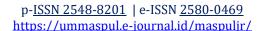# The effectiveness of using Blooket on improving the learning motivation of science students in grade 8 at MTs Negeri 1 Sidenreng Rappang

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Abstract

Blooket, yang dilafalkan sebagai 'blu-kit', merupakan salah satu platform pembelajaran yang digunakan dalam proses belajar mengajar. Platform ini dapat dimanfaatkan dalam pembelajaran daring dan diharapkan mampu meningkatkan motivasi belajar siswa. Penelitian ini bertujuan untuk mengetahui efektivitas penggunaan Blooket terhadap motivasi belajar siswa mata pelajaran Ilmu Pengetahuan Alam (IPA) kelas VIII di MTs Negeri 1 Sidenreng Rappang. Jenis penelitian ini adalah quasi experimental dengan desain one group pretest-posttest. Populasi dalam penelitian ini adalah seluruh siswa kelas VIII MTs Negeri 1 Sidenreng Rappang yang berjumlah 238 orang. Sampel penelitian ditentukan dengan teknik random sampling dan terpilih sebanyak 31 siswa dari kelas VIII.A. Instrumen yang digunakan dalam penelitian ini adalah tes dalam bentuk pilihan ganda dan kuesioner untuk mengukur motivasi belajar siswa, mencakup aspek ketuntasan belajar dan ketepatan waktu dalam memahami materi. Hasil penelitian menunjukkan bahwa terdapat efektivitas penggunaan Blooket terhadap motivasi belajar siswa. Hal ini dibuktikan melalui hasil uji paired sample t-test antara data pretest dan posttest motivasi belajar siswa yang menunjukkan nilai signifikansi. Nilai rata-rata motivasi belajar setelah perlakuan ($Mx = 88,86$) lebih tinggi dibandingkan sebelum perlakuan ($My = 48,95$). Dengan demikian, dapat disimpulkan bahwa penggunaan Blooket efektif dalam meningkatkan motivasi belajar siswa IPA kelas VIII di MTs Negeri 1 Sidenreng Rappang.

Kata Kunci: Blooket, motivasi belajar, IPA, siswa kelas VIII, quasi experimental

Abstract

Blooket, pronounced as 'blu-kit', is an educational platform used to enhance the learning process. It can be utilized for online learning and is expected to increase students' learning motivation. This study aims to determine the effectiveness of using Blooket in improving the learning motivation of eighth-grade students in science (IPA) at MTs Negeri 1 Sidenreng Rappang. This research is a quasi-experimental study using a one-group pretest-posttest design. The population consisted of all eighth-grade students at MTs Negeri 1 Sidenreng Rappang, totaling 238 students. The sample was selected using random sampling, resulting in 31 students from class VIII.A. Data collection instruments included multiple-choice tests and questionnaires to measure students' learning motivation, focusing on mastery and timeliness in understanding the material. The results showed that the use of Blooket effectively improved students' learning motivation. This was supported by the paired sample t-test analysis of pretest and posttest data, which showed a significant difference. The average posttest score ($Mx = 88.86$) was higher than the pretest score ($My = 48.95$). Therefore, it can be concluded that Blooket is effective in enhancing students' learning motivation in science subjects.

Keywords: Blooket, learning motivation, science, eighth-grade students, quasiexperimental

Introduction

Education is a key component in the development of human resources within the national development process. Quality human resources are expected to manage the existing natural resources effectively. Moreover, individuals with quality education possess the ability to master knowledge and technology, uphold cultural values, have strong personalities, and are skilled in managing the nation's natural wealth (Setiawan, 2020).The rapid advancement of knowledge and technology today demands a higher level of education that can meet the needs of globalization. All those involved in education are expected to explore every possibility to improve the quality of education. Classroom learning experiences play a crucial role in ensuring quality education (Syamsunir, 2023).Education can also be seen as a process of human development to lead a righteous life. It is the key to creating quality human resources. The implementation of education in Indonesia aligns with the National Education System as stated in the 2003 Law No. 20, Article 3, which says, "National education functions to develop the ability and form the character and civilization of a nation aimed at developing the potential of students to become individuals who are faithful and devoted to God, have noble character, are healthy, knowledgeable, capable, independent, and responsible democratic citizens."

The advancement of technology has led to significant changes in the way education is delivered. According to Government Regulation No. 19 of 2005, the curriculum is implemented using a multi-strategy approach, supported by multimedia, adequate learning resources, and technology, while also utilizing the surrounding environment as a learning source. To achieve this, it is essential for educators to use media that make learning more effective and efficient (Anjeliani, 2022).

