

Implementation of Quizizz Interactive Media to Increase Enthusiasm and Participation of Grade VI Students of SDN 3 Linggasari in Science Learning

Nova Abadul Fahmi^{1,2}, Subuh Anggoro²

¹SDN 3 Linggasari, Twin, Banyumas

²Universitas Muhammadiyah Purwokerto

ARTICLE INFO

Article history:

DOI:

[10.30595/pssh.v25i.1758](https://doi.org/10.30595/pssh.v25i.1758)

Submitted:

July 22, 2025

Accepted:

August 11, 2025

Published:

August 24, 2025

Keywords:

Quizizz Application;
 Enthusiasm; Participation;
 Science

ABSTRACT

This study aims to describe the use of the Quizizz application in increasing student enthusiasm during science learning in grade 6 of SD Negeri 3 Linggasari. The method used is qualitative with data collection techniques through interviews and observations. The subjects of the study consisted of grade 6 students who participated in Quizizz-based learning. Data analysis was carried out by processing information obtained from interviews and observations, to obtain a clear picture of student enthusiasm in science learning. The results of the study showed a significant increase in student enthusiasm when using Quizizz as a science learning medium. Students showed positive responses, higher attention, and a desire to be actively involved in the learning process. Thus, the use of Quizizz has proven effective in creating a fun and interesting learning atmosphere, thereby increasing student motivation in learning. This study provides an important contribution to the development of more interactive and interesting learning methods for students.

This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).



Corresponding Author:

Nova Abadul Fahmi

SDN 3 Linggasari, Twin, Banyumas

Email: badulpesek88@gmail.com

1. INTRODUCTION

Education plays a crucial role in shaping a superior future generation. Amidst the current of globalization and the rapid development of the industrial revolution 4.0 era, the world of education is faced with increasingly complex challenges. Technological advances demand updates in the curriculum, teaching materials, and learning methods. The learning approach now no longer only focuses on mastering content alone, but also on developing 21st-century skills such as critical thinking, communication skills, collaboration, and creativity. Therefore, an interactive, fun, and up-to-date learning process is the main key to arousing students' interest in learning.

Learning in the modern era must be able to encourage analytical thinking and creative use of technology that is applied in real terms in teaching and learning activities in the classroom. (Suyanto & Asep, 2013). Students who have high enthusiasm and interest in learning generally show active involvement in every learning activity. They tend to be more enthusiastic and have an internal drive to understand the material more deeply. This enthusiasm often comes from learning motivation that comes from within themselves. With strong motivation, students will be more motivated to ask questions, discuss, and explore learning materials in a more independent and reflective way.

Factors such as a conducive learning environment, the right teaching approach, and support from teachers

are important elements in building and maintaining this motivation. (Alawiyah & Gumala, 2025). However, the reality of education in Indonesia shows that there are still quite a lot of challenges in the field. One of the major challenges that is often encountered is the low interest and motivation of students to learn certain subjects, especially subjects that are considered difficult and boring. Natural Sciences (IPA) subjects, for example, are often considered complicated because they present many abstract theoretical concepts and require in-depth logical reasoning.

The minimal use of concrete and interactive learning media worsens this situation, so that students become less interested and are not actively involved in the learning process. As a result, learning outcomes are not optimal. This is a serious concern, especially at the elementary school level, which is the initial foundation for students' understanding of science. (Utami, 2020; Sujarwadi, Ramdani, & Pratiwi, 2024). The advancement of information and communication technology brings great opportunities for adaptive digital learning innovation.

One innovation that has received quite a lot of attention is the use of interactive quiz applications such as Quizizz. This application combines game elements with an evaluation system in one platform that is easy to use, both by teachers and students. The main advantages of Quizizz lie in its attractive interface, automatic assessment features, and competitive nuances built through game elements. This is able to create a learning atmosphere that is more lively, fun, and far from monotonous. This kind of innovation is the answer to the needs of 21st century learning that integrates technology into the learning process creatively and fun. (Fauzi & Pratama, 2021).

More than just an evaluation tool, Quizizz also presents a unique learning experience through a game-based learning approach. This learning strategy is able to increase students' intrinsic motivation by providing challenges, a variety of questions, and awards for achievements. All of these elements make students feel more involved and challenged in the learning process. In addition to encouraging active participation, Quizizz also helps foster a positive attitude towards subjects that were previously considered difficult such as science. Therefore, the implementation of this platform is highly recommended for educators to improve the effectiveness of learning at various levels of education. (Deci & Ryan, 1985).

However, the implementation of digital technology such as Quizizz in learning still faces various obstacles, especially in areas that do not yet have adequate infrastructure. In rural or suburban areas, limited internet access, technological devices, and low digital competence of teachers are the main obstacles in implementing technology-based learning innovations. Lack of training, the dominance of conventional methods that are still deeply rooted, and lack of facility support are the causes of the low use of digital media in a number of schools. This condition creates a gap in the quality of learning between schools in urban and regional areas.

