# Active and Interactive Learning Through Quizlet and Kahoot

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*Abstract*—**The use of learning media might adjust to the times and needs of students in this globalization era. Teachers are required to take advantage of technological developments in learning done with students. Today, the problems are about how to be able to realize active and interactive learning using modern technology-based. This can be done by applying to learn using Quizlet and Kahoot applications. The purpose of this study is to explain the advantages of Quizlet and Kahoot in an effort to realize active and interactive learning. The literature study was used in this study, the results showed that Quizlet and Kahoot were effectively implemented to realize active and interactive learning with the advantages of each feature in both applications.**

*Keywords: active learning, interactive learning, Quizlet, Kahoot*

## I. INTRODUCTION

Learning is very closely related to the ability of students to capture a new thing given by a teacher. In this era of globalization, teachers are required to be able to carry out reforms in the field of education, including the use of modern technology in teaching and learning activities. One of the technologies currently being used by most Indonesian in the world of education is learning using smartphone technology. Google, Inc. through consumerbarometer.com conducted a survey with the results that most people use smartphones for listening music (93%), taking photos and videos (89%), playing games (73%), setting alarms (33%), reading the news (34%), checking the weather (6%), making a shopping list (6%), and reading the book or magazine (5%). Although the results of the survey say that, many companies and individuals have released several smartphone-based applications that can be used in the learning process. Some of them are Quizlet and Kahoot, smartphone-based applications, that can be used as tools for evaluation and learning media in the classroom.

Quizlet is an educational platform that is classified as large and has many users today. Therefore, we can access and use the application with a wide and easy range. Especially with this application we can access it with or without internet connection [1]. Although it can be used offline, the Quizlet application will remain well organized. The main function of this Quizlet application is to develop linguistic intelligence for students or other people who use it in terms of learning activities and can be used for all subjects [12]. Not much different from Quizlet, Kahoot is also an application that can be accessed via a smartphone by its users, which in this case is used for learning activities.

However, Quizlet and Kahoot have several differences. Besides being different in terms of content, Kahoot is an application that is used with an internet connection, so it must be used online. Kahoot can be used as a learning evaluation tool because there are various games or quizzes that can hone the speed and accuracy of students in answering questions. This was supported by Rofiyarti and Sari that Kahoot could be played in the form of online quizzes, surveys, and discussions with various ways to play each type [11].

Quizlet and Kahoot are applications that can be used as evaluation tools and media to create active and interactive learning. The components of active and interactive learning are through learning by doing and learning by association (group learning / interacting in study groups) [2], [3], [6]. Quizlet and Kahoot allow students to learn with experience and interact in groups. This study aims to explain the advantages of Quizlet and Kahoot applications in realizing active and interactive learning through learning by doing and learning by association.

## II. RESEARCH METHODOLOGY

This research is a literature study (library research) with a qualitative approach. Through analysis of the use of the Quizlet and Kahoot application on learning, the researcher can find out the advantages of using both applications to realize active and interactive learning. By using literature studies, researchers can obtain a variety of accurate information from various sources such as books or e-books, journals, and other literature. Through this, information or ideas can be obtained to support research topics. The researcher will do data processing and analysis supported by scientific references so that a solution will be obtained for the problems in the study. In the final stage, researchers will carry out the process of writing scientific articles in accordance with the topic specified and by using data that is processed and analysed from various references that have been collected.

## III. RESULT AND DISCUSSION

There are some advantages of using Quizlet and Kahoot applications in active and interactive learning.

### A. *Quizlet trains students to work together and collaborate*

The research [1] shows that with the Quizlet application learning becomes more interactive because students use the benefits in the form of material interpreted audio-visual. In addition, in the Quizlet application, it is also useful in

understanding the material because through the Quizlet application students have the opportunity to train and reflect on the learning material being taught that might appear in the test questions later. Through Quizlet students can also be trained to work together in learning, through collaboration with fellow students.

Quizlet is one of the largest educational platform in the world. Basically, access to this platform is free of charge, whether in the form of a website or application. Therefore, the reach of this platform is beyond doubt. Although available in the form of a smartphone application, it can be used even when offline (not connected to the internet). Although can be access for free, it is well organized. In the other words, the platform provided virtual classroom services range from managing multiple folders containing flashcards to a specific topic or material, limiting users (whether everyone, a particular class, personal user, or need a specific password) to access them to record users' scores while running the existing modes. In fact, a series of flashcards that have been created can be printed, including the tests.

Quizlet is one of the interesting and attractive learning media, there are various kinds of digital flashcards in this Quizlet are used. (a) Cards are similar to conventional flashcards made of paper. On it, users will be shown each card consisting of existing terms. Users can also flip a card by touching the screen to see what the term means. (b) Learn, allowing user to type terms from the displayed definition, and vice versa. After typing the answer, user can tell whether the answer is correct or incorrect. Score can be automatically identified by its answer. (c) Speller, can be used to memorize the spoken word, then user is required to spell correctly. (d) Test, allowing user to take it by including answers. There are at least four methods (writing answers, pairing, multiple choice, and right/wrong) to choose this test. Interestingly, user can print it. (e) Scatter, allowing user the opportunity to match a term with a definition by dragging term and converting it to the correct definition. The right partner will disappear. In the end, users are asked to clear the screen as soon as possible. (f) Space Race, is a mode requires user to type a term when the definition runs from left to right. User are required to type the correct answer before the definition arrives at the end of the screen. There are "level" increases and "live" when a user has reached a certain score. Besides, their "live" will be reduced if user is not able to provide the correct answer. These six modes can be selected when a user accesses the website version, while the smartphone application version is summarized in just three modes (cards, learn, and matches) whose functionality is not significantly different from what is available on the website version.

To sum up, the use of mobile devices, particularly smartphones in relation to mobile learning, can be used for academic purposes or as a support for classroom learning. Quizlet can be downloaded and installed on a mobile device, so students can enjoy the audio-visual presentation of interactive information. This offers students to practice and reflect on the learning material in order to prepare by predicting key concepts appear in the test [13].

### B. *Quizlet increases students' interest in learning*

Martins, et shows the benefits of using the Kahoot application in learning. Through the use of the Kahoot application, there is greater interaction between the teacher and students or students and students. When this application is used properly by teachers it can contribute to the formation of social and moral individuals, especially in working groups. Through the use of this application also the learning results will also increase significantly and teachers can use the Kahoot application to further motivate students and increase students' interest and pleasure in participating the learning process.

### C. *Kahoot facilitates evaluation in learning and increases student learning participation*

Licorish, et al [5] stated that by using Kahoot, students can play an active role in the learning process. Using Kahoot can also help students remember the concepts and knowledge in the learning process. Students could participate more and look more pleasant with the use of this application. In addition, teachers will be easier to evaluate their students.

In fact, Wang and Lieberoth [14] dissected Kahoot! to explore which gamification elements positively impact students' experiences. They found that the full Kahoot experience, rather than any single component, accounted for students' increased concentration and enjoyment. The student points system was the strongest predictor of engagement as students reported an increase in their pulse. However, the presence of audio increased student motivation and classroom dynamics, above and beyond the point system. In fact, teachers may use Kahoot as a reflective tool to validate students' learning and to monitor overall class progress, as well as individuals' learning trajectory. For instance, the utilization of Kahoot in Information Science lecture sessions at our institution over the past 2 years suggest that such tools excite students to actively engage in lectures and contribute to the student learning participation.

Kahoot gave students more opportunities to engage with the lecturer, peers, and lecture content. It also helped in creating a learning experience that was described as "fun", which contributed to useful classroom engagement dynamics. This was a particularly different learning experience to the traditional "chalk and talk" method that students have been exposed to in other courses [4], [10]. The findings substantiate previous research in supporting the use of Kahoot! in fostering our understanding of classroom dynamics, enhanced lecturer-student engagement, and more constructive discussions with peers [9].

When students are engaged, they exhibit curiosity in the learning content and maintain focus during class sessions. Consistent with Wang [14], the findings from our study suggested that maintaining anonymity is critical for facilitating engagement among students who might not be actively participating in classroom discussions. The findings also showed that the employment of Kahoot led to excessive competition among students and to some extent, invoked negative feelings. That said, notwithstanding such feelings, we observed that the desire to perform resulted in increased learning (or knowledge acquisition). While Kahoot! is known as a great tool for doing revision before formal assessments, it is interesting to know that this tool may also promote class discussion after the game, which may ultimately enhance students' ability to remember concepts at a later stage. Thus, beyond increased engagement and a shift in classroom dynamics, the drive to perform, and ultimately

increase learning are positive effects of using Kahoot! during lectures.

### D. Quizlet makes it easy for students to learn about the concepts in the material

The research [15] shows that the Quizlet application contained features such as flashcard, write, learn, spell, test, match, and gravity. The existing features can be useful for training students' understanding of mastering vocabulary and also practicing memory of students. In this case, teacher must strive to build success in the form of using Quizlet applied in learning activities. This can make it easier for students to adjust and can easily remember the concepts that have been taught both in the application and in everyday learning.

Regards to the digital age, the learning process of teaching in the classroom can be integrated with the use of online-based learning tools such as Quizlet. Quizlet can be used for free by teachers and implement them in the classroom. After creating an account in Quizlet, teachers can create content material for the topic to teach or select topics that are already available and created by other Quizlet users. After completing or selecting materials, teachers can begin the lesson by showing and teaching digital flashcards to learners. Then, teacher can use the various features of Quizlet to repeat and test how well the scholars understand and memorize the vocabulary material and the others.

### E. Kahoot and Quizlet realize active, interactive and fun learning

Sari [12] explained some advantages of using the Quizlet application. The advantages of the Quizlet application include the Quizlet application, which is a free application or can be accessed for free. In addition, the Quizlet application also causes students to learn independently by using a laptop or smartphone. Quizlet can also increase social collaboration with peers from students with the features in it. Quizlet can bridge between educators and students in the learning process. Quizlet provides an audio, visual, and also kinesthetic learning experience that allows students to have a pleasant first-hand experience. Palmer, Zajonc and Scribner [8] state teachers need to educate all students the importance of making meaningful relationships between their own thoughts and what they learn to maintain and incorporate new knowledge, this is the advantage of using Quizlet and Kahoot in learning, which makes learning active, interactive, and fun.

## IV. CONCLUSION

Smartphone-based applications such as Kahoot and Quizlet are effective applications and can help students in learning because this application requires students to be independent in working on the questions and learning the material that has been uploaded in the application, Quizlet and Kahoot are applications that can improve student interaction in learning. Evidenced by using Kahoot and Quizlet, students can interact through games that are set in groups in both applications. This makes it easy for teachers to be able to realize an active and interactive classroom atmosphere so that they can achieve learning goals.

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