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THE INFLUENCE OF TECHNOLOGY-BASED LEARNING STRATEGIES ON STUDENT PERFORMANCE/MOTIVATION IN PRIMARY SCHOOLS

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Abstract

In today's digital era, the use of technology in education is becoming increasingly important. Technology-based learning strategies (e-learning) have become an effective method for improving student performance, especially in elementary schools. This journal aims to explore and analyze the influence of technology-based learning strategies on the performance of content data from surveys and interviews with teachers and students. The research results show that students in elementary schools are able to use technology . This study uses literature review methods and qualitative methods, including analysis of student use of technology in learning can increase student motivation and engagement, thereby improving their academic performance. Apart from that, technology-based learning strategies can also help in preparing students for an increasingly digital future. However, this research also found several challenges, such as limited access to technology and difficulties in integrating technology into the school curriculum. Therefore, this research suggests that the development of technology-based learning strategies must be adapted to school needs and conditions, and ensure that all students have equal access to technology. The research method chosen was the document review method. Data collection was carried out by recording and reviewing research articles related to the use of technology-based learning media in elementary schools, which were then analyzed and appropriate conclusions were drawn. with research objectives. The conclusion of this research is that the benefits of implementing e-learning now can be felt so that teachers and students feel the need to study the Koran in depth.

Keywords : Learning Media, Technology Based, Performance, Elementary School

Introduction

A journal introduction regarding the influence of technology-based learning strategies on student performance in elementary schools can begin by highlighting the importance of information and communication technology (ICT) in modern education. This technology has become a significant supporting medium in the learning process, facilitating data analysis and facilitating interaction between teachers and students. This research aims to explore how the use of ICT in learning strategies can influence student performance in elementary schools. The use of ICT in learning can improve the quality of learning by facilitating access to extensive learning resources and allowing students to learn independently. However, the application of ICT in learning also raises challenges, such as limited teacher skills in using ICT and the need for teacher education on effective use of ICT This research will explore the role of teachers in the use of ICT-based learning media in elementary schools, as well as how the use of ICT can influence student performance. Research data will be collected through surveys and data analysis using relevant statistical techniques. It is hoped that the results of this research will provide new insights into how ICT-based learning strategies can be implemented effectively to improve student performance in elementary schools. This research will also include recommendations for developing teacher skills in using ICT in learning, as well as strategies for overcoming challenges that may be faced in implementing ICT in learning. Thus, this research aims to contribute to the existing literature and provide practical guidance for teachers and educational policy developers

in integrating ICT in learning strategies. The problems faced are globalization, economic growth, international competition, environmental, cultural and political problems, these complex problems make it very important to develop skills and knowledge to be successful in the 21st century.

Along with the increasingly rapid development of Information and Communication Technology (ICT) , the need for an ICT-based concept and mechanism for teaching and learning (educators) is no longer inevitable. This concept, which has become known as e-learning, has had an influence on the process of transforming conventional education into digital form, both in terms of contents and systems (Kristiawan , 2014). E-learning as a new learning model in education provides a big role and function for the world of education which has been burdened with many educational shortcomings and weaknesses, including limited space and time in the educational process. E-learning is the term used for learning that utilizes communication and information technology in various ways to support and improve the learning process. There are various kinds of technology that can be used, starting from online and offline computer applications, presentation technology such as Microsoft PowerPoint applications or projectors, the World Wide Web, web-conferences, multimedia materials such as photos or animations, tools for assessing student work, games, and many more. much more. The development of science and technology encourages innovative efforts in utilizing technological results in the learning process. The use of media in the teaching and learning process is expected to overcome weaknesses in communication. Teachers must be able to use the tools provided by the school, and these tools must be able to adapt to developments and demands of the times (Azhar Arsyad, 2005: 2). The use of educational media in the learning process includes overcoming limitations of space, time and sensory abilities, students' passive attitudes can be overcome by using educational media, clarifying the message conveyed so that it is not too verbal (written or verbal only). Based on several research results, the author is interested in re-examining research results that show the role of media in improving student performance/learning motivation. The aim of this research is to analyze whether it is true that the use of technology-based learning media can increase students' learning motivation, so that students are willing to try and develop their thinking skills when encountering various problems in the learning process. Apart from that, this research also aims to provide information and recommendations for teachers and educational institutions that using technology-based learning media is the right way to make learning more effective. It is hoped that this research can contribute to improving the quality of education in Indonesia.