Therefore, efforts to equalize access to technology and increase teacher capacity in utilizing digital media are important steps in creating equitable and quality education. (Sari & Yuliani, 2020). SD Negeri 3 Linggasari is located in a semi-rural area and faces other similar challenges. Initial observations showed that science teaching in grade 6 was still dominated by traditional methods and monotonous exercises, making students often feel bored and less interested in actively participating. As a result, student participation was low and evaluation results did not show significant improvement.

This condition requires renewal of learning methods that are more innovative and attract students' interest. Grade 6 teachers realized that conventional methods were less effective, so they saw the use of Quizizz as a potential solution. With a more interactive, visual, and competitive learning format, this application is expected to increase student enthusiasm and participation in learning science, as well as initiating a transformation of learning methods that are more in line with the needs of today's students. To explore more deeply the application of Quizizz in Natural Science (IPA) learning at the elementary school level, this study adopted a qualitative approach.

This approach was chosen because it is able to comprehensively reveal the processes, responses, and dynamics that emerge during the implementation of technology-based learning. According to Sugiyono (2019), qualitative research provides space for researchers to understand reality as a whole, explore the hidden meanings behind actions and social interactions, and record authentic experiences of teachers and students in a natural context. In this study, data collection techniques include direct observation in class, in-depth interviews with related parties, and documentation analysis as an effort to capture the entire learning process comprehensively.

Through this research, it is expected to gain broader insights into how technology-based learning media, especially Quizizz, can make a real contribution to improving the quality of science learning in elementary schools. The findings are expected to not only encourage the birth of more creative and adaptive learning strategies, but also provide practical guidance for educators in presenting a learning process that is in accordance with the development of the times. This research is also expected to be able to open up a wider discussion space regarding the urgency of technology integration in elementary education, as part of an effort to produce a golden generation that is ready to face future challenges.

2. RESEARCH METHODS

2.1 Research methods

This study applies a descriptive qualitative approach to examine the phenomenon of increasing student enthusiasm for learning in Natural Sciences (IPA) subjects through the use of the Quizizz application. This method is considered appropriate because it is able to naturally describe the learning situation that takes place in the classroom, where the researcher acts as the main instrument directly involved in the process of data collection and analysis. Through this approach, the dynamics of interaction between teachers, students, and the use of digital media can be observed in depth and contextually. (Sugiyono, 2017).

In line with that, the descriptive qualitative approach in this study aims to present a complete picture of the student learning experience that is built through the application of digital-based learning media, especially the Quizizz application, in the context of science learning. The selection of this approach allows researchers to trace the perceptions, emotional responses, and active participation of students during the learning process. Thus, the results of the study are expected to be able to provide a comprehensive understanding of the effectiveness of technology integration in increasing students' enthusiasm for learning in the modern education era. (Creswell, 2014)

2.2 Subjects and Location of Research

The subjects in this study were 32 sixth grade students of SD Negeri 3 Linggasari. The study was conducted at the school for two weeks in the even semester of the 2024/2025 school year.

2.3 Research Instruments

1. The main instrument in this research is the researcher himself, assisted by colleagues as observers, and with additional instruments such as:
2. Participatory observation sheet
3. Interview guidelines
4. Documentation of student learning outcomes and activities during the use of Quizizz
5. This instrument is used to obtain data on responses, active student participation, and student enthusiasm in participating in interactive digital-based science learning.

2.4 Data collection techniques

Data is collected by three main techniques:

1. Direct observation: Observations were made of student activities during science learning with the Quizizz 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 Quizizz.
3. Documentation: Collecting visual evidence such as photos of activities, quiz results on Quizizz, 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

3.1 Results

The results showed that the use of Quizizz 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 Quizizz, an interactive game, enhances the learning experience and increases students' motivation to actively participate.

3.2 Discussion

The implementation of interactive media Quizizz in Natural Science (IPA) learning in grade VI of SDN 3 Linggasari has a significant positive impact on students' enthusiasm and involvement in the learning process. Quizizz, as an interactive quiz-based platform, is able to present a more enjoyable, dynamic learning atmosphere and encourage students to be more active in participating in learning activities. This finding is in line with various previous research results which state that consistent use of Quizizz can increase student motivation and improve the achievement of science learning outcomes. (Gunawan et al., 2025; Gumala & Alawiyah, 2025).

Before the Quizizz media was implemented, student interest and participation in science learning were relatively low. This can be seen from the results of direct observations and interviews with teachers which showed a lack of student involvement during conventional learning activities. Learning tends to be one-way, where students only act as passive listeners. However, through the integration of Quizizz, students began to show active participation by taking quizzes that were packaged in an interesting way through interactive game features. This activity succeeded in fostering students' curiosity, competitive spirit, and enthusiasm in understanding the subject matter. (Yolanda & Meilana, 2021; Sari & Ramadhani, 2023; Rahmadani, 2021; Maulidiyah & Rifa'i, 2020).

