

Student Response to TikTok Application as a Science Biology Learning Media for Middle School Students

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Abstract. This study aims to analyze the perceptions of junior high school students towards learning media using the TikTok application. Learning media is a means that greatly affects the learning process of students in the classroom. During the pandemic and towards the new normal, teachers are very confused about determining the right learning media to give to students. Ideally, learning media should be fun, very close to students and can be used anywhere and anytime. The TikTok application is a social media application that is much favored by junior high school students. The subjects in this study were students of SMP Negeri 6 Tebingtinggi City. Data from this study were collected using Google Forms to see student responses to science-biology learning. The results of the study of student responses to the TikTok application as a science-biology learning medium are: stating the quality of the display of learning media using the TikTok application is attractive, fun and easy to operate as much as 92.14%, states that learning media using the TikTok application increases students' knowledge in learning as much as 87.97%, stated that students' motivation to learn increased by using the TikTok application as much as 85.88%, and stated that learning activities became fun by using the TikTok application as much as 86.56%. It can be concluded that the feasibility of using the TikTok application as a learning medium is 88.13%, meaning that the use of the TikTok application as a learning medium is very feasible.

Keywords : student responses, TikTok application, science-biology learning media.

1 Introduction

The use of teaching aids during the pandemic has a significant function in helping students master biology modules in an abstract way. The change in learning methods from face-to-face (offline) to online (online) is a challenge for teachers in educational institutions, especially the biological research aspect, to change teaching strategies and learning features. [1].

The impact of Covid-19 on efficient learning innovation provides a new perspective for educational

institutions that no longer explain how to study compulsory face-to-face in the room [2]. A significant role in learning is played by online remote technology data systems, which must be ready for home learning. An alternative that can be applied by using Android as an area in the learning process. Using Android as a learning tool can be a substitute as well as a solution so that students become more active in the way of learning. Students who are more active will affect the results of the learning process. Learning outcomes are also closely related to students' scientific literacy [3,4].

Technology has advanced, but the teaching and learning process has not been able to utilize technology media optimally, and teachers still need to provide learning materials. Teachers play an important role in online learning, especially during the Covid-19 pandemic [5]. Teachers must be able to motivate students to learn. In addition, teachers should carefully review the assignments given to their students and remember to reward their achievements in online learning during the pandemic. [6] Science learning can foster cognitive, psychomotor, and social thinking skills through direct experiences given to students scientifically about the natural surroundings. However, in a pandemic like this, science learning is carried out online and independently by junior high school students.

It should be noted that students are currently listed in the digital generation. [7] The digital native generation is a digital generation since birth. This means that this generation is introduced to PC technology from an early age. Nowadays, internet applications are widely used in all countries, there are e-learning plans or distance learning plans, where teachers and students can practice outside of school or campus. There is also an online learning plan, meaning that learning takes place without face-to-face communication, but only using applications such as Android. The advantage of learning on the Android platform is that the system can be done very flexibly, both in place and in time.

The Tebingtinggi science teacher in the Tebingtinggi MGMP community, faces obstacles including: 1) students' lack of interest in learning due to ineffective use of teaching aids; 2) Teachers only use science textbooks, power point presentations and educational videos that are only owned by teachers, and only a few students understand them. This is because the ability to master the lessons of each student is different. Some students understand only with one study. Many students need to study repeatedly to understand the learning material. This is because students do not understand the material being studied. The use of learning devices is still classified as classic (it can only be used in one place and is difficult to access for low-power androids).

Tiktok app is a Chinese network based music video platform. The social media service was launched in September 2016. The app authorizes users to create their own favorite short music videos (tik tok). Tik tok Positioned as the application downloaded up to 45.8 million times the first quarter (Q1) in 2018 [8]. Tiktok application users in Indonesia itself, of course, consists of teenagers who are still students. If used properly, the Tiktok application can be an interesting and fun learning medium for students. The use of the Tiktok application as a learning medium is intended to make it easier for students to understand the science learning materials provided by the teacher. Through the tiktok application, Interactive learning media can support teachers in learning effectively and efficiently.

