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The Effect of the Use of Blended Learning-Assisted Learning Module on Learning Outcomes

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Abstract: *The burden of Education Law No. 20/2003 article 1 paragraph 1 education forms students to actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and the skills needed by themselves, society, nation, and country. To achieve this goal the teacher must be professional to create a conducive learning atmosphere for the creation of maximum learning. For the social studies field of junior high school, the study load to be achieved by students is very dense so the teacher feels overwhelmed in conveying all the material. For this reason, a way must be found so that all existing material can be conveyed in full. And the Blended Learning learning model with the help of E-Modules is very appropriate. With the E-module that uses IT, students can learn repeatedly until they can understand and understand.*

Keywords: *Blended Learning, E Module, Learning Outcomes.*

INTRODUCTION

Education according to Education Law No. 20/2003 article 1 paragraph 1 is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and the skills needed by themselves, society, nation, and state.

The transformation of the 21st-century education pattern requires a demand in the world of education, where an important role in learning is the collaboration of students and educators. The role of the teacher is not only to transfer knowledge or assume that the teacher is the only source of learning, but the teacher is an active mediator and facilitator to develop the potential of students. The knowledge, skills, and experience of the teacher are integrated into creating effective and professional learning conditions so that it is more varied, meaningful, and enjoyable (Ingvarson et al., 2005).

One of the things that cause changes in the pattern of education is the development of technology. The current rapid development of information technology has changed conventional learning patterns towards digitizing learning. The use of digital learning media has been widely used by educators to transfer learning material more broadly supported by internet technology which is endemic everywhere. The use of technology in the learning process is a form of effort to transform the direction of education for the

better, which is not only centered on teachers or educators but actively involves students who are important icons in the learning process (Rao, 2019).

Improving the quality of education is certainly inseparable from the role of the teacher in implementing learning in the school. The teacher as the spearhead in the implementation of education is a party that is very influential in the process of teaching and learning activities. A quality learning process can be achieved if there is reciprocal interaction/activity between students and teachers. The role of the teacher in determining the pattern of teaching and learning activities in the classroom is not only determined by what will be learned but also by how to enrich the experience of student learning activities. Teachers as educators are the main pillar in facing the challenges of globalization in the 21st century. The 21st-century teacher is a teacher who is able and ready to transform learning that can make students the center point of the education and learning process, the teacher changes the role of world speakers to become facilitators, tutors, and students' learners (Malik, 2018)

The reality that the author encountered in the field where the author teaches at Junior High School 6 Sawahlunto, students only receive knowledge given by the teacher during face-to-face hours, and even if that cannot be fully accepted, the level of activity of students is still the low category. In conveying lessons the teacher uses more conventional methods, where the teacher is more dominant in the learning process. The dominance of learning by the teacher causes the level of student activity to be low.

The low student learning outcomes in social studies learning is because teachers tend to use conventional learning models, so students are less enthusiastic during the learning process. The conventional learning process carried out by subject teachers causes students not to be involved in the learning process, students only receive more material presented by the teacher, even students are less trained to develop ideas in solving a problem, student learning intensity is still too low, as well as limited (minimal) student involvement, this causes students not to be motivated in the learning process.

The existence of technology in learning not only affects teachers and students but is also able to increase the value of the learning itself. The application of technology in learning has an impact on improving the quality of learning, changing the learning process to be more effective, and practical, can increase knowledge, and skills for educators and students in utilizing technology in the learning process both in the classroom (indoor) and outside the classroom/outdoor (Licorish et al., 2018)

Looking at the curriculum used in Indonesia, many experts have commented that the curriculum in Indonesia is very dense, as an education expert, Tatok Amin Soefijanto said. According to Totok, the education curriculum in Indonesian schools is indeed very dense. To compensate for the dense curriculum load and the hours of study load, teachers are asked to find and choose the methods used so that the learning objectives as set out in the education law can be achieved even with the limited time they have.

To overcome these problems, the use of blended learning is an alternative to learning activities. Blended learning embodies learning methods that eliminate the barriers of place, situation, and time, and allows for high-quality interactions between teachers and students while implementing long-distance learning practices that emphasize flexibility in time, place, and student learning speed.

