

Increasing the Enthusiasm and Participation of 6 Grade Students of SD Negeri Ledug Through the Use of the kahoot in Science Learning

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ARTICLE INFO

Article history:

DOI:

[10.30595/pssh.v25i.1766](https://doi.org/10.30595/pssh.v25i.1766)

Submitted:

July 22, 2025

Accepted:

August 11, 2025

Published:

August 24, 2025

Keywords:

Kahoot; Student Enthusiasm;
Participation; Science Learning

ABSTRACT

This study aims to describe how Kahoot can enhance the enthusiasm and participation of sixth-grade students at SD Negeri Ledug during science learning. Employing a qualitative research method, data were collected through interviews and observations. The analysis involved processing the data to uncover patterns and insights related to student engagement. The results reveal that using Kahoot in science learning significantly increases students' enthusiasm and active involvement in completing assessments. The gamified learning platform creates an interactive and enjoyable environment that motivates students to participate more actively in classroom activities. Observations showed that students were more focused, engaged, and eager to answer questions during lessons involving Kahoot compared to traditional teaching methods. Additionally, interviews highlighted the positive perception of students toward Kahoot, emphasizing its role in making learning fun and reducing anxiety during assessments. The competitive elements of Kahoot encouraged students to stay attentive and perform better while fostering a collaborative atmosphere among peers. In conclusion, this study demonstrates that integrating Kahoot into educational practices not only boosts student participation but also enhances their overall enthusiasm for learning. These findings suggest that Kahoot in science learning can be a valuable tool for educators seeking to improve student enthusiasm, participation and create a more dynamic learning experience.

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1. INTRODUCTION

Education in the modern era is currently experiencing very rapid development, along with the advancement of information and communication technology. This change has also had a major impact on the world of education, especially in terms of increasingly diverse learning methods and media. Now, various interactive and participatory digital-based media are starting to be widely used in the teaching and learning process. The challenge facing the world of education today is how to utilize technology appropriately, so as to improve the quality of student learning outcomes at various levels of education (Utami, Ragil, and Atmojo 2021)(Fitria et al. 2023).

In the realm of basic education, the learning process needs to be designed in such a way as to be able to foster students' interest in learning. Interest in learning is an important factor that plays a role as the main driver

for students in participating in teaching and learning activities at school. When this interest grows, students tend to be more enthusiastic and easily understand the material presented. Conversely, without interest, students get bored more quickly and have difficulty absorbing the lessons given by the teacher (Supriyadin 2023) (Saraswati, Rodliyah, and Rahmawati 2022).

In actuality, there are still a number of issues facing Indonesian education. One of the most notable is the lack of enthusiasm and drive pupils have for learning particular courses, particularly those deemed challenging and dull. Because they include a lot of abstract theoretical notions and logical reasoning, students frequently view disciplines in the natural sciences (IPA) as being difficult. This issue is made worse by the underutilization of tangible and interactive learning resources, which causes students to become less engaged in the learning process and their learning outcomes to fall short of their full potential.

This state is a significant worry in attempts to raise the standard of education, particularly at the elementary school level, which serves as the starting point for developing a scientific understanding (Idhatul Hasanah 2025) (Kusumaningtyas and Surakarta 2025) (Nabila 2024). Kahoot has been proven to increase students' enthusiasm in participating in learning because the questions presented are in the form of competitive quiz games. The game-like format makes students more challenged and entertained when answering the questions given. This makes students more actively involved in discussions and understand the material learned with classmates faster.

Several previous studies have proven that Kahoot is effective in science learning at elementary school level. For example, Aji (2024) in his research stated that the application of the Discovery Learning method combined with the Kahoot application can improve students' understanding of science concepts. This interactive media has been proven to make it easier for students to understand subject matter that was previously considered difficult. Thus, Kahoot can be an alternative learning media that is relevant to be applied in elementary schools (Yu 2021) (Hasani, Faizatil, Wulandari, Rifka 2025).

Ledug State Elementary School is a school located in the city border area. Based on initial observations, the science learning process in grade VI still uses many conventional methods with limited media and exercises that tend to be monotonous. This condition makes students quickly feel bored and less interested in being actively involved in learning activities. As a result, student participation in class and learning evaluation results have not shown significant development. Interestingly, most students in this school already have access to gadgets, either personal or parental, thus opening up opportunities to apply more modern and technology-based learning methods such as kahoot.

The 6th grade teacher realized that conventional methods were less effective, so he saw the use of Kahoot as the right solution. With a more interactive, visual, and competitive learning game format, this application is expected to increase student enthusiasm and participation in learning science, as well as initiate a transformation of learning methods that are more in line with the needs of today's students. To explore further the implementation of Kahoot in science learning in elementary schools, this study uses a qualitative approach. This approach was chosen because it is able to provide a deep understanding of the processes, responses, and dynamics that occur during the application implementation.

According to Sugiyono (2019), qualitative research allows researchers to explore reality holistically, understand the meaning behind actions and social interactions, and record authentic experiences of teachers and students in a natural context. Data collection techniques such as direct observation, in-depth interviews, and documentation will be used to capture the reality of learning as a whole (Sugiyono n.d.). At SDN Ledug, the Kahoot application is expected to be a solution to increase the enthusiasm and learning participation of grade VI students which has tended to be low.