The increase in student participation is also reflected in observation data that shows a significant spike in their involvement during the learning process. The level of student activity increased from only 30% before using Quizizz to 91% after the implementation of the media. This increase proves that interactive learning media such as Quizizz are able to overcome the problems of low motivation and minimal participation that often occur in science learning in elementary schools. (Gumala & Alawiyah, 2025; Hutabarat & Murniati, 2022). Not only does it have an impact on students, the use of Quizizz also makes it easier for teachers to evaluate learning.

The automatic assessment system owned by this application allows teachers to monitor student work results in real-time, so that feedback can be given quickly and on target. Thus, the learning process becomes more effective, efficient, and in line with the development of today's educational technology. (Latar et al., nd; Gunawan et al., 2025; Anindya & Mustofa, 2022). Other studies also support these findings, showing that the use of Quizizz has been proven to increase students' learning participation and enthusiasm for science lessons, both in terms of internal motivation and academic achievement. Therefore, the application of interactive media such as Quizizz is not only a solution to increase student engagement but also contributes to improving the overall quality of learning outcomes at the elementary school level. (Yulistadi & Qodariah, 2022; Annisa & Erwin, 2021)

4. CONCLUSIONS

By implementing interactive media Quizizz in science learning for grade VI of SDN 3 Linggasari, a study has been conducted. And the results showed that Quizizz was effective in increasing student enthusiasm and participation. Interactive media quizizz is also able to create a fun and interactive learning environment, thus motivating students to actively participate in learning. In addition, Quizizz also helps teachers in monitoring and improving student learning outcomes significantly. This can be applied in other schools, with suggestions and input:

- a. Schools should provide adequate internet facilities
- b. Conducting training related to the use of technology-based interactive media

REFERENCES

- Alawiyah, S., & Gumala, Y. (2025). The Use of Quizizz-Based Media in Science Learning to Grow Student Motivation in Elementary Schools. *Journal of Social and Humanities Education*.
- Annisa, R., & Erwin, E. (2021). The Effect of Using the Quizizz Application on Students' Science Learning Outcomes in Elementary Schools. *Basicedu Journal*, 5(5), 3660–3667. <https://doi.org/10.31004/basicedu.v5i5.1376>
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). SAGE Publications.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. Springer.
- Fauzi, M., & Pratama, A. (2021). The Effect of Using Quizizz on Student Learning Motivation in Online Learning. *Journal of Educational Technology Innovation*, 8(1), 112–123.
- Gunawan, A., Inaarah, D., As-syawal, MF, Putri, NA, & Pratiwi, SA (2025). Implementation of Quizizz Learning Media on Science Learning Outcomes of Grade 5 Students of SD Negeri 3 Siraman. 1(1), 1–9. <https://doi.org/10.24127/penainspirasi.v1i1.8152>
- Background, A., Elementary, Science, Elementary, Science, Elementary, Science, & Key, K. (nd).

- Implementation of At-Tashil Application. 6–12.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook* (2nd ed.). Sage Publications.
- Moleong, LJ (2019). *Qualitative Research Methodology* (Revised Edition). Rosdakarya Youth.
- Rahayu, I., Putri, MA, & Hardiyanti, D. (2022). Effectiveness of Using Quizizz in Improving Science Learning Outcomes of Elementary School Students. *Journal of Elementary Education*, 7(2), 98–106. Link
- Sari, DAP, & Yuliani, S. (2020). Readiness of Elementary School Teachers in Integrating ICT in Learning. *Nusantara Elementary Education Journal*, 5(2), 34–40.
- Sugiyono. (2019). *Qualitative, Quantitative, and R&D Research Methods*. Alfabeta.
- Sujarwadi, A., Ramdani, R., & Pratiwi, MA (2024). Case Study of the Use of Quizizz for Grade V Science Subjects at SDN Santaka. *Didactics: Scientific Journal of Elementary School Teacher Education*.
- Suyanto, M., & Asep, S. (2013). *Learning and Teaching*. Multi Pressindo.
- Utami, DR (2020). Application of Interactive Media in Elementary School Science Learning. *Journal of Elementary Education and Learning*, 4(1), 45–53.
- Yolanda, S., & Meilana, SF (2021). The Effect of the Quizizz Application on Science Learning Interests of Fifth Grade Elementary School Students. *Jurnal Educatio*, 7(3), 915–921. <https://doi.org/10.31949/educatio.v7i3.1286>
- Yulistiadi, P., & Qodariah, L. (2022). The Effect of Using Quizizz on Science Learning Outcomes at SDN Cipinang Melayu 10 Pagi. *JIKAP PGSD: Scientific Journal of Educational Sciences*, 6(3), 545–551.