IMPLEMENTATION OF WEB-BASED E-LEARNING MODEL TO BUILD THE FOURTH-GRADE STUDENTS’ LEARNING MOTIVATION ON THE IPA THEMATIC LEARNING IN MADRASAH IBTIDAIYAH

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PENERAPAN MEDIA PEMBATIK MODEL E-LEARNING BERBASIS WEB UNTUK MEMBANGUN MOTIVASI BELAJAR SISWA PADA PEMBELAJARAN TEMATIK MATERI IPA KELAS IV DI MADRASAH IBTIDAIYAH

ARTICLE HISTORY

Abstract: Research indicates that learning motivation is crucial to determine a successful learning process for students. In fact, the reality in the research field, students’ motivation for Natural Science learning subjects in elementary schools is still lacking. The researcher will subsequently apply or examine the learning models. The research is conducted to explain whether the implementation of web-based e-learning in thematic learning, especially Natural Science learning subjects, can build students’ learning motivation or not. The research location was conducted at Madrasah Ibtidaiyah Plus Nur Rahma in Bengkulu. The time of conducting the research is the even semester in the academic year 2021/2022. The method used is a qualitative approach. Data collection is direct interview and documentation techniques. The research results imply that implementing an e-learning model can increase students’ learning motivation. The implication of the research is that teachers or thematic learning for Natural Science learning subjects in elementary schools are recommended to utilize this web-based e-learning model.

Keywords: web, e-learning, thematic learning, learning motivation, elementary school

ABSTRACT


Kata Kunci: web, e-learning, pembelajaran tematik, motivasi belajar, sekolah dasar

CITATION

INTRODUCTION

Motivation is very important during the learning process (Manizar, 2015; Suharni, 2021). Learning motivation is the main thing, especially in implementing thematic learning in schools. However, with the many obstacles that hinder the course of learning, such as the current spread of the Covid-19 virus, which has reduced student learning motivation (Masduqi, 2020). The teacher is said to be successful in teaching if there is an increase in positive things that can motivate students in terms of learning. Motivation is something that can encourage conscious or unconscious action to achieve a goal. Motivation itself can arise from outside and from the internal learners themselves. This factor is important and interrelated in building students' learning motivation (Izzatunnisa Lita, Suryanda Ade, 2021). Student learning motivation is an interaction that occurs between students and educators in terms of achieving a learning goal. This makes teachers always think about what to do, apply to students, using methods that can build student learning motivation itself (Pusvyta Sari, 2015).

Learning motivation is very influential, but in reality children's learning motivation during the pandemic has decreased. Student learning motivation has decreased, due to the change in the face-to-face teaching system to online teaching after the pandemic. The decline in learning motivation after the pandemic has forced teachers to think about ways to make student learning motivation grow again in students. During the Corona period, students' learning motivation through e-learning decreased with a significant value of 0.000 less than 0.05 (p <0.05) (Cahyani et al., 2020). This is also reinforced by the average results of student learning motivation before online teaching is 80.8% and the mean of student learning motivation before online teaching drops to 64.01%, which means that student learning motivation has decreased by 16.07% (Aldo, 2021). Madrasah Ibtidaiyah Plus Nur Rahma Bengkulu City is one of the schools that implements online learning. Therefore, it is necessary to have a learning model that can support learning that involves teachers and students which can be implemented at any time. And not only build students' learning enthusiasm, but also increase the intensity of learning interactions between students and teachers outside of school lessons (S.widowati, H.Susanto, 2013).

Learning by implementing web-based e-learning at Madrasah Ibtidaiyah Plus Nur Rahma Bengkulu City is to: 1) be able to motivate students in learning science; 2) students can streamline the learning process in class; 3) able to learn the lesson well. Along with the development of the times, the development of Technology-Based Learning is increasingly rapid. The concept of IT-based learning includes web-based e-learning. E-learning itself began to be used in schools. The use of web-based e-learning as a technology also needs to be designed so that it can be implemented effectively and creates an interesting learning atmosphere for students (Islamiyah & Widayanti, 2016).

Teachers as facilitators of compulsory education can prepare fun learning, for example by applying teaching methods that can adapt to what is needed and according to the expertise of students in class (Rofiah, t.t.; Taufik et al., 2013). By observing the situation in the students' environment, students' learning abilities can be determined, and the learning process can be changed, so as to improve the quality of education. For this reason, teachers can apply various teaching strategies that motivate students. Learning by using e-learning is an important thing for learning, because e-learning is learning that can be obtained through technology. E-learning can involve more learning experiences than just using the usual learning models/methods. E-learning involves all kinds of electronic media.
Almost every activity today uses technology. Both for learning activities and activities outside of learning. One of them is the Zoom Meeting and Google Classroom platforms which are commonly used in learning activities and are often used by teachers and students in learning (Hamidy, t.t., p. 62). In addition, there is an application, namely kahoot as a very simple game that can be useful for measuring student understanding, the game is in the form of a quiz game in web-based interactive learning (Irfan et al., 2022, p. 71). The use of this media is in line with the expectation that the use of the internet itself is not hindered by time limits. But we can see, the application of the internet in schools is not entirely going well. Some students use the internet just to playing and access to education are not running effectively. This shows the need for awareness in maximizing technology-based learning in the education sector with the aim that students achieve learning goals and that education can change for the better starting from elementary school education (Susanti & Prameswari, 2020). One of them is by utilizing technology by implementing web-based e-learning.

At the time of conducting research, the problems encountered so far were that the learning process carried out was limited. Only around 30-60 minutes for science learning. When teachers and students interact, they also don't interact well (Septi, 2019). There is an influence on technology-based learning on mathematics learning outcomes. The findings of this study indicate that the learning-based learning method has a positive influence on student learning outcomes and is able to motivate students to learn mathematics better than the usual method. This can be seen from the difference in the mean values of the two groups (Masduqi, 2020). Relevant to the expression from previous research (Meidawati, 2019) stating that online-based learning can have a positive impact on students, a positive influence can be seen from the science learning process with online learning, which is to form a learning community. This is also reinforced by a study (Haryadi, 2021) proving that there is an increase in learning outcomes after using e-learning media with the creativity of educators and the use of e-learning can be used anytime and anywhere. Then (Nuriah et al., 2022) also argues that online learning with zoom has a significant relationship both to motivation and the results of students' learning styles visually which are significant. As well as being confirmed by research (Jessica et al., 2020) which states that the implementation of digital literacy during the e-learning-based learning process that takes place in the classroom has been implemented for two years, the impact shows a very positive influence because students feel happy and active while learning.

Based on research from previous studies using e-learning shows that there is a significant influence on student learning motivation and students' motivational tendencies to apply it in learning. Because of this, researchers are interested in implementing web-based e-learning learning to increase student motivation in science subjects at Madrasah Ibtidaiyah. This research has similarities with previous research, but differs in the focus of questions, subjects and school levels (Ibrahim & Suardiman, 2014). Based on all the studies described above, this research was conducted for the purpose of disclosing e-learning activities based on web-based thematic learning of science material at Madrasah Ibtidaiyah Plus Nur Rahma Bengkulu City to build learning motivation. The difference between this research and previous research is in the form of research location, informants, and research time.

RESEARCH METHODS

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This research uses a qualitative approach. A qualitative approach is research based on a phenomenological perspective. A descriptive study is a study that shows direct, real, or incidental symptoms that systematically and correctly describe these characteristics (Sugiono, 2016). This research was conducted in the even semester of the 2021/2022 academic year. Location This research was conducted at MI Plus Nur Rahma Bengkulu City. For researchers, one of the problems that have been mentioned in the question about the arguments in this study is still ambiguous, so it is more appropriate to use this type of qualitative research. Relevant to this, the purpose of this research is to describe whether the implementation of website-based e-learning in thematic learning, especially science material, can build student motivation. Informants from this study connected various parties at MI Plus Nur Rahma Bengkulu City. As for the profiles of contributing informants, it can be seen in table I.

Table 1. Informan Research

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<th>No</th>
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<tbody>
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<td>1</td>
<td>S1</td>
<td>Kepala Sekolah</td>
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In this study, the technique of collecting records was through in-depth interviews (Lexy J Moleong, 2021). Informants in the study were direct interviews with school principals, interviews with teachers, and face-to-face interviews with students. Interviews with school principals were held for 25 minutes, interviews with teachers for 35 minutes and interviews with students for 48 minutes. Interviews were attempted in person using voice recording aids via a cellphone application.

Table 2. General Interview Guidelines

<table>
<thead>
<tr>
<th>No</th>
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<tbody>
<tr>
<td>1</td>
<td>What is your opinion regarding the application of technology-based learning that is applied to students?</td>
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<tr>
<td>2</td>
<td>What are the obstacles in implementing web-based e-learning?</td>
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<tr>
<td>3</td>
<td>How are students motivated to be able to apply technology-based learning to science subjects?</td>
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<td>4</td>
<td>What is the teacher’s effort in generating stimulus so that students are active in the learning process?</td>
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In addition to interview data, researchers also collected data through observation. Observations were made on aspects of people and objects, namely during the learning process of students using computers. Then you can see the observation guidelines in table 3.
Table 3. General Observation Guidelines

<table>
<thead>
<tr>
<th>No</th>
<th>Questions</th>
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<tbody>
<tr>
<td>1</td>
<td>The place where the learning process takes place</td>
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<tr>
<td>2</td>
<td>Observing the teacher's preparation process in carrying out web-based e-learning learning</td>
</tr>
<tr>
<td>3</td>
<td>The process of teaching and learning activities in class using computers</td>
</tr>
<tr>
<td>4</td>
<td>Anyone who plays a role in the implementation of technology-based learning</td>
</tr>
<tr>
<td>5</td>
<td>Observing the results of web-based e-learning for students</td>
</tr>
</tbody>
</table>

The next stage is data analysis techniques that use stages to make it easier to understand the data collected. The steps in analyzing this data are data collection, data reduction and drawing conclusions. The collection of data collected by researchers is in the form of data that is involved in the learning process, including syllabus, lesson plans and the results of curriculum evaluation. Data reduction researchers here try to summarize the data from the data that has been obtained from the process of interviews, observation and documentation then draw conclusions after the data in the field is obtained. In the next stage, the writer collects data that is in accordance with the formulation of the problem, in thematic learning, especially science material, can it build students' learning motivation. As for the confirmability or certainty of the data that the researcher collected using source triangulation, namely by analogy and checking information obtained through different times and tools in the study. For example: analogizing the results of observational data with the results of interview data, considering the results of the data from the interview process and the documents that have been obtained.

RESULTS AND DISCUSSION

1. Preparation of Web-Based E-Learning Learning Plans

As technology advances at this time, it is very possible for schools to develop learning models. With this in mind, MI Plus Nur Rahma uses web-based e-learning which can build children's learning motivation even better. (Dinata, 2021) explains that students can understand material both face-to-face and online that can be used through technology-based learning. In terms of carrying out web-based e-learning learning, the school and teachers prepare things such as internet connection and computers. Implementation of learning at MI Plus Nur Rahma, students have a high interest in learning science, especially with applied learning using computers.

Based on the results of the interviews, it shows that “Before this web-based e-learning learning was carried out, we prepared several facilities and infrastructure. First we arrange a classroom that will be used. We ordered 15 computers, where each student gets 1 computer that can be used when learning takes place alternately. Then, we increase the internet connection again, so that during learning there is no loss of signal. Children are divided into 2 groups, each group enters alternately. For teachers to prepare RPP lesson plans for e-learning learning” (Interview with S1, personal communication, n.t.).

In terms of the term e-learning has a very broad definition. To explain this, Munir (2009) explains that there are 2 interpretations that can describe the power of this interpretation. First, Electronic based learning is education that uses ICT (Prayogi, 2020). Second, internet-based is education that uses internet facilities that use the internet as its main instrument. From this interpretation, students can access learning with the internet anywhere and anytime (Pusvyta Sari, 2015).
Also with ICT, students are expected to be enthusiastic and not out of date. With this learning, it can create students who are productive and effective in the learning process” (Interview with S1, personal communication, t.t.).

Based on these interviews, it can be seen that related activities are carried out in order to form a generation that understands information and communication technology and can become active and innovative students, creating good graduation standards in high grades. “We have implemented various teaching systems, as currently implemented, namely by applying the learning process using a computer for web-based e-learning. With learning, students can use the computers provided by the school as well as possible and can carry out this learning effectively” (Interview with S2, personal communication, t.t.).

Based on interviews with teachers, it can be seen that MI Plus Nur Rahma Bengkulu City uses a web-based e-learning system so that students can study effectively and not carry out monotonous learning.

2. The Process of Implementing Web-Based E-learning in Science Thematic Learning

Planning has a very important meaning as the goal of learning to be achieved. The purpose of planning is to ensure that the goals to be achieved can be conveyed properly (Saripudin & Faujiah, 2018). In the application of free e-learning is the website requires RPP. Research with the teacher can be seen if the teacher makes a lesson plan first. The researcher made observations regarding the design of the lesson plan, the researcher observed the teacher making the lesson plan for e-learning. The contents of the RPP are not far from the contents of the RPP for face-to-face learning.

The process of implementing thematic learning of science material using web-based e-learning that teachers and students try is the same as using offline learning as before, only they carry out learning using computers and using e-mail for students to send assignments and to send homework (PR). To convey the teacher's material using zoom, the link has been prepared on each student's computer to start learning. The teacher prepares PPT to explain the material to students, after an explanation of the material that has been explained by the teacher through PPT, the teacher gives assignments to work on questions through the website that has been prepared again to students on their computers. Then if students have finished working on assignments, students are given directions to collect them through the website.

In terms of activity, students are very active in participating in learning. The teacher prepares the group first before entering the class which has been prepared by the computer on the student's desk. Each student is given a computer unit to carry out the web-based e-learning learning process (Wiharto, WIdianto, 2012). There is a learning guidance teacher where the teacher serves as an instructor and functions as a facilitator. Then the teacher is also charged with the task of being able to supervise the teaching process, provide guidance, and help students who have difficulty learning.

Learning is divided into 2 groups which students will enter gradually. When learning started, the attitude that occurred between students and science teachers at MI Plus Nur Rahma was quite good and efficient. Teachers always help their students who experience problems in applying web-based e-learning (Emda, 2019). Another thing that becomes a reference in implementing web-based e-learning is learning resources. The learning resource in question is something that can be used as a medium to facilitate students in turn and can motivate students in learning.
3. Obstacles in the Web-Based E-Learning Technology-Based Learning Process

Obstacles during the web-based e-learning learning process take the form of technical constraints or human error. This situation cannot be separated from the participants in ICT learning activities who still occupy the first high class, namely in class IV. As for the results of interviews with teachers about the obstacles during the learning process: "There are several obstacles in implementing web-based e-learning. Not all of the facilities and infrastructure owned by schools have been fulfilled. For example, on the computer, not all students get a computer one by one when learning science takes place. Students are divided into 2 groups alternately to take part in web-based e-learning. Then there are also students who find it rather difficult to accept and apply learning, so that when submitting assignments there are students who are late and need help, I as a teacher must always check each child one by one." (Interview with S2, personal communication, t.t.).

Based on interviews with the class teacher, it was found that in web-based e-learning learning, there were still obstacles experienced by teachers, including obstacles to school facilities and infrastructure that were not fully adequate. There are barriers that students have difficulty mastering educational modules can also experience delays in submitting assignments. After that the next obstacle is students who do the task is not optimal. Another obstacle experienced by the teacher was the conditioning of the class. "I have a computer at home, but my sister's, Mrs. laptop, I often observe my mother using a laptop" (Interview with S4, personal communication, t.n.). "I don't have a computer, I am very happy to be able to use a laptop at school while studying science" (Interview with S5, personal communication, t.n.).

4. Learning Motivation by Using Web-Based E-learning

In implementing the e-learning learning process students are expected to be motivated to increase their activity in learning (Kosasi, 2015). Because to change student learning outcomes and achievement, a strong motivational boost from a teacher is needed to create the expected education. This can be a benchmark whether in applying this learning process changes in student behavior change or not. For students, the use of e-learning should be able to make students participate actively, be involved in the learning process which makes students exchange ideas about learning even though during the learning process students get a point of focus on their respective computers (Pusvyta Sari, 2015). “When learning to use a computer, I get new experiences. And learning doesn't make me sleepy” (Interview with S3, personal communication, t.t.). “Besides being able to learn science by using a computer, you can learn to use it too. This learning makes it easier for us when collecting assignments and implementing them” (Interview with S4, personal communication, t.t.).

A positive classroom atmosphere can affect students' motivation in carrying out learning. This web-based e-learning learning makes students effective in learning given by educators a motivation (Calvin, 2015). Learning by applying web-based e-learning has an effect on students' self which builds student learning to increase. Self-motivation is
something that can change students’ unwillingness to learn within themselves, so that it can generate enthusiasm for learning.

CONCLUSIONS AND RECOMMENDATIONS

The application of technology-based learning media using the e-learning model using the web can change motivation when students learn thematic material for class IV Science at Madrasah Ibtidaiyah to motivate students. This result can be proven by the interviews that were asked of some of the informants mentioned above. With the implementation of web-based e-learning in thematic learning of science material, it shows that web-based e-learning brings positive changes that motivate student learning. Web-based e-learning itself can facilitate both teachers and students in the ongoing learning process. The results of the research were only carried out in one school, of course it would be better and more comprehensive if it were carried out in different locations and for a longer time. The limitations in this study were the limited research time which was only done in 3 interviews with school principals, teachers, students and only limited to one class. This happened because when the researcher plunged into the location at the school the next day he was practicing face-to-face education.

Then suggestions for future researchers if they want to improve, especially web-based e-learning, are advised not to just be in one class and when the research is broken down into several segments so that the results of the research are more extensive and complete. Further research and more in-depth interviews so that the results of building motivation using this model can be seen.

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