Curricula:
Journal of Curriculum Development
https://ejournal.upi.edu/index.php/CURRICULA/

Kahoot! as innovation gamification for examination

Efrilla Niza[1], Salsabilah Ardian[2]
[1,2]Universitas Pendidikan Indonesia, Bandung, Indonesia
efrillaniza@upi.edu[1], aurasalsabilahardian@upi.edu[2]

ABSTRACT

Kahoot! is a learning innovation with a gamification method in the form of a platform. This study used a literature review method based on various research results that discuss the implementation of learning using web-based media. The data analysis consists of reading the literature review, summarizing, analyzing, and synthesizing it. The results of this study indicate that in carrying out the learning process, educators need to follow technological developments. By using Kahoot! As a medium for conducting exams or tests, students will get a new and fun experience while doing their exams. This is supported by the website's visual appearance, which uses funny and exciting animations. In addition, in its use, There is no charge, and the application is relatively easy to use. However, the downside of using Kahoot! as a learning media, both educators and students need a good internet network and adequate devices. Kahoot! can be used as an alternative media in learning because of its advantages, but it should also be noted that in its use, Kahoot! Requires a good internet connection and adequate devices.

ABSTRAK

Kahoot! Merupakan sebuah inovasi pembelajaran dengan metode gamifikasi yang berbentuk sebuah platform. Artikel ini menggunakan metode kajian pustaka yang dilakukan pada berbagai hasil penelitian yang membahas mengenai pelaksanaan pembelajaran dengan menggunakan media berbasis web. Proses analisis data terdiri dari membaca tinjauan literatur, merangkum, menganalisis, dan mensitesisnya. Hasil dari kajian ini menunjukan bahwa dalam melakukan proses pembelajaran, pendidik perlu mengikuti perkembangan teknologi. Dengan menggunakan Kahoot! Sebagai media untuk melakukan ujian atau tes, peserta didik akan mendapatkan pengalaman yang baru dan menyenangkan saat mengerjakan ujian mereka. Hal tersebut didukung dengan tampilan visual website yang menggunakan animasi-animasi yang lucu dan menarik. Selain itu, dalam penggunaannya, Kahoot! Tidak dipungut biaya apapun dan pengaplikasiannya terbilang cukup mudah. Namun, kekurangan dari penggunaan Kahoot! Sebagai media pembelajaran adalah baik pendidik maupun peserta didik membutuhkan jaringan internet yang kuat serta perangkat yang cukup memadai. Kahoot! Dapat dijadikan sebagai salah satu media alternatif dalam pembelajaran karean kelebihan-kelebihan yang ditawarkannya, namun perlu diperhatikan juga, dalam penggunaannya, Kahoot! Memerlukan koneksi internet yang kuat dan perangkat yang memadai.

Kata Kunci: Evaluasi pembelajaran; gamifikasi; Kahoot!; kuis.

INTRODUCTION

Current technological advances have made various work systems and methods better and more efficient (Darmawan, 2020). Technological developments have mastered almost all aspects of human life, including the education sector. Technology has become essential to be applied in the learning process and to help solve student learning problems (Cahyadi, 2019). In education, information technology has been used to support administrative services, learning processes, exams, re-registration, libraries, access to grades, quick and easy reference searches, research processes, payment of tuition fees, and even the selection of new student admissions. The existence of technology has helped the education sector become more manageable, more effective, and more efficient.

In developed countries, the application of technology has been going on for a long time. Technology is development and application that aims to solve problems. Thus, technology is usually referred to as helpful discoveries (Huda, 2020). The critical aspects of technology are: first, technology is an ever-changing and growing body of knowledge, a valuable, intangible asset that can make the difference between success and failure for many organizations. Second, technology is a method of understanding, developing, implementing, and using systems that aim to solve problems. Third, technology is a system developed to serve a specific purpose (Fahrizandi, 2020).

Information technology is a variety of matters related to processes, utilization of assistive devices, and information management (Widianto, 2021). The application of information technology in the learning process has changed the models and patterns of learning in the education world. Using this technology, learning can still be carried out correctly (Astini, 2020). Using technology in learning can improve student learning outcomes (Chairudin & Dewi, 2021). Many learning systems use computer aids, one of which is a learning application of Multimedia-based and Web-based (Internet) technologies.

Educators are expected to be able to keep abreast of technological developments, one of which is interactive learning media. Learning media is a vessel for conveying and distributing information to produce teaching and learning activities that are planned effectively and efficiently (Mahardika et al., 2021). Learning media is a tool used to channel information in the form of subject matter to create interaction between teachers and students during the learning process (Wulandari et al., 2022). Learning media can also help students improve understanding, present data excitingly and reliably, facilitate data interpretation, condense information, and generate student motivation and interest in learning (Tafonao, 2018). Learning media is defined as a means of conveying learning material to facilitate learning objectives (Sakdah et al., 2022).

There are various ways to utilize technology in learning activities in this era. Educators have an essential role in developing innovations, ideas, or ideas for using technology in learning (Ardiansyah, 2020). Many applications can facilitate active and interactive student learning (Andari, 2020). One is Kahoot!, a gamification tool to see students' abilities through questions as an online platform for conducting multiple-choice tests (Guardia et al., 2019).

Kahoot! is a free question-based online learning media used in teaching and learning activities to evaluate the results of the student learning process, repeat subject matter, and stimulate student interest in holding discussions both in groups and classically about the questions provided by Kahoot! (Winarti, 2021). Kahoot! is also an interactive learning medium because Kahoot! can be used in teaching activities such as pre-test, post-test, practice questions, and enrichment that can be used via student and teacher cell phones (Daryanes & Ririen, 2020; Bunyamin et al., 2020).

Kahoot! provides a game-based learning platform that brings fun into learning for any subject for all ages, letting users create, play, and share learning games. By using Kahoot! Students can take the test from different places but must be on an internet network, and students need a PIN or link to access Kahoot! Application. Then, with the implementation of Kahoot! Increase motivation and enthusiasm for learning to influence student learning abilities (Misnah, 2019). This has become an innovation in the learning process in the 4.0 era so that students are more accustomed to using technology in everyday life and are better prepared to face a more advanced era.

LITERATURE REVIEW

Kahoot!

Kahoot! Founded in 2012 by Morten Versvik, Johan Brand, and Jamie Brooker, who, in a joint project with the Norwegian University of Technology and Science (NTNU), teamed up with professor Alf Inge Wang and later joined by Norwegian entrepreneur Asmund Furuseth (Wang & Tahir, 2020). This application used to be a platform that could only be accessed via the web until now. It has been developed into an application that can be installed on a smartphone, which is claimed to be more practical (Chotibuddin, 2021).

Kahoot! adapts "formative assessment" to monitor each student's progress in achieving learning objectives and determine the location of student strengths and weaknesses in each learning objective, represented in each quiz question. Evaluation can be immediately known and displayed readily and practically because it is paperless. Kahoot! Divided into three types: (1) Quiz/Game, (2) Discussion, (3) Survey. Kahoot! has two websites to access: (1) Kahoot!.com, which educators can use to create quizzes in Kahoot! and monitor who uses the quiz created by that educator. (2) Kahoot!. It is used for students to access quizzes by entering the PIN provided by the teacher. Muhridza et al., (2018), stated that Kahoot! can motivate students to pay more attention and participate more in class.

How to Use Kahoot!

Several tools must be prepared before the learning evaluation process is carried out using Kahoot! in order to obtain optimal evaluation interactions, including (1) The equipment that the teacher must prepare is the Overhead Projector and screen, (2) Students are encouraged to bring smartphones or other gadgets. (3) Schools must provide an adequate and reliable internet connection to facilitate the learning process using Kahoot! This.

The educator first prepares material for the questions to be asked, and then he can create quizzes via the Kahoot!.com web and log in/sign up using a Google account. Various modes, such as a quiz mode with four answer choices or true-false choices, will be used.

Educators can use it according to the needs of their questions. After that, he can determine how many seconds for 1 question, the deadline for the entire quiz, and how many points will be awarded if the student answers the question correctly. After the quiz is created, educators will be given access to a link or pin to be given to students. Students can access the link or enter a pin by going to Kahoot! Link to enter the quiz. After entering the pin, students will be instructed to input a nickname they will use during the quiz.

When the quiz starts, the questions that have been provided will appear. Participants will be given a few seconds to read the question, and then answer choices will appear, along with pictures if provided. After answering, the student will be notified whether the answer he chose is the correct answer or the wrong answer, and then the student will be taken to the score tab where the score that has been obtained is displayed and also the order/ranking of each participant who is currently taking the quiz.

When all the questions have been answered, the result score and the highest fifth-order score will be displayed. So, the teacher can find out which students have more mastery of the material and less mastery of the material from the quizzes that have been carried out (see **Figure 1**):
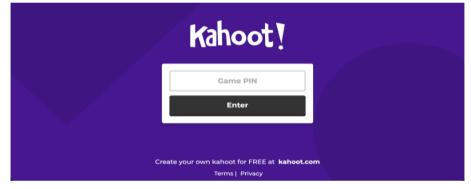

Figure 1. First Look at Kahoot! "Enter Game Pin"
Source: https://kahoot.it/

METHODS

The method used is a literature review. This literature review was carried out on various research results that discussed the implementation of web-based learning media. Kahoot! It is one of the evaluation media using internet facilities and is gamification.

RESULT AND DISCUSSION

Using Kahoot! in the Learning Process

Through playing, children can experience a variety of emotional experiences, ranging from feeling happy, sad, excited, disappointed, proud, angry, Etc. Through playing, children can also understand any rules or procedures for an association; Rofiyarti & Sari (2017) argues that children can practice social life, such as communication and negotiation skills. Playing

also trains cooperation, cooperation, tolerance, respect, and mutual need among children. Kahoot! can affect children's social-emotional development in the ability to compete and collaborate; therefore, if we apply Kahoot! Into the learning process, students will be more enthusiastic about doing assignments because playing Kahoot! with other friends will spur their enthusiasm and passion, which can increase effectiveness and efficiency in doing assignments or questions. This application is a visual type of learning media and directs attention to concentrate on related lesson content (Affrida, 2017). That means media Kahoot! It can attract students' attention so that they are more focused on the subject matter being discussed (Perdana et al., 2020). Also, by using Kahoot! Students will feel challenged because they compete with their friends through the listed rankings, and they also want to do better so that their rankings are high. Use of the Kahoot! It is one of the blended learning strategies to improve critical thinking skills and student learning achievement (Utomo & Wihartanti, 2019). Application of learning media Kahoot! According to observations, game-based learning in the experimental class gives higher cognitive competency results than the results obtained in the control class, which uses direct learning (Kudri & Maisharoh, 2021).

This makes the exams or tests students face more enjoyable and becomes a new experience for them. The average child uses gadgets to play games rather than using them for other things. The closeness of students to gadgets and computers in everyday life must be used as an advantage for teachers to be used as a tool to increase motivation in learning (Utami & Hamdun, 2020). Educators also need to keep abreast of developments in the digital era and master technology, which is increasingly developing and influencing the world of education. Using engaging media will make students experience learning in comfortable conditions and without any pressure (Putri & Asrori, 2019). Learning that was initially monotonous will become more exciting and fun, which can ultimately generate student motivation and interest, increase understanding, and improve learning outcomes (Sulistiyawati et al., 2021).

Pros and Cons of Kahoot! on the Learning Process

Kahoot! in learning is beneficial and makes students more enthusiastic about learning and taking exams. Besides being easy to use and manufacture, Kahoot! can be used free of charge so that teachers do not incur costs. Kahoot! It is also easy to operate and only requires a device such as a computer/laptop/mobile phone and an internet connection, so using Kahoot! in the learning process will be carried out smoothly.

Website visualization displays and animation contained in Kahoot! are also attractive and suitable for students who mostly prefer bright colors. The impression of 'gamification' felt in the appearance and animation and its use makes students more interested. In using Kahoot! also does not require an application. Even though the application exists and can be installed for free, you can only make it and use it via the web. This is an advantage for students using it as they only need to access the web Kahoot! and enter the pin that has been distributed. Another advantage of the Kahoot! Namely, the questions presented in Kahoot! have a limited time allocation because, with limited time, it can train to think quickly and precisely in solving problems with this application (Lisnani & Emmanuel, 2020).

Using Kahoot! in learning makes learning more exciting and effective, but Kahoot! also has drawbacks. The drawbacks include the need for a strong internet connection and the device. Not all students have adequate internet connections and devices. Also, many schools still need to allow students to bring electronic devices such as cell phones or laptops.