One of the media that can bridge the dense curriculum and the lack of available hours of study is to use the E module. With the use of this E-module, students are guided to learn more independently and purposefully both face-to-face and when they study independently without being guided by a teacher. E-module is a source or study guide in electronic form (Rokhmania & Kustijono, 2017)

The e-module is interactive, allowing easy transitions of learning content because it can accommodate audiovisual media and animations, and is equipped with tests. From here, the e-module supports learning especially outside of class sessions (Suarsana et al., 2018). The implementation of the independent

curriculum is now starting to be treated in Indonesia, especially in schools that have been designated as driving schools. In the independent curriculum, the preparations made by the teacher are no longer in the form of lesson plans (RPP) but in the form of modules. Where this module already contains all teacher preparation and teaching materials that will be guided by the teacher in carrying out the teaching and learning process. Junior High School⁶ where the researcher will conduct the research is the only Mobilizing School in Sawahlunto City, which will use the Prototype curriculum at the beginning of the 2022/2023 school year.

With the implementation of the new curriculum at Junior High School⁶ Sawahlunto, the researchers and most of the teachers at Junior High School⁶ Sawahlunto hope that students have to get used to and be active in using the modules that have been made by the teacher assembly and to what extent: The effect of implementing the learning model Blended Learning Assisted E Module on student learning outcomes.

FINDINGS

Definition of Learning Outcomes

Many experts argue says that learning outcomes are "certain competencies or abilities both cognitive, affective and psychomotor that is achieved or mastered by students after participating in the teaching and learning process (Firman et al., 2020). While learning is a personality change that is manifested as a new response pattern in the form of skills, attitudes, habits, knowledge, and skills (Isroani et al., 2022). Another opinion states that learning is a process of changing behavior that arises because of experience (Fiori, 2002). Thus it can be concluded that learning is a process of one's thinking that is carried out through training, and learning. and so on aims to change behavior into a whole new behavior that emphasizes the process of seeking and discovering knowledge through interaction between individuals and the environment.

The factors that affect the process and student learning outcomes are broadly divided into two parts, namely internal and external factors:

- Student internal factors: 1) Physiological factors of students, such as health conditions and physical fitness, as well as the condition of the five senses, especially vision and hearing; and 2) Psychological factors of students, such as interests, talents, intelligence, motivation, and cognitive abilities such as perceptual abilities, memory, thinking, and basic knowledge skills possessed.
- External factors of students: 1) Student environmental factors, this factor is divided into two, namely first, natural or non-social environmental factors such as temperature conditions, air humidity, time of day (morning, afternoon, evening, night), location of the madrasa, and so on. Second, social environmental factors such as humans and their culture; and 2) Instrumental factors, which include instrumental factors, include classroom buildings or physical facilities, learning facilities or tools, learning media, teachers, and curriculum or subject matter as well as learning strategies. The high and low learning outcomes of students are influenced by many existing factors, both internal and external. These factors greatly influence efforts to achieve student learning outcomes and can support the implementation of learning process activities, so that learning objectives can be achieved.

Blended Learning Learning Model

Combination learning or blended learning is learning that combines face-to-face learning models with ICT-based learning models (Gray et al., 2007). Based on the opinions of the experts above, it can be concluded that blended learning is learning that combines face-to-face learning with online learning. Blended learning utilizes a variety of media and technology to support independent learning and provide learning experiences for students. Teacher professionalism is needed because the key to successful learning lies in teachers who can design learning well.

Said the objectives of blended learning (Bakhtiar et al., 2020) are: 1) Helping students to develop better in the learning process, according to students' learning styles learning; 2) Providing realistic practical opportunities for teachers and students for independent, beneficial, and growing learning; 3) Improved scheduling flexibility for students, by combining face-to-face and online aspects; 4) In-person classes can be used to engage students in interactive experiences. Whereas the online portion provides students with knowledge-rich multimedia content at any time, and anywhere as long as students have internet access. Overcoming learning problems that require completion through the use of various learning methods.

Blended learning has advantages and disadