Uji plagiasi

by Uji Plagiasi

The Effectiveness of Wordpress In Increasing Interest in Learning Mathematics And The Activeness of Elementary School Students in Merdeka Learning

Ita Fitriyah 1), Ida Rindaningsih 2)

1) Islamic Education Management Study Program, Muhammadiyah University of Sidoarjo, Indonesia
2) Islamic Education Management Study Program, Muhammadiyah University of Sidoarjo, Indonesia

Itafitriyah83@gmail.com
rindaningsih1@umsida.ac.id

Abstract . This research was conducted with the aim of analyzing the level of effectiveness of using the Wordpress-based Learning Management System in learning mathematics in elementary schools. The learning management system is one of the learning media systems currently used in the implementation of learning in elementary schools. The learning management system itself is divided into several models, one of which is WordPress. The use of WordPress itself is considered to make it easier for teachers to organize learning in schools, especially in the era of independent learning. In the era of independent learning, of course, students are facilitated in accessing learning material by using the WordPress system. The use of this system will of course also have an impact on student activity and interest in learning. The method used in this study is a mixed method (Mix Method). The first thing the researcher did was to use a quantitative approach with a Quasi Experiment to see how much influence the WordPress system had on student learning interest and student learning activeness. To validate the results of the quantitative research approach, the researchers used qualitative methods to determine the causes of the influence of WordPress on students' learning interest and student learning activeness. The results showed that the use of the wordpress system in learning had an effect on students' learning interest and student learning activeness. This is caused by several factors, for example, the availability of various learning materials and the ease of accessing learning materials. However, this system also tends to make students feel bored because in learning students only tend to look at laptop or cellphone screens without being able to interact directly .

Keywords - *Wordpress, Interest in Learning, Activeness* **,** Independent Learning

I. INTRODUCTION

Education is one of the factors that can describe the progress or decline of the quality of a society in a country or nation [1] . Ki Hajar Dewantara as the father of Indonesian national education said that education is a demand in people's lives, this can be interpreted that education can guide all the nature that exists in these children so that they can achieve safety and happiness [2] . Therefore education is something that must be obtained by all citizens in a country [3] .

On the other hand, education and technological advances are something that cannot be separated and are related to the process of implementing learning [4] . Technological progress has brought its own changes to the delivery of education and educational models in Indonesia [5] . Various educational facilities were created from the existence of technological advances, this of course facilitates the implementation of education and learning at the elementary school level and higher education [6] . One of the media and learning tools that emerge from technological advances is the learning management system or LMS [7] . The learning management system itself can be defined as a technology-based educational medium developed specifically to manage and facilitate all online learning in educational institutions [8] . It can be said that the Learning Management System is a web-based application software designed to handle learning content, student interaction, assessment tools and reports on learning progress and student activities [9] .

Meanwhile, in implementing learning management system-based learning, learning activities can be developed through various models, namely registration, payment, distribution of learning materials and the process of interaction between teachers and students in virtual classes [10] . Not only that, in the learning management system itself there are several features such as features for uploading and sharing teaching material, online discussions, quizzes and reports that make it easier for teachers to carry out online learning [11] . With a learning management system, the learning process can be carried out easily and without face-to-face or distance learning [12] . Learning can be done all the time without any limitations of space and time. The implementation of online learning accessed through the LMS allows students to view and interact with learning tools via a web browser using any operating system, computer or mobile device [13] .

In a learning management system, there are several kinds of learning management systems, one of which is a WordPress-based learning management system [14] . Online learning platform is another alternative expression that is sometimes used to refer to Learning Management System [15] . There are various types of Learning Management Systems such as Google Classroom, Edmodo, Moodle, WordPress [16] . Wordpress itself is a learning management system software that is quite popular among other learning management system software. Wordpress consists of three main components, namely: Core, Themes and Plugins. The plugins provided on WordPress make it easy for users to add features to their website with just one click [17] . In addition to being able to facilitate educators in carrying out the learning process, Wordpress can also be used in organizing independent learning, especially at the elementary school level. The independent learning is policy program presented by the Ministry of Education and Culture of the Republic of Indonesia which was proposed by the Minister of Education and Culture Nadiem Anwar Makarim [18] .

According to Nadiem Makarim, the Independent Learning Program is a term in the implementation of learning which is defined as learning independence [19] . Draft of the independent learning program emphasizes returning the national education system to an essence based on law in giving independence to schools in implementing the curriculum based competency is an assessment of students [20] . However, in the process of organizing independent learning, of course, there are various obstacles, one of which is educational technology [21] . Educational technology is a scientific field that has the goal of facilitating the learning process by using various technology-based learning media to form an efficient and effective education.

The use of Wordpress in learning apart from providing convenience in organizing learning also has an impact on student learning interest and activeness [22] . According to research entitled Increasing student interest in learning during learning from through the use of a learning management system platform, accounting and financial expertise program at SMK Yadika Manado Kab. Minahasa Utara North Sulawesi explained that the use of a learning management system in learning accounting has increased interest in learning from 75% to 87.50% [23] . In addition, the use of a wordpress-based learning management system in school learning can certainly provide convenience for teachers in monitoring student activity during the learning process and can foster student interest in learning because it is one of the success factors in learning and has a role in fostering a sense of pleasure in increasing enthusiasm for learning [24] . Students are directly required to actively participate in learning by using this wordpress system. Students are also required to actively access learning in the WordPress-based learning management system. From the use of this system, it can be concluded that it has affected the interest and activeness of student learning.

Even so, in learning mathematics using the Learning Management System itself, there are still some challenges. As research entitled opportunities and challenges of integrating learning management systems in learning mathematics in Indonesia explains that the challenge in implementing mathematics education using e-learning is that teachers are required to manage interesting content and learning materials for mathematics using a learning management system [25] .

Research conducted by Witri Melfawani and friends explains several barriers to learning mathematics using e-learning. These obstacles are divided into three major groups, the first is technical obstacles, namely the difficulty of accessing the LMS in remote areas, the second is adaptation barriers where it is difficult for students to understand the LMS system and the lessons provided. The third is the limitations of the teaching materials used by the teachers so as to hinder the process inside learning mathematics [26] . Although in learning mathematics using the LMS system there are still some obstacles, learning mathematics using the LMS system is still considered as effective and efficient learning, especially in a pandemic situation in recent years which requires distance learning [27] .

Based on the background and previous research that has been carried out which is only limited to measuring obstacles and opportunities for learning mathematics using a learning management system, this research is carried out This aims to determine the effectiveness of using a learning management system in learning mathematics in elementary schools. Elementary school is one of the schools that uses a learning management system in organizing learning, especially learning mathematics. The implications of this research are expected to provide information whether the use of learning management in learning mathematics has been effective or not.

II. METHOD

The method used in this study is a mixed method (Mix Method), namely using quantitative and qualitative methods. The quantitative method used in this study is a quasi-experimental approach. This approach is used to see the effect of the effectiveness of WordPress on learning mathematics in elementary schools. In this method the experimental group or control group is not randomly selected. Researchers intend to get an overview of the phenomena that occur before and after receiving treatment (treatment). The population of this study used a sample of elementary schools, each of which consisted of 2 classes. The samples used in this study were 56 elementary school students. As for testing the data obtained using the Analysis Of Variance (ANOVA) test. The hypothesis in this study consists of two hypotheses which become the framework for thinking in this study, namely as follows:

- Q1 : Does the Wordpress system affect students' learning interest?

• Q2 : Does the Wordpress system affect student learning activity?

The next stage When it is known about the effect of wordpress on student learning interest and student learning activeness, the researcher uses a qualitative approach to find out the reasons why the wordpress system influences student learning interest and student learning activeness. The qualitative method used in this study is descriptive qualitative with data collection using interviews, observation and documentation. The informant in this study was a mathematics teacher at an elementary school in Sidoarjo Regency. Observations themselves were made to see the effect of WordPress on student learning interest and student learning activeness. And finally is the documentation where this technique is used to present the data obtained during the research so that it can be used in the process of drawing conclusions.

III. RESULTS AND DISCUSSION

The Effect of Wordpress on Learning Interest and Student Learning Activeness

In this study, the sample used was 2 classes where the first thing to do was to find out how strong the influence of WordPress was on student learning activeness and student learning interest in learning mathematics. As many as 50.3% of students stated that wordpress had an effect on students' learning interest while 49.7% of students said wordpress had an effect on learning activeness in learning mathematics.

Keaktifan
49,7%

Minat Belajar
50,3%
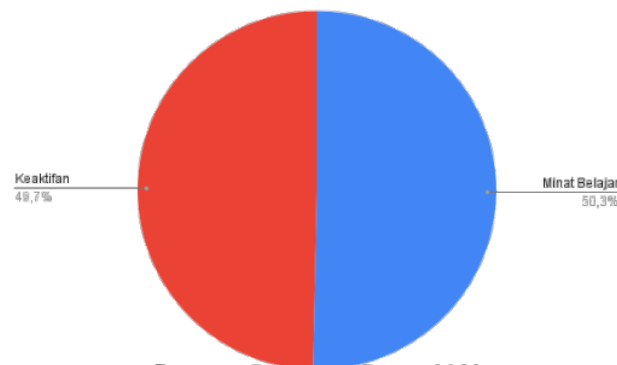
Source : Processed Data , 2023

Furthermore, to test the results of data analysis using a two-way annova test, it was found that the number on Learning Interest was Fcount = 6.705 > Ftable = 4.110, then H0 was rejected and the significance level was 0.05 while the significance level of the test results was p = 0.005 where the t[1] result (sig) > significance level (0.005 <0.05), then H1 is accepted, meaning it can concluded that the effect of using the learning management system based on WordPress in learning mathematics where students have a high interest in learning. Not only that, based on the results of analyst a using the two-way ANOVA test shown in the table above, the Fcount value is greater than the FTtable (48.505 > 4.110) and the sig value is smaller than 0.05 (0.000 <0.05). Then H0 is rejected and H1 is accepted, meaning that there are differences in the learning management system-based learning media that affect student learning activity, which is high in mathematics learning. Learning mathematics using WordPress when compared to learning using other media has a difference in the activeness of learning in students.

Results on research also strengthened by research by Muhajir et al., (2019) where results study This learning using E-Learning media has significant influence _ to interest Study student ie of 81.25%. Use of learning media use E-Learning greatly easy used by students Where use of learning media This The same case using social media so student No difficulty in online learning . No only That use of learning media e-learning based also helps in the learning process stare characteristic face _ limited . There is possible features _ _ _ give convenience for students , really help in the online learning process as well learning in a manner stare face . Through feature comments on the student's E-Learning system can give question to the teacher or can discuss with Friend they class . Besides give convenience for student or teachers can use the E-Learning system increase trust self student . If on learning in a manner stare advance in the classroom student sometimes feel No believe self so learning with using trust E-Learning media self to students can improved .

However, the research results are inversely proportional to research according to Tanjung et al. (2021) said that interest in learning through learning media through E-Learning makes students bored because they only meet friends and teachers online, and there is a desire to play which can result in students being lazy to attend scheduled lessons

and can cause students to students don't interested . The ups and downs of student learning interest according to Tanjung et al., (2021) when online - based learning can influenced by two factor . The first factor is internal factors where factor This can be marked with create a sense of happiness and interest student caught what are they learn . External factors can too influence to interest Study student . Interest Study student tend increase if there is attention from parents , friends and the environment around student .

Based on learning in mathematics in elementary schools in the district Sidoarjo students' interest in learning mathematics is very high, this is because the media used when learning mathematics using WordPress is very varied. In Wordprees, teachers can provide a variety of math video lessons where each video provides various ways or solutions for solving math problems in a way that they understand. directly and can be corrected by friends on zoom so that when teaching online class discussions come alive.

Figure 1. Elementary School Wordpress

In line with the curriculum used by schools, namely the independent learning curriculum where in the curriculum students are given the freedom to solve a problem in a way that is considered easier for them to use, the independent learning curriculum opens opportunities for students to express ideas and opinions freely without having to set standards. with the teacher's mind. But on the other hand, sometimes using WordPress also makes students tend to get bored, this is because students can only see their friends and teachers through limited cellphone or laptop screens. learning online also makes students feel like they are not learning because the space used is not a classroom like at school.

Not only does it affect the learning interest of students learning mathematics using WordPress, it also affects the activeness of student learning, where this occurs at SD Muhammadiyah Sidoarjo. In elementary schools, elementary school students' learning activity is said to have increased because students feel more enthusiastic when conveying their ideas or opinions without feeling embarrassed if they answer incorrectly because during class learning there are some students who are still embarrassed in expressing their opinions. . Using wordpess can also train students in the skills to use IT so that this also encourages students to learn more about using IT.

Based on the phenomena that occur in elementary schools, it can be strengthened by research by Abd. Rozak & Azkia Muharom Albantani, (2018) entitled " Arabic Language Lecture Design through Google Classroom " , in the following research This said that learning by utilizing the learning management system application , namely Google Classroom as a learning media can produce positive influence on students . The students were more enthusiastic in participating in Digital Simulation learning. It's just that there are a few problems with the wifi connection in the environment school with less stable speed. However, the rest of the research conducted proved to be able to improve each potential possessed by students , student activity as well as interest student learning in participating in Digital Simulation learning. Anita Ratnasari (2012) said students were quite active in teaching and learning activities with the e-Learning system which included downloading material, discussion forums and working on quizzes or practice questions.

Other research that can strengthen is research conducted by Wibowo (2016) where in study This argue bring liveliness student is the main factor that goes or not learning that has approved and arranged by the teacher. This is also reinforced by the opinion Grace (2020) Where in study This learning very online _ impact for liveliness student . Where are students easy in access the learning process with supported sufficient facilities _ ok . However _ in maintenance online learning still there is weakness Where in learning This student sometimes No active follow learning because limited teacher supervision of participant educate .

IV . CONCLUSION

Based on the results of the tests that have been carried out, it produces two hypothesis tests. In testing the first hypothesis, the results obtained are on Learning Interest, namely Fcount = 6.705 > Ftable = 4.110, then H0 is rejected and the significance level is 0.05, the significance of the test result is p = 0.005 where the test result (sig) > significance level (0.005 <0.05) , then H1 is accepted, meaning that there is a difference in the Learning Management System-based learning media which has a high learning interest, higher than students who have a low learning interest in mathematics with a two-way ANOVA test. To test the second hypothesis, the results of the two-way ANOVA test obtained that the Fcount value was greater than the FTabel (48.505 > 4.110) and the sig value was less than 0.05 (0.000 <0.05). Then H0 is rejected and H1 is accepted, meaning that there is a difference in the Learning Management System-based learning media which has high learning activity, higher than students who have low learning activity in mathematics.

THANK-YOU NOTE

Thanks to my family, friends, supervisors who have helped me in completing this thesis.

REFERENCE

[1]   A. Widiansyah, "The Role of the Economy in Education and Education in Economic Development," *Horizon* , vol. XVII, no. 2, pp. 207–215, 2017.

[2]   IM Sugiarta, IBP Mardana, A. Adiarta, and IW Artanayasa, "Educational Philosophy of Ki Hajar Dewantara (Eastern Figures)," *J. Indonesian Philosophy*. , vol. 2, no. 3, pp. 124–136, 2019.

[3]   YN Nani, "The Role of Communication in the Implementation of Equal Access to Education Policy Implementation (At the Gorontalo District Education and Culture Office)," *Ideas J. Education, Sos. and Culture* , vol. 7, no. 3, pp. 231–240, Aug. 2021.

[4]   UH Salsabila and N. Agustian, "The Role of Educational Technology in Learning," *Islam. J. Islam and Educator Science*. , vol. 3, no. 1, pp. 123–133, 2021.

[5]   I. Hambali, "Implementation of Management Information Systems (MIS) in Improving the Quality of the Learning Process," *J. Edumaspul* , vol. 5, no. 1, pp. 124–134, 2021.

[6]   FK Zukhrufin, S. Anwar, and U. Sidiq, "Design of Moral Learning Through Islamic Religious Education Subjects," *J. Islam. educ.* , vol. 6, no. 2, pp. 126–144, 2021.

[7]   ON Toxirjonovich and XG Tulanovna, "Overview Of Distance Learning Systems And Learning Management," *Gospod. i Innow*. , vol. 21, pp. 166–181, 2022.

[8]   NIS Rakhmawati, S. Mardliyah, R. Fitri, Darni, and K. Laksono, "Development of a Learning Management System (LMS) in the Era of the Covid-19 Pandemic in Early Childhood Education," J. Obs . *J. Educator. Early Childhood* , vol. 6, no. 1, pp. 107–118, Apr. 2022.

[9]   VM Bradley, "Learning Management System (LMS) Use with Online Instruction," *Int. J. Technol. educ.* , vol. 4, no. 1, pp. 68–92, Dec. 2021.

[10]   MBUB Arifin, Nurdyansyah, I. Rindaningsih, and S. Kalimah, "Development of Smart Play Wheel Learning Media to Improve Student Learning Outcomes in Islamic Elementary schools," in *Journal of Physics: Conference Series* , Feb. 2020, vols. 1779, no. 1.

[11]   A. Yauma, I. Fitri, and S. Ningsih, "Learning Management System (LMS) in E-Learning Using Website-based Agile and Waterfall Methods," *J. Teknol. inf. and Communications)* , vol. 5, no. 3, pp. 323–328, 2021.

