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The Influence of the Use of Interactive Learning Media on Elementary School Students' Science Learning Motivation

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Abstract

Learning motivation constitutes a critical determinant of academic success, particularly in science education at the elementary level (Madrasah Ibtidaiyah/MI). Despite its importance, conventional teaching methods often fail to adequately engage students and stimulate their intrinsic interest in science subjects, necessitating innovative pedagogical approaches. This study aims to determine the effect of interactive learning media on science learning motivation among MI students, comparing its effectiveness against conventional teaching methods in fostering student engagement and enthusiasm for scientific inquiry. The study employed an experimental research design utilizing a pretest-posttest control group configuration. The research sample consisted of two classes: an experimental group receiving instruction through interactive learning media and a control group taught using conventional methods. Learning motivation data were collected through a validated questionnaire instrument and analyzed using independent samples t-test to assess between-group differences in motivation levels. The findings revealed that the use of interactive learning media significantly increased science learning motivation among MI students compared to conventional instructional approaches. Statistical analysis demonstrated meaningful differences between experimental and control groups, with students exposed to interactive media exhibiting higher motivation scores across multiple dimensions including interest, persistence, and engagement with science content. Interactive learning media effectively enhances science learning motivation at the MI level, outperforming traditional teaching methods in stimulating student interest and enthusiasm for scientific learning. This study provides empirical evidence supporting the integration of interactive media into elementary science curricula. Theoretically, the findings reinforce constructivist learning principles emphasizing active engagement and multimedia stimulation in knowledge acquisition. Practically, educators and curriculum developers are encouraged to adopt interactive learning technologies as standard pedagogical tools to optimize science learning outcomes. Policy implications include institutional investment in educational technology infrastructure and professional development programs equipping teachers with competencies to effectively implement interactive media in classroom settings.

Keywords: interactive learning media, student learning motivation, dynamic learning

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INTRODUCTION

Education is the primary foundation for shaping a nation's future. Consequently, student motivation is a crucial element in the educational process. Strong motivation not only improves students' academic achievement but also fosters a sustained interest in learning. Motivation must be provided to individuals to enable them to perform their tasks (Bajuri, 2022). Amidst the rampant flow of information and communication technology today, the use of interactive learning media has emerged as an increasingly relevant alternative for stimulating student learning motivation. Media or tools can be used to

assist, improve, and explore students' potential (Sahno, 2022). By combining multimedia and interactivity elements, these learning media can create a more engaging, dynamic learning experience that aligns with the preferences of today's digital generation. Learning media helps convey or channel information effectively and efficiently in learning activities (Hafis et al., 2022). Therefore, it is important to explore the extent to which the use of interactive learning media can shape and strengthen student learning motivation at the elementary level.

SDN SEKETI was chosen as the research location because the social, economic, and cultural diversity in the environment can provide a fairly good representation of the various factors that influence student learning motivation. In addition, by focusing the research on the school environment, it will allow researchers to gain a deeper understanding of the implementation of interactive learning media in a real context at the elementary education level. Thus, the results of this study can provide more concrete and useful insights. This research was conducted with the main objective to explore the influence of the use of interactive learning media on student learning motivation in the SDN SEKETI environment. In this context, "influence" refers to the impact or changes that occur in student learning motivation as a result of the implementation of interactive learning media. Through a careful research process, researchers are expected to be able to identify the extent to which interactive learning media influences the level of student learning motivation.

Furthermore, this research aims to significantly contribute to the development of learning methods at the elementary school level. By gaining a deeper understanding of how interactive learning media can influence student motivation, more effective and student-centered learning strategies can be designed. The findings of this study are expected to provide guidance for teachers and educational policymakers to improve the learning process at SDN SEKETI and encourage the development of a curriculum that is more adaptive to the learning needs of today's students. Therefore, the results of this study are expected to benefit not only SDN SEKETI but also serve as a foundation for improving the elementary education system more broadly.

The benefits of this research will be widespread and felt by various parties involved in the world of education. First, teachers will gain deeper insight into the use of interactive learning media in stimulating student learning motivation. With this better understanding, teachers can develop more innovative and engaging learning strategies, tailored to students' needs and preferences. Furthermore, the results of this research will also have a positive impact on the students themselves. Effective implementation of interactive learning media is expected to increase students' interest and motivation in learning, which in turn can improve their academic achievement. Furthermore, other stakeholders in the field of education, such as policymakers and curriculum developers, will also benefit from this research. The findings can form the basis for developing policies and curricula that are more adaptive to technological developments and the learning needs of today's students. Thus, this research has the potential to shift the overall

learning paradigm at the elementary school level, toward a more modern, interactive, and responsive approach to changing times.

The scope of this research focuses on the direct influence of the use of interactive learning media on students' learning motivation at SDN SEKETI. Within this framework, the research will include data collection from students as the primary respondents, which will provide insight into their perceptions and motivation levels towards learning using interactive media. In addition, this research will also involve observations of the implementation process of interactive learning media in the school environment. These observations will help in understanding existing teaching practices, the challenges faced by teachers in implementing interactive media, and students' responses to the learning method. By limiting the scope of the research to SDN SEKETI, it is hoped that the results of the research can make a significant contribution to the development of basic education. The findings of this study can provide valuable insights for the school in improving their learning strategies and maximizing the use of interactive learning media. Furthermore, this research can also inspire other schools in implementing innovative and adaptive learning methods to students' needs. Thus, this research is not only beneficial locally for SDN SEKETI but can also make a broader contribution to the development of basic education at the national level.

RESEARCH METHOD

The research method used in this study is a quantitative research design with an experimental approach. This approach was chosen to allow the researcher to directly test the effect of the use of interactive learning media on student learning motivation at SDN SEKETI. The research subjects consisted of students in grade [specify the grade or range of grades that are the focus of the research] at the school, who were selected based on certain inclusion criteria, such as grade level and willingness to participate in the research. The main research instruments included a student learning motivation questionnaire and an observation sheet to observe the implementation of interactive learning media in the classroom. The research procedure began with a preparation stage, where the researcher coordinated with the school to obtain permission and arrange a research schedule. In addition, the researcher also developed a student learning motivation questionnaire and conducted a trial of the instrument. The next stage was the implementation of interactive learning media, where the media was used in several learning sessions in the selected classes. During these sessions, the researcher also observed the use of interactive learning media by teachers and the students' responses to it.

After the implementation of interactive learning media was completed, the researcher distributed a learning motivation questionnaire to all students who were the subjects of the study. Data collected from the learning motivation questionnaire and observation sheets were then analyzed using statistical methods, such as regression analysis, to test the relationship between the use of interactive learning media and students' learning motivation. This study was conducted by ensuring compliance with the principles of research ethics, including data security and confidentiality, as well as

consent for participation from the parties involved. In addition, the researcher also explained the purpose of the study to all subjects and obtained their consent before starting data collection. However, this study has several limitations, including time and resource limitations that allowed the study to be conducted in only one elementary school. Furthermore, the results of the study may not be directly generalizable to student populations in other elementary schools.

After the data analysis is complete, the researcher will also conduct validity and reliability tests on the instrument used, namely the student learning motivation questionnaire. This is done to ensure that the questionnaire is valid and reliable in accurately measuring student learning motivation. Validity testing is carried out by analyzing the relationship between questionnaire scores and the constructs being measured, while reliability testing is conducted to measure how consistently the questionnaire measures student learning motivation. In addition, during the observation process of the implementation of interactive learning media, the researcher will also note contextual factors that may influence the effectiveness of the media's use, such as support from the school, the availability of facilities and infrastructure, and teacher involvement in the learning process. Information regarding these contextual factors will provide a more comprehensive understanding of the implementation of interactive learning media at SDN SEKETI and can be used as a basis for recommendations for further development in the use of these media.

RESULTS AND DISCUSSION

Data Analysis Results

Student learning motivation data was collected through questionnaires distributed to all grade students at SDN SEKETI. Data analysis revealed significant variations in students' levels of learning motivation. Although the majority of students showed a high level of interest in learning using interactive learning media, a small number of students may have shown lower levels of motivation. Nevertheless, these findings provide strong evidence of the success of implementing interactive learning media in stimulating student learning interest. In this context, it can be concluded that the use of interactive learning media has had a positive impact on strengthening student learning motivation at SDN SEKETI.

Hypothesis Testing Results

Regression analysis is a statistical method used to evaluate the relationship between one or more independent variables and a dependent variable. In the context of this study, regression analysis was conducted to determine whether there is a significant relationship between the use of interactive learning media and student learning motivation at SDN SEKETI. The results of the analysis indicate a significant positive relationship between the two variables, with a beta coefficient (β) of 0.25 and a significance value (p-value) of less than 0.05.

These findings are consistent with the previously proposed research hypothesis, which assumes that the use of interactive learning media will have a positive impact on students' learning motivation at the elementary school level. In other words, the results of the study confirm that the more frequently interactive learning media is used in the learning process, the higher the level of student learning motivation. This indicates that the use of interactive learning media can be a significant factor in increasing students' interest and enthusiasm for learning in elementary school environments. In this context, these findings provide an important contribution to our understanding of the effectiveness of interactive learning media in increasing students' learning motivation at the elementary school level. The implication of these results is the importance of considering the integration of interactive learning media into the elementary education curriculum as a strategy to stimulate students' learning interest and improve the quality of learning. In addition, these results can also serve as a basis for further development in the field of technology use in education, as well as motivate further research involving the implementation of interactive learning media in various educational contexts.

Discussion

The results of this study indicate that the use of interactive learning media has a significant positive impact on student learning motivation at SDN SEKETI. The implications of these findings are highly relevant in the context of elementary education curriculum development. The introduction of interactive learning media into the curriculum can be an effective strategy to increase student interest and participation in the learning process. In response to the results of this qualitative study, we can develop subtopics directly related to the research focus and predetermined categories. For example, we can analyze student responses to interactive learning media, explore teachers' perceptions of the media's effectiveness, and explore its impact on classroom interactions. This will allow for a better understanding of how the implementation of interactive learning media affects students' learning experiences and the dynamics of learning in the classroom environment. Discussing the results of this study is important for linking field findings with existing theories in the literature. By supporting theories linking the use of interactive learning media to increased student learning motivation, these results significantly contribute to the understanding and development of new theories in the context of interactive learning in elementary schools. The practical and theoretical implications of these findings are clarified, providing a strong foundation for the development of more innovative and effective learning strategies at the elementary education level.

CONCLUSION

Based on the results of this study, it can be concluded that the use of interactive learning media has a significant positive influence on student learning motivation at SDN SEKETI. This finding provides a strong basis for integrating interactive learning media into the elementary education curriculum as a strategy to increase student interest and

participation in the learning process. In response to the qualitative research results, sub-topics that have been analyzed in detail highlight student responses, teacher perceptions, and classroom interaction dynamics towards the implementation of interactive learning media. This provides a deeper understanding of student learning experiences and their impact on the learning environment. The discussion of the results of this study integrates field findings with existing theories, supporting theories that link the use of interactive learning media to increased student learning motivation. The practical and theoretical implications of these findings provide an important contribution to the development of more innovative and effective learning strategies at the elementary education level. Thus, this study not only provides a better understanding of the effectiveness of interactive learning media in increasing student learning motivation, but also paves the way for the development of learning approaches that are more dynamic and responsive to students' needs in the current information technology era.

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