Through interactive quizzes that are packaged attractively, students can learn while playing so that the learning atmosphere in the classroom becomes more lively. The presence of Kahoot is expected to be able to raise students' enthusiasm for learning and make them more active in the learning process. In addition, teachers can also more easily evaluate learning outcomes in real-time.

2. RESEARCH METHODS

2.1 Research methods

This study employs a descriptive qualitative methodology to investigate the phenomena of boosting the enthusiasm of learners in scientific education through the usage of the Kahoot application. This approach, which uses the researcher as the primary tool, was selected because it can accurately describe what occurs in the classroom (Sugiyono n.d.). An alternative point of view, In order to describe and comprehend the phenomenon of raising student learning excitement through the use of digital-based learning media, particularly the Kahoot application, in the context of Natural Science (IPA) learning, this study used a descriptive qualitative approach. Because it is appropriate to thoroughly examine students' experiences, perspectives, and answers, this method was selected (W n.d.).

2.2 Subjects and Location of Research

The subjects in this study were 23 sixth grade students of Ledug State Elementary School. The study was conducted for two weeks in the even semester of the 2024/2025 school year.

2.3 Research Instruments

The main instrument in this research is the researcher himself, assisted by colleagues as observers, and with additional instruments such as:

1. Participatory observation sheet
2. Interview guidelines
3. Documentation of student learning outcomes and activities during the use of Kahoot

This instrument is used to obtain data on responses, active student participation, and student enthusiasm in participating in interactive digital-based science learning(W n.d.).

2.4 Data collection technique

Data is collected by three main techniques:

1. Direct observation: Observations were made of student activities during science learning using the Kahoot application, recording learning behavior, active involvement and participation, and student enthusiasm.
2. Semi-structured interviews: Conducted with several students and colleagues as observers to obtain subjective opinions about the effectiveness of using Kahoot.
3. Documentation: Collecting visual evidence such as photos of activities, Kahoot quiz results, and videos of the learning process.

2.5 Data Analysis Techniques

Data were analyzed using the interactive analysis model of Miles and Huberman (1994), which includes:

1. Data reduction: Filtering and selecting relevant data from observations, interviews, and documentation.
2. Data presentation: Arrange data in the form of descriptive narratives and thematic tables.
3. Drawing conclusions: Conclude patterns of student enthusiasm and participation based on the results of integrating data from various sources.

2.6 Validity of Data

To ensure the validity of the data, triangulation of sources and techniques was carried out, as well as member checking of informants. Validity was confirmed by comparing data from observations, interviews, and documentation.

3. RESULTS AND DISCUSSIONS

The results showed that the use of Kahoot media significantly increased students' enthusiasm and participation. The average value of student learning participation and enthusiasm increased significantly. These results indicate that this media attracts students' attention and encourages them to actively participate in learning. In addition, using Kahoot, an interactive game, enhances the learning experience and increases students' motivation to actively participate. The implementation of Kahoot interactive media in science learning in grade VI of SDN Ledug has a positive and significant impact on student enthusiasm and participation.

Kahoot as an interactive quiz-based learning platform can provide a more enjoyable learning atmosphere and motivate students to participate more in the learning process. This is in line with previous research findings which show that the use of Kahoot can significantly increase students' motivation and science learning outcomes(Fatma. Yuniarti 2021)(Kusumaningtyas and Surakarta 2025). Before the implementation of Kahoot media, the level of student enthusiasm and participation in science learning was still relatively low, indicated by the results of interviews and direct observations as well as minimal student involvement in conventional learning activities6.

Through the use of Kahoot, students not only receive materials passively, but also actively participate through interesting quizzes and existing game features, thereby increasing their curiosity, as well as increasing their competitive spirit and enthusiasm for learning(Hasani. Faizatil, Wulandari. Rifka 2025)(Supriyadin 2023). In addition, the use of Kahoot also makes it easier for teachers to evaluate and monitor student learning outcomes in real-time, so that teachers can provide fast and targeted feedback. This supports a more effective and efficient learning process and is in accordance with current developments.

Other studies also support the results of this study, the use of Kahoot has been shown to increase learning participation and enthusiasm for learning science in elementary school students, both in terms of motivation and academic achievement. Thus, the application of Kahoot interactive media not only increases student enthusiasm and participation, but also has a positive impact on their science learning outcomes(Nasikhah et al.

2021)(Saraswati, Rodliyah, and Rahmawati 2022).

4. CONCLUSIONS

By implementing Kahoot interactive media in science learning for grade VI of SDN Ledug, it was found that Kahoot was proven effective in increasing student enthusiasm and participation. Kahoot interactive media is also able to create a fun and interactive learning environment, thus motivating students to actively participate in learning. In addition, Kahoot also helps teachers in monitoring and improving student learning outcomes significantly. This can be applied in other schools, with suggestions schools should provide adequate internet facilities and conducting training related to the use of technology-based interactive media

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