[12]   A. Syaputra, D. Hidayati, and E. Hasanah, "Mathematics Mathematics Curriculum Management of Distance Learning Program in Junior High School," *Mosharafa J. Educator. Matt.* , vol. 12, no. 1, pp. 71–80, 2023.

[13]   H. Altinpulluk and M. Kesim, "A Systematic Review Of The Tendencies In The Use Of Learning Management Systems," *Turkish Online J. Distance Educ.* , vol. 22, no. 3, pp. 40–54, 2021.

[14]   JM Martinez-Caro, AJ Aledo-Hernandez, A. Guillen-Perez, R. Sanchez-Iborra, and MD Cano, "A Comparative Study of Web Content Management Systems," *Inf* . , vol. 9, no. 2, pp. 1–15, Jan. 2018.

[15]   NNM Kasim and F. Khalid, "Choosing The Right Learning Management System (LMS) For The Higher Education Institution Context: A Systematic Review," *Int. J. Emerg. Technol. learn.* , vol. 11, no. 6, pp. 55–61, 2016.

[16]   MA Mahbub, "Optimizing the Use of Learning Management System (LMS) in Virtual Learning for Teachers in the Jember NU Ma'arif Education Institution," *J. Pengabdi. Mass.* , vol. 17, no. 1, pp. 107–116, 2021.

[17]   IP Aji, "Development of a Wordpress Plugin for a New Student Registration System on the SMPIT Ihsanul Fikri Mungkid Website," Muhammadiyah University of Magelang, Magelang, 2020.

[18]   N. Istiq'faroh, "The Relevance of Ki Hajar Dewantara's Philosophy as the Basis for National Education Policy

for Freedom to Learn in Indonesia," *Lintang Songo J. Educator.*, vol. 3, no. 2, pp. 1–10, 2020.

[19]   N. Hendri, "Freedom to Learn; Between Rhetoric and Application," *E-Tech J. Ilm. Technol. Educator.*, vol. 08, no. 01, pp. 1–29, 2020.

[20]   Sherly, E. Dharma, and HB Sihombing, "Freedom to Learn: Literature Study," in *National Conference on Education I*, 2020, pp. 183–190.

[21]   A. Widiyono and I. Millati, "The Role of Educational Technology in the Perspective of Free Learning in the 4.0 Era," *JET J. Educ. Teach.*, vol. 2, no. 1, pp. 1–9, 2021.

[22]   YIP Gunawan, "The Effect of Learning Motivation on Student Activeness in Realizing Student Learning Achievement," *Khazanah Akad.*, vol. 02, no. 01, pp. 74–84, 2018.

[23]   VMs . Wuwung, Samsinar, and A. Kadir, "Increasing Students' Interest in Learning During Online Learning Through the Use of the Learning Management System Learning Platform Expertise Program in Accounting and Finance at SMK Yadika Manado Kab. Minahasa Utara, North Sulawesi," *E. Wuwung*, vol. 3, no. 4, pp. 2021–97.

[24]   YI Agustin and I. Rindaningsih, "Framework of Realistic Mathematics Learning Based on Flipped Classroom Against Learning Interests of Elementary School Students in the Post-Pandemic Period," *J. Cakrawala Pendas*, vol. 8, no. 4, pp. 1112–1123, 2022.

[25]   I. Rafi, FF Nurjannah, IR Fabella, and S. Andayani, "Opportunities and Challenges of Integrating Learning Management Systems (LMS) in Mathematics Learning in Indonesia," *J. Tadris Mat.*, vol. 3, no. 2, pp. 229–248, Dec. 2020.

[26]   W. Melfawani, Y. Roza, and Maimunah, "Analysis of Students' Difficulties in Learning Mathematics Using a Learning Management System During a Pandemic," *J. Scholar J. Educator. Matt.*, vol. 06, no. 01, pp. 837–847, 2022.

[27]   FPU Dewi, "Utilization of Learning Management System (LMS) Features in Distance Learning (Case Study of Mathematics Teachers at SMK Engineering Group in Klaten Regency)," in *National Seminar on Mathematics and Mathematics Education (6th SENATIK)*, 2021, pp. 77–83.

Uji plagiasi

PRIMARY SOURCES

1 Kukuh Miroso Raharjo, Monica Widyaswari, Umi Dayati. "The Effectiveness of Learning Management System (LMS) as a Learner Self-Service-based Platform in Community Learning Center (CLC)", 2022 2nd International Conference on Information Technology and Education (ICIT&E), 2022
Publication

2%