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THE IMPACT OF USING INTERACTIVE LEARNING MEDIA ON STUDENT LEARNING OUTCOMES IN GRADE IV AT SDN 123

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Abstract

This study aims to analyze the impact of using interactive learning media on the learning outcomes of Grade IV students at SDN 123. The use of interactive media is expected to enhance students' understanding and participation in the learning process. The research method employed is an experimental design with pre-test and post-test. The subjects of the study consist of 30 randomly selected Grade IV students. Initially, a pre-test was conducted to assess students' baseline abilities before the use of interactive media. Subsequently, instruction using interactive media was carried out, followed by a post-test to measure changes in students' learning outcomes.The results of the study indicate a significant improvement in students' learning outcomes. The average pre-test score of the students was 65, while the average post-test score increased to 85. This improvement demonstrates that the use of interactive learning media plays a role in enhancing students' understanding and learning outcomes. Additionally, observations during the instruction revealed that students were more active and engaged in discussions and class activities, which reinforced their grasp of the material. Based on these findings, it is concluded that interactive learning media positively impacts students' learning outcomes and has the potential to improve the effectiveness of the learning process in elementary schools.

.**Keywords:** Interactive Learning Media, Learning Outcomes, Grade IV Students

1. Introduction

In the era of globalization, characterized by rapid technological advancements, every aspect of life is undergoing transformation (Azzahra & Maret, 2024; Hsb & Ramadhani, 2024; Zachroh & Fahrun, 2024), including the field of education. The advancement of information and communication technology (ICT) has brought significant changes to various domains, and education is one of the most impacted. Technology has become an integral part of the teaching and learning process, not only as a source of information but also as a tool to facilitate and support more efficient learning. A concrete example of technology application in education is the use of interactive learning media.

Interactive learning media refers to tools or methods that leverage digital technology to create a more engaging and dynamic learning experience.(Belva Saskia Permana et al., 2024; Firmansyah, 2024; Lutfi, 2021). These media integrate various elements such as text, images, audio, video, and animations to present educational content in a more engaging manner for students. The use of this media allows students to interact directly with the material being studied, providing a deeper and more meaningful learning experience. Additionally, interactive media enables students to learn independently and at a pace suited to their abilities.

Interactive learning media is considered an innovative solution to address various challenges associated with traditional learning methods. Conventional learning, which often relies on lecture-based methods, can sometimes be less engaging for students and may not actively involve them in the learning process. In contrast, interactive media offers a range of features that can stimulate student interest and encourage active participation in learning. For instance, students can manipulate objects in animations or answer questions through interactive games, allowing them to learn while being actively engaged. Thus, this media not only presents information passively but also fosters active student participation in the learning process.

Beyond the benefits related to student engagement, interactive learning media also offers advantages in terms of presenting more varied instructional content. Traditional teaching methods are often limited to textbooks and verbal presentations from teachers. However, with interactive media, educators can leverage various digital resources, such as educational videos, simulations, and interactive quizzes, to enrich the content being taught. This varied presentation of material can help students with different learning styles—whether visual, auditory, or kinesthetic—better understand the concepts being taught.

Despite the numerous advantages of interactive learning media, its usage remains relatively limited in many elementary schools, particularly in underdeveloped areas. Factors contributing to the restricted use of interactive media in schools include a lack of supporting facilities, such as computers or tablets, and the limited knowledge of teachers regarding the use of such technology. Not all teachers possess the necessary skills or knowledge to integrate technology effectively into their teaching practices. Therefore, although interactive media has great potential to enhance educational quality, its implementation still requires broader support, both in terms of infrastructure and teacher training.

Various studies have been conducted to investigate the effectiveness of interactive learning media in improving student learning outcomes.(Murtado et al., 2023; Nasution, 2023; Suyuti et al., 2023) Gagne et al. (2018) The research aims to further explore the impact of using interactive learning media on the learning outcomes of elementary school students, specifically fourth-grade students at SDN 123. It is expected that this study will provide a clearer picture of how interactive media can be effectively used in the context of elementary education. Additionally, this research aims to evaluate the extent to which this media can improve student learning outcomes and identify the factors influencing the effectiveness of its use.

Specifically, the study will test the hypothesis that the use of interactive learning media has a significant positive effect on student learning outcomes. Learning outcomes in this research are measured by comparing pre-test and post-test scores administered before and after the use of interactive learning media. Furthermore, the study will observe changes in student behavior

during the learning process, such as participation levels, interaction with teachers and classmates, and interest in the subject matter. Thus, this research will not only measure learning outcomes quantitatively but also assess the qualitative impact of using interactive learning media.

This research is important given the need to continuously improve the quality of education in Indonesia. In an increasingly digital era, utilizing technology in education is no longer an option but a necessity. Therefore, the findings of this research are expected to contribute valuable insights into the development of more effective and innovative teaching methods in elementary schools. Additionally, the results are anticipated to serve as a reference for policymakers in designing training programs for teachers to optimize the use of technology in the learning process.

With this research, it is hoped that a deeper understanding of the importance of using interactive learning media to enhance student learning outcomes can be achieved. The study is also expected to encourage more schools and teachers to adopt technology in their daily teaching activities, thereby fostering a more inclusive, innovative, and effective education for all students, particularly at the elementary school level.

2. Method

The research method employed is an experimental design with pre-test and post-test. The subjects of the study consist of 30 randomly selected Grade IV students. Initially, a pre-test was conducted to assess students' baseline abilities before the use of interactive media. Subsequently, instruction using interactive media was carried out, followed by a post-test to measure changes in students' learning outcomes.