From the explanation above, we can see that the Tiktok application is very popular among students. Therefore, researchers are interested in making Tiktok as a scientific learning media. Researchers suggest that using the Tiktok application can help students feel happier when learning science material. Developing learning media with the tiktok application can attract students' attention, make them feel happy while learning, and succeed in achieving their learning goals. So that the use of the Tiktok application as a scientific learning medium can provoke student responses to various learning materials provided by the teacher.

2 Research Methods

This research method uses descriptive qualitative. The sample for this study was high school students who were randomly selected (random sample). The survey data was collected through Google Forms using a questionnaire to ensure student responses to the Science-Biology learning media using the Tiktok application. The number of respondents was 88 students of SMP Negeri 6 Tebingtinggi who were randomly sampled. In addition, the data were analyzed in stages, data reduction, data presentation, and drawing conclusions.

3 Results And Discussion

Based on research conducted on junior high school students, several important points were obtained regarding the results of junior high school students' responses to science-biology learning media using the tiktok application. The research results are explained starting from the respondent's data to the discussion based on the relevant literature references with various points of view being studied. A complete explanation of the results of junior high school students' responses to the science-biology learning media using the tiktok application from several questions concerning various aspects studied with direct answers from students. The results of the study of student responses to the TikTok application as a science-biology learning medium consisted of aspects, namely: appearance, media effectiveness, learning motivation, and learning activities.

3.1 Tiktok Media Display

The results of the display quality of the TikTok media in learning using the TikTok application are interesting, fun and easy to use in learning. A total of 92.14% of video views attract attention, Feedback or feedback on practical issues is clearly presented, The layout of menus, text, images and other content is clear. The appearance of the TikTok application can attract the interest of students because of its various features that can be realized in the learning process.

3.2 Media Effectiveness

The results of student responses as much as 87.97% stated that learning media using the TikTok application increased students' knowledge in learning. This means that students give a very positive response to the learning media. This is corroborated by previous researchers stating that the TikTok application can be used as an effective learning medium [9]. The TikTok application meets the

learning needs of students, can attract the interest of students because of its novelty and has many features that can be implemented into learning, and finally the TikTok application is equivalent to the development of maturity and experience as well as the characteristics of students who are the millennial generation, who are attached and close with the digital world.

3.3 Motivation to learn

The results of student responses as much as 85.88% of students stated that students' motivation to learn increased by using the TikTok application. The results of the previous thesis research also showed that social media tiktok had a very significant positive effect on learning achievement [10]. The positive response given by students stated that TikTok-based biology learning media made students motivated in studying motion material in living things, plant structure and function, food digestive system, and human blood circulation system. The importance of using learning media to increase students' learning motivation. Because basically student learning activities are influenced by motivation. If students are motivated in learning activities, automatically students will be more interested in learning concepts that are abstract and will increase activity and learning outcomes [11]. It can be concluded that the tiktok application can motivate students in learning science-biology.

3.4 Learning activity

The results of student responses as many as 86.56% of students stated that learning activities were fun using the TikTok application. The TikTok application can be useful as an interesting and interactive science learning media. Wisnu Nugroho Aji's research on Tiktok Applications as Indonesian Language and Literature Learning Media which obtained the results of a study, namely through the Tik Tok application, teachers can easily create interactive learning, so that it can be adapted to the environment, situation, and conditions of students [12].

It can be concluded that the response to the use of the TikTok application as a science-biology learning medium in SMPA 6 Tebingtinggi students is 88.13%, meaning that the use of the TikTok application as a learning medium. The TikTok application meets the learning needs of students, can attract the interest of students because of its novelty and has many features that can be implemented into learning, and finally the TikTok application is equivalent to the development of maturity and experience as well as the characteristics of students who are the millennial generation, who are attached and close with the digital world. The main thing that must be done by teachers in using appropriate learning media is to find, select, and find learning media that attract students [3].

4 Conclusion

It can be concluded that the feasibility of using the TikTok application as a learning medium is 88.13%, meaning that the use of the TikTok application as a learning medium is very feasible.

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