Research Methodology

The method used in this research is a literature review. According to Sarwono (in MilyaSari: 2020:3) literature review research is book research that is used as a reference document along with the results of previous research related to the problem being discussed to produce a theoretical basis for the problem being studied. This data is used as a source of information to then be processed and analyzed. According to Farisi (2010:70) literature review research is research that critically examines ideas and knowledge found in academic literature, as well as formulating theories and methodologies on certain topics. The method used in this research is qualitative method. The data collection technique used is a documentation technique from various data sources in the form of documents, journals or books related to research from 2014 to 2023. Data was taken from the Google Scholar and Publish or Perish databases. The data analysis used in this research uses a descriptive analysis method, namely describing the data obtained, then providing an explanation so that readers can understand it clearly.

Result & Discussion

Utilization of Information Technology as a learning medium can be through the use of the internet in e-learning or the use of computers as interactive media. It is hoped that the use of this media can stimulate students' thoughts, feelings, interests and attention in such a way that the learning process can occur. Apart from that, the learning process will be more effective because the use of learning media allows obstacles in the teacher-student communication process to be overcome, such as physiological, psychological, cultural and environmental barriers. In the world of education and training today, there are many practices called e-learning. Until now, the word e-learning is often used in all educational activities that use computers and/or the internet. There are also many terms used that have almost the same meaning as e-learning. Web-based learning, computer-based training/learning, distance learning, computer aided instruction, and so on, are terms that are often used to replace e-learning. The term e-learning itself can refer to all training activities that use electronic media or information technology. (Effendi, et al., 2005: 6-7). The results of the research data are summarized based on the main topics related to technology-based learning strategies and student performance/motivation in elementary schools. The results of scientific article data are summarized in Table 1

Table 1. Technology-based learning strategies

Research Topics	Researcher	Research result
The Effect of Using Elearning on Motivation and Mathematics Learning Achievement of Yogyakarta Public Elementary School Students	Doni Septumarsa Ibrahim, Siti Partini Suardiman	The T2 Hotteling's Trace test results show a significance value of 0.001 or smaller than α 5% and the average questionnaire score for student learning motivation in the experimental group is 74.03 and the control group is 70.42 and the average test score for student learning achievement the experimental group was 15.45 and the control group was 12.09, which means that the use of e-learning had a positive influence on the motivation and learning outcomes of students at Tahunan Yogyakarta State Elementary School.
The Effect of Using Multimedia (Powerpoint) on Increasing Elementary School Students' Learning Motivation (Experimental Study on Social Studies Learning for Class V Students at Nangela Elementary School)	Gilang Mas Ramadhan	The research results show that the use of multimedia in implementing learning has an impact on increasing student learning motivation. This is shown by the average student score before being given treatment of 54 and after being given treatment the average score was 54.80. From the t test data, it can be seen that the t value is 40.307, Sig 0.000, which is less than <0.05. It can be concluded that the use of PowerPoint-based multimedia content has an impact on increasing student motivation in studying social studies subjects at SDN Nangela.
The Influence of Online Learning and Learning Motivation on Student Learning Outcomes in Elementary Schools	Rina Anggita Tampubolon, Woro Sumarni, Udi Utomo	From the coefficient table above, the results of the t test for using Wordwall-based educational games are as follows. tcount = 11.796 > 2.045, significance 0.000 < 0.05. These results show that H_0 is rejected and H_1 is accepted. This means that the use of word wall-based educational games (X) in mathematics learning has an effect on learning motivation (Y).
The Influence of Implementing Learning Based on Information and Communication Technology Media on Motivation and Mathematics	Ni Nyoman Suwastarini, Nyoman Dantes, I Made Candiasa	The results of the first hypothesis analysis in this research show that the application of media-based learning in the field of information