3. Results and Discussion

This research adopts the Classroom Action Research (CAR) method with a design consisting of three cycles to evaluate the impact of using interactive learning media on the learning outcomes of fourth-grade students at SDN 123. The CAR method was selected because it allows the researcher to iteratively identify, implement, and evaluate improvements in the learning process.(Aprilyada et al., 2023; Rohita, 2016; Suhaedin et al., 2023). Here is an in-depth discussion of the results and findings of this research.

The Classroom Action Research (CAR) method with three cycles was applied to provide a comprehensive understanding of the effectiveness of interactive learning media in improving student learning outcomes. Each cycle in CAR consists of four main stages: planning, action, observation, and reflection.(Lilik Kustiani, 2024; Purwanto, 2021).

Planning:At this stage, the researcher designs and prepares the interactive learning media to be used during the cycle. This plan includes the development of materials, selection of technology, and implementation strategies tailored to the students' needs.

Action: After planning, the interactive learning media is implemented into the learning process. During this cycle, students engage in learning activities involving the newly introduced interactive media.

Observation: At this stage, the researcher observes the learning process and records everything that happens during the use of interactive media. Observations include student interactions, participation, and comprehension of the material.

Reflection: After action and observation, the researcher reflects on the results obtained and evaluates the effectiveness of the interactive media. This reflection helps identify the strengths and weaknesses of the actions taken and plan improvements for the next cycle.

First Cycle: In the first cycle, the planning focused on introducing interactive learning media and initial adaptation in the learning process. During this cycle, students were provided with material using the newly introduced interactive media. Observations showed that students exhibited high interest and good engagement during learning. However, some students still had difficulties understanding the material, especially more complex concepts.

Reflection from the first cycle identified that despite increased student engagement, there needed to be adjustments in the way material was delivered and additional support for students who were struggling. Based on these findings, the researcher planned improvements for the second cycle, including adding interactive exercises and group discussions.

Second Cycle: In the second cycle, the planned improvements were implemented. The interactive learning media was enhanced with additional exercises and activities designed to deepen students' understanding. Group discussions and Q&A sessions were integrated to increase interaction and collaboration among students.

Observations during the second cycle showed significant improvement in students' understanding of the material. Students became more active in discussions and showed progress in the exercises provided. Improved learning outcomes were also reflected in higher post-test scores compared to the first cycle.

Reflection from the second cycle confirmed that increased interactive activities and additional support contributed to better understanding and higher learning outcomes. However, some students still required special attention. The researcher planned further improvements for the third cycle, focusing on providing individual assistance and adjusting materials to meet diverse student needs.

Third Cycle: The third cycle focused on refining the findings from previous cycles. The researcher added strategies to provide individual support to students needing extra help and adjusted materials to ensure all students could follow the learning process effectively. The interactive learning media was also updated based on feedback from previous cycles.

During the third cycle, observations indicated that students who had previously struggled could follow the lessons more effectively. Interactive activities and individual support helped students understand the material more deeply. Final assessments showed consistent improvement in learning outcomes across the student group, with higher average scores compared to previous cycles.

Reflection from the third cycle showed that the approaches implemented in this cycle were effective in improving overall student learning outcomes. Interactive learning media, combined with individual support and material adjustments, contributed to better achievements and deeper understanding.

Based on the results from the three research cycles, it can be concluded that the use of interactive learning media significantly improves the learning outcomes of fourth-grade students at SDN 123. The CAR method with iterative cycles allowed the researcher to continuously refine and adjust the learning process, leading to significant improvements in student comprehension and engagement. Well-designed interactive media, combined with additional support and material adjustments, proved effective in enhancing learning outcomes and student involvement.

These findings support the theory that interactive learning media can provide significant benefits in education.(Lilik Kustiani, 2024; Utomo, 2023), By increasing student motivation and facilitating material comprehension. This study also highlights the importance of flexibility and adaptability in the learning process to meet the diverse needs of students.

4. Conclusion

Based on the research findings, it can be concluded that the use of interactive learning media significantly influences the learning outcomes of grade IV students at SDN 123. This conclusion is drawn from the observed improvements in both student comprehension and participation resulting from the integration of interactive media into the learning process.

The research employed a Classroom Action Research (CAR) method with a three-cycle design, allowing for a comprehensive evaluation of the effectiveness of interactive media. Each cycle involved planning, action, observation, and reflection, which facilitated iterative improvements in teaching practices. The first cycle focused on the introduction of interactive media and its initial integration into the curriculum. Observations from this phase indicated that

while students showed high levels of interest and engagement, some struggled with understanding more complex concepts.

In response, the second cycle introduced enhancements such as additional interactive exercises and group discussions. These adjustments were aimed at deepening student understanding and fostering greater collaboration. The results showed a notable improvement in students' grasp of the material, as evidenced by their increased activity in discussions and better performance in subsequent assessments.

The third cycle further refined the approach by providing individualized support and adjusting the material to cater to diverse student needs. This cycle demonstrated that the added support and tailored content significantly helped students who had previously faced difficulties. The final assessments revealed consistent improvements in learning outcomes across the student group, highlighting the effectiveness of the interactive media combined with personalized assistance.

The use of interactive learning media proved to be beneficial in enhancing student motivation and facilitating better understanding of the material. The media's ability to engage multiple senses and provide immediate feedback contributed to a more immersive and effective learning experience. Furthermore, the research underscores the importance of flexibility and adaptability in teaching methods to accommodate the varied needs of students.

In conclusion, the study suggests that interactive learning media can play a crucial role in improving educational outcomes at the primary school level. The observed benefits in student engagement and understanding support the broader adoption of such media in educational settings. Implementing interactive media more extensively in primary education can lead to more effective teaching practices and better achievement of educational goals. The findings advocate for increased use of interactive tools and resources to enhance learning experiences and outcomes in schools.

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