CONCLUSION

Kahoot! is a game that teachers can use to give lesson questions to their students. This gamification method is expected to arouse students' passion for learning, motivate the desire to answer questions and become a new experience for them. An educator is expected to be able to use proliferating technology to improve learning objectives that construct the learning process to create active and efficient learning. Aside from the convenience of Kahoot! There are drawbacks, namely if you want to carry out tests or exams with Kahoot! Both students and teachers must connect their gadgets to the internet and other devices such as projector screens. Meanwhile, many schools still need adequate learning tools and strong internet connections. So, it needs to be reviewed whether there are other negative impacts from using Kahoot! Media. This is continuous so that you can know how far the Kahoot is! The gamification method is! This can be applied in the teaching and learning process in the classroom. As we know, there are many other types of online games, such as Quizzes and others.

AUTHOR'S NOTE

The author declares that there is no conflict of interest regarding the publication of this article. The author confirms that the data and content of the article are free from plagiarism.

REFERENCES

Affrida, E. N. (2017). Pola asuh anak usia pra sekolah bagi ibu dengan peran ganda. *Pedagogi: Jurnal Anak Usia Dini dan Pendidikan Anak Usia Dini*, *3*(3a), 72-77.

Andari, R. (2020). Pemanfaatan media pembelajaran berbasis game edukasi Kahoot! pada pembelajaran Fisika. *Orbita: Jurnal Kajian, Inovasi dan Aplikasi Pendidikan Fisika*, *6*(1), 135-137.

Ardiansyah, M. (2020). Pemanfaatan aplikasi Kahoot! sebagai media pembelajaran matematika kreatif. *Jumlahku: Jurnal Matematika Ilmiah STKIP Muhammadiyah Kuningan*, *6*(2), 145-155.

Astini, N. K. S. (2020). Pemanfaatan teknologi informasi dalam pembelajaran tingkat sekolah dasar pada masa pandemi COVID-19. *Lampuhyang*, *11*(2), 13-25.

Bunyamin, A. C., Juita, D. R., & Syalsiah, N. (2020). Penggunaan Kahoot! sebagai media pembelajaran berbasis permainan sebagai bentuk variasi pembelajaran. *Gunahumas*, *3*(1), 43-50.

Cahyadi, R. A. (2019). Pengembangan bahan ajar berbasis ADDIE model. *Halaqa: Islamic Education Journal*, *3*(31), 35–43.

Chairudin, M., & Dewi, R. M. (2021). Pengembangan bahan ajar buku saku digital berbasis *problem based learning* pada mata pelajaran ekonomi. *Edukatif: Jurnal Ilmu Pendidikan*, *3*(3), 951-962.

Chotibuddin, M. (2021). Pengaruh penggunaan media pembelajaran berbasis aplikasi (Kahoot!) terhadap hasil belajar peserta didik pada mata pelajaran fiqih kelas VII di MTs Muhammadiyah 06 Banyutengah. *Jurnal Mahasiswa Pendidikan*, *1*(1), 112-138.

Darmawan, A. (2020). Pengaruh penggunaan kahoot terhadap hasil belajar materi ruang lingkup biologi di SMA Negeri 1 Muncar. *Jurnal Edukasi dan Teknologi Pembelajaran., 1(2), 91–99.*

Daryanes, F., & Ririen, D. (2020). Efektivitas penggunaan aplikasi Kahoot! sebagai alat evaluasi pada mahasiswa. *Journal of Natural Science and Integration*, *3*(2), 172-186.

Fahrizandi, F. (2020). Pemanfaatan teknologi informasi di perpustakaan. *Tik Ilmeu: Jurnal Ilmu Perpustakaan dan Informasi*, *4*(1), 63-76.

Guardia, J. J., Del Olmo, J. L., Roa, I., & Berlanga, V. (2019). Innovation in the teaching-learning process: The case of Kahoot!. *On The Horizon*, *27*(1), 35-45.

Huda, I. A. (2020). Perkembangan Teknologi Informasi dan Komunikasi (TIK) terhadap kualitas pembelajaran di sekolah dasar. *Jurnal Pendidikan dan Konseling (JPDK)*, *2*(1), 121-125.

Kudri, A., & Maisharoh, M. (2021). Pengaruh media pembelajaran Kahoot! berbasis *game based learning* terhadap hasil belajar mahasiswa. *Edukatif: Jurnal Ilmu Pendidikan*, *3*(6), 4628-4636.

