference was that they focused on the effectiveness of foreign language learning, while this study found improvement in math and science lessons, asboth participants said:

> There are improvements when Quizizz is used, especially during math lessons. (I am a male). There was an increase, specifically in science lessons (R, female).

Quizizz highly motivates and promotes students to perform exceptionally or obtain maximal learning results. That grades are obtained from the interview excerpt:

> Author1: How about your grades? Good?
> M,D,K (simultaneously): yes
> Author1: How good is it?
> M (girl): 90, 98, and 100
> D (boy): I do not know my grade. I failed just one question
> Author 2: K, how were your grades?
> K (girl): Always good, I am1st and 2nd winners

4. Conclusion

Teachers at the elementary school at Cisauk havehigh motivation to use Quizizz and Kahoot! during the learning process in pandemic covid-19. Their students were highly involved in using these game apps to compete. However, the obstacles faced are network access, quota availability, and reliance on parents for their mobile devices. Students and teachers preferred Quizizz to Kahoot! because of its numerous features and conveniences. The game-based e-learning help teachersto engage students to participate in class. This study has practical implications for elementary school teachers to introduce and use Quizizz and Kahoot! platforms.

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