As stated in Law No. 20 of 2003 on National Education, education is a planned and conscious effort to create a learning atmosphere and a learning process so that students can actively develop their potential in spiritual strength, self-control, personality, intelligence, noble character, and the skills required for themselves, society, the nation, and the state. Article 40, paragraph 1 of Government Regulation No. 57 of 2021 on Educational Standards mandates that advances in science, technology, and the arts be considered in curriculum development at all education levels. According to Law No. 20, Chapter II, Article 3 of 2023, national education functions to develop the ability and character of the nation to create an enlightened society and support the progress of its people.Prof. Zaharai Indris suggests that education is a series of communicative activities aimed at guiding adults (educators) and students to meet face-to-face or use media to assist in the child's overall development (Mata & Semester, 2020). Al-Ghazali views education as an effort by educators to eliminate bad character and instill good character in students, drawing them closer to Allah and achieving happiness both in this world and the hereafter. Meanwhile, Ibnu Khaldun sees education as a broad concept that extends beyond just the process of learning with space and time as its boundaries. It represents the process of human awareness in understanding, absorbing, and experiencing natural events throughout time (Firmansyah, 2019).

Ki Hajar Dewantara, Indonesia's National Education Father, defines education as "the guidance in life for the growth of children, which aims to lead all the inherent natural potential in children so that they, as individuals and as members of society, can achieve the highest possible safety and happiness." Education, therefore, is a

humane process, also known as "humanizing humanity."

It is crucial to respect the basic rights of every human being. Students are not mere machines to be controlled at will, but rather a generation we must assist and care for in every stage of their development towards maturity, enabling them to form critical thinking, as well as good moral attitudes. Education, therefore, should not only shape individuals who are different from others in their ability to eat, drink, dress, and have a place to live but should also aim to humanize individuals.

Education is essential in efforts to eliminate ignorance, fight poverty, raise the living standards of all citizens, and build the dignity of the nation and state. Therefore, the government has been committed to addressing various issues in enhancing education at all levels, from elementary to higher education (Ujud, 2023).Gagne & Briggs (1979) state that learning is a system aimed at assisting the learning process, consisting of a series of events designed to influence and support the internal learning process of students. In other words, learning is an activity intentionally planned and designed to aid the learning process (Astuti, 2020).

Learning is an interaction process between students, educators, and learning resources within a learning environment. Quality learning involves all key components of the teaching and learning process—teachers, students, and their interactions—along with supportive elements such as learning objectives, material selection, learning facilities, a conducive learning environment, and appropriate evaluation methods. Learning achievements can be optimized by improving the quality of learning, which is a significant task for teachers, including diagnosing learning difficulties and providing assistance to overcome them. A learning process is considered successful when students experience changes in behavior in cognitive, affective, and psychomotor aspects. Generally, learning is deemed successful if students can master the material provided (Ummah, 2019).

With the advancement of the digital age, we are now entering the 5.0 era, where students can choose their own learning methods. This means they can decide the time, place, and approach to learning. As students access information faster, their curiosity and emotional states develop quicker. In this context, teachers guide students' learning, helping them consider opportunities, learning media, the learning environment, and available support for them. Today, students use electronic devices as learning media, gaining insights into global phenomena while deepening their knowledge. Researchers are now exploring how game-based media like Blooket can support educational institutions (Nabila & Nurhamidah, 2024).Blooket is a game-based platform that presents multiple-choice questions, allowing students to compete against each other in class. This game tracks students' responses in real-time, rewarding correct answers with higher scores. The use of Blooket is expected to increase student engagement, making learning more interactive, and fostering emotional and social development among peers during the learning process.

Based on preliminary observations, it was found that the teaching process in schools generally still uses lecture methods or conventional approaches, supported by PowerPoint presentations. Teachers and students engage in manual learning, with the teacher acting as the primary information deliverer while students mostly serve as passive listeners. Although this method is effective for direct information delivery, there is a need to create a more interactive learning atmosphere to increase student participation.

One solution to enhance student interaction and involvement in learning is through digital media such as Blooket. Blooket is a game-based learning platform designed to help students learn through interactive quizzes and fun challenges. The use of Blooket can increase student motivation, make the learning process more engaging, and support active participation. Furthermore, this platform makes it easier for teachers to deliver content, create an effective learning environment, and encourage positive collaboration and competition among students.

METHOD

This study adopts a quantitative approach rooted in the philosophy of positivism, aiming to collect data to evaluate theories through empirical facts. The research uses a deductive approach, where problems and their solutions are explained with data gathered from the field. Quantitative research emphasizes numerical data, utilizing a specific sample or population. Statistical methods are applied to test hypotheses established before the study, allowing for measurable analysis of the data collected (Sugiyono, 2018).

The research employs a quasi-experimental design, specifically the one-group pretest-posttest design. This design doesn't include a comparison group but relies on pretest data to determine the effectiveness of Blooket in enhancing student motivation. By comparing the results of pretest and posttest scores, the research aims to assess the impact of using Blooket in improving students' learning outcomes. This design provides a clear understanding of how the tool affects student engagement and learning motivation.In terms of variables, the study identifies both independent and dependent variables. The independent variable is the use of online learning media, particularly the Blooket platform, while the dependent variable is the students' learning outcomes. The study focuses on students' abilities before and after using Blooket, categorizing them based on their initial proficiency levels. The research design includes pretests to assess prior knowledge, followed by the intervention (Blooket-based learning), and concludes with posttests to evaluate any changes in learning outcomes.

Data collection techniques include documentation, testing, and questionnaires. Documentation provides background information about the student population, while tests measure student performance in IPA (science) before and after the use of Blooket. The pretest and posttest consist of multiple-choice questions, where correct answers are scored to determine the effectiveness of the learning intervention. Additionally, questionnaires assess students' perceptions of their learning experiences, including how Blooket affects their confidence, understanding of the material, and time management skills during the learning process.For data analysis, descriptive statistics are employed to calculate the mean scores of the pretest and posttest. The scores are converted to percentages using a specific formula, allowing for a clear comparison of students' performance before and after the intervention. The analysis aims to reveal whether the use of Blooket has a significant effect on students' learning outcomes in the IPA subject, providing valuable insights into the tool's effectiveness in improving student motivation and academic achievement.

RESULT AND DISCUSSION

The research was conducted at MTs Negeri 1 Sidenreng Rappang, located in South Sulawesi, from January 17 to February 17, 2025, following official permission from the relevant governmental bodies. The subject of the research was Natural Science (IPA), specifically the circulatory system, taught using the Blooket platform.

The use of Blooket during the study led to the effective completion of the curriculum within the set timeframe. The interactive and gamified nature of Blooket allowed students to engage more deeply with the material, facilitating better understanding. The learning process was structured with a review of previous lessons, followed by the introduction of new content, and concluded with interactive questions on Blooket to evaluate students' grasp of the topics. Throughout the study, the implementation adhered to the schedule, ensuring that all activities were carried out as planned.

In the first week, students participated in the pre-test to assess their initial knowledge of the circulatory system. By the second week, after engaging with Blooket, students took the post-test to evaluate their learning progress. A notable improvement in test scores was observed, confirming the effectiveness of Blooket as a teaching tool. The average score of students increased significantly from 48.95 on the pre-test to 88.86 on the post-test, indicating a substantial gain in knowledge and motivation.

The effectiveness of Blooket in enhancing student learning outcomes was evident, as demonstrated by the increase in post-test scores. The use of Blooket fostered an engaging learning environment that encouraged student participation, making the learning process more enjoyable and less intimidating. As a result, students became more confident in their understanding of the material.Furthermore, the research showed that Blooket provided students with ample time to complete their tasks without feeling rushed. This time efficiency, along with the platform's interactive features, helped students manage their learning process effectively. The results suggest that the use of Blooket not only improved academic achievement but also positively impacted students' learning motivation, making it a valuable educational tool for enhancing classroom experiences.

CONCLUSION

Based on the research conducted on the effectiveness of using Blooket media to improve the motivation of learning Science among 8th-grade students at MTs Negeri 1 Sidenreng Rappang, it can be concluded that the use of Blooket has a significant impact on improving student motivation. This is evidenced by the increase in the average motivation score from 48.95 in the pre-test to 88.86 in the post-test. The use of Blooket successfully created a more interactive, engaging, and easily accepted learning environment, making students more enthusiastic about participating in each learning session.

Furthermore, the use of Blooket also encourages active student participation in the learning process. The gamification features offered by Blooket make students more emotionally and cognitively involved in learning, which in turn enhances their understanding of the material. Students showed a higher level of interest in learning Science when using Blooket compared to traditional learning methods.

Thus, it can be concluded that Blooket not only enhances student learning motivation but also creates a fun and competitive learning environment. Therefore, Blooket media can be an effective tool for improving the quality of education, especially in Science subjects at MTs Negeri 1 Sidenreng Rappang.

Suggestions

Students are encouraged to be more active in participating in lessons, especially when using technology-based media like Blooket. Additionally, students should make use of this technology to enhance their understanding of the material both independently and collaboratively with their classmates, making the learning process more enjoyable and effective. Teachers are advised to continue developing their creativity in utilizing interactive learning

media such as Blooket. Teachers can maximize the available school facilities, such as smart TVs, to display Blooket directly in class, making lessons more engaging and easier to follow. Furthermore, teachers need to stay updated on the developments in educational technology to create relevant and effective learning experiences. Schools are encouraged to support the use of technology in the learning process by optimizing existing facilities, such as smart TVs. Schools should also provide training or assistance to teachers in using digital learning media like Blooket, ensuring that technology is used optimally. This will help create a more modern and effective learning environment. Future researchers are advised to expand the scope of this study, considering factors such as the number of respondents, educational levels, and different subjects. Additionally, research can focus on the impact of Blooket on learning outcomes, critical thinking skills, or other affective aspects of students. Comparing the effectiveness of Blooket with other digital learning media could also be an interesting topic to explore for more comprehensive results.

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