Lisnani, L., & Emmanuel, G. (2020). Analisis penggunaan aplikasi Kahoot! dalam pembelajaran IPA. *JIPI (Jurnal IPA & Pembelajaran IPA)*, *4*(2), 155-167.

Mahardika, A. I., Wiranda, N., & Pramita, M. (2021). Pembuatan media pembelajaran menarik menggunakan Canva untuk optimalisasi pembelajaran daring. *Jurnal Pendidikan dan Pengabdian Masyarakat*, *4*(3). 275-281.

Misnah, M. (2019). Pengaruh media pembelajaran situs lumpang batu dan motivasi belajar terhadap hasil belajar siswa SMA. *JTP - Jurnal Teknologi Pendidikan*, *21*(1), 42-55.

Muhridza, N. H. M., Rosli, N. A. M., Sirri, A., & Samad, A. A. (2018). Using game-based technology, Kahoot! for classroom engagement. *LSP International Journal*, *5*(2), 37-48.

Perdana, I., Saragi, R. E. S., & Aribowo, E. K. (2020). Persepsi siswa terhadap pemanfaatan media Kahoot! dalam pembelajaran bahasa Indonesia. *Kwangsan: Jurnal Teknologi Pendidikan*, *8*(2), 290-306.

Putri, V. V. E., & Asrori, M. A. R., (2019). Pemanfaatan digital game base learning dengan media aplikasi Kahoot.it untuk peningkatan interaksi pembelajaran. *Inspirasi: Jurnal Ilmu-Ilmu Sosial*, *16*(2), 141-150.

Rofiyarti, F., & Sari, A. (2017). TIK untuk PAUD: penggunaan platform "Kahoot!" dalam menumbuhkan jiwa kompetitif dan kolaboratif anak. *Pedagogi: Jurnal Anak Usia Dini dan Pendidikan Anak Usia Dini, 3(3b)*, 164-172.

Sakdah, M. S., Prastowo, A., & Anas, N. (2022). Implementasi Kahoot! sebagai media pembelajaran berbasis game based learning terhadap hasil belajar dalam menghadapi era revolusi industri 4.0. *Edukatif: Jurnal Ilmu Pendidikan*, *4*(1), 487-497.

Sulistiyawati, W. S., Sholikhin, R. S., Afifah, D. S. N., & Listiawan, T. L. (2021). Peranan game edukasi Kahoot! dalam menunjang pembelajaran matematika. *Wahana*

Matematika dan Sains: Jurnal Matematika, Sains, dan Pembelajarannya, *15*(1), 56-57.

Tafonao, T. (2018). Peranan media pembelajaran dalam meningkatkan minat belajar mahasiswa. *Jurnal Komunikasi Pendidikan*, *2*(2), 103-114.

Utami, A. K. Z., & Hamdun, D. (2020). Pengaruh penggunaan aplikasi Kahoot! terhadap motivasi belajar bahasa Arab siswa kelas X MAN 4 Kebumen. *Edulab: Majalah Ilmiah Laboratorium Pendidikan*, *5*(1), 20-31.

Utomo, S. W., & Wihartanti, L. V. (2019). Penerapan strategi blended learning untuk meningkatkan kemampuan berpikir kritis mahasiswa pada era revolusi industri 4.0. *Kwangsan: Jurnal Teknologi Pendidikan*, *7*(1), 30-44.

Wang, A., & Tahir, R. (2020). The effect of using Kahoot! for learning – a literature review*. Computers & Education, 149*, 103818.

Widianto, E. (2021). Pemanfaatan media pembelajaran berbasis teknologi informasi. *Journal of Education and Teaching*, *2*(2), 213-224.

Winarti, A. (2021). Korelasi antara kemampuan guru melaksanakan pembelajaran dengan media kahoot dan hasil belajar menulis teks karya ilmiah siswa SMAN 3 Sintang. *Jurnal Edukasi Khatulistiwa Pembelajaran Bahasa dan Sastra Indonesia Vol*, *4*(1), 12-24.

Wulandari, T., & Mudinillah, A. (2022). Efektivitas penggunaan aplikasi Canva sebagai media pembelajaran IPA MI/SD. *Jurnal Riset Madrasah Ibtidaiyah*, *2*(1), 102-118.