Learning Outcomes of SDLB B (Deaf) Students at State SLB B PTN Jimbaran		and communication technology has a significant influence on student learning motivation in mathematics learning for SDLB B (Deaf) students at SLB BN PTN Jimbaran. This is indicated by the t-count value of 30.262 which is greater than the t-table value of 2.179. Overall, students who take part in media-based learning in the field of information and communication technology have an average motivation of 80.38 in the high category, without taking into account the variables of gender and learning outcomes. Apart from that, all students' learning motivation exceeds the moderate motivation standard, namely 65, with details of 15.38% of students having very high learning motivation and 30.77 students having moderate learning motivation.
The Influence of ICT-Based Learning Media on the Motivation and Science Learning Outcomes of Class V Students at SDN Model Terpadu Madani Palu	Hasan Mahmud Halidi, Sarjan N. Husain and Sahrul Saehana	The results of research using the F test show that motivation and learning outcomes are very significant. The results of calculating motivation and learning outcomes were 242.07 and 121.00 respectively. This result exceeds Ftable (1%) = 94.40. Conclusion: The use of ICT media in science learning for grade 5 students at SDN Model Terpadu Madani Palu increases students' learning motivation
The Effect of Using Animation Media in Social Studies Learning on the Learning Motivation of Class IV Students at Mannuruki State Elementary School	Wahyullah Alannasir	The frequency of learning motivation increased significantly in students in both the experimental and control groups. In the experimental group, the average value of students' learning motivation scores before being given treatment (28.8) was in the sufficient category (72%), and the average value of students' learning motivation scores after being given treatment (36.6) was in the sufficient category. and very good percentage (86.5%). Meanwhile, in the control class, the average student learning motivation score before being given treatment was (28.7) in the sufficient category with a percentage of (71.75%), and

		the average student learning motivation score after being given treatment was (33.4). Meanwhile, the percentage in the "good" category is (83.5%)

A review of research results shows that the use of technology-based learning media in learning can have a significant impact on student learning performance. Twelve samples showed positive reactions and satisfaction with the use of technology-based learning media in learning. On the positive side, according to respondents, learning is more fun, easy and interesting. The use of technology-based learning media is an effective solution that teachers can use to motivate students to learn, because it makes the teaching and learning process less monotonous and more enjoyable. The use of interactive learning media allows for two-way active communication between students and the media so that learning delivery can run optimally, making it more efficient in conveying the information that teachers convey to students during the learning process. This is in line with the ideas of Kartikasari (2016) who concluded in his research that the use of multimedia learning media has a positive impact on increasing student motivation and learning outcomes.

Conclusion

The use of e-learning in educational institutions has been proven to play a very important role in it. One of these things can be seen in Indonesian language learning, which currently really needs electronic technology as a medium. Various types of materials and assignments already use electronic media (the internet). These roles and functions are to simplify and accelerate the implementation of Indonesian language learning in accordance with the applicable curriculum. Nowadays, the benefits of implementing e-learning can be felt so that teachers and students feel the need to study the Koran in depth. All efforts need to be made so that e-learning based learning can be carried out well. These improvements can be made to human resources, infrastructure, curriculum and applicable policies. If improvements to these aspects have been carried out, e-learning based Indonesian language learning will certainly be achieved well. However, there are many challenges and obstacles in implementing ICT-based learning. In particular, for remote areas where internet access is not possible. Based on research results, when teachers use technology-based learning media during learning it can help students understand the subject matter, increase their learning motivation, and of course influence their learning outcomes. Satisfactory learning results enable you to achieve your learning goals optimally. Apart from that, the use of technology-based learning media also ensures that students do not get bored because the teacher is not the only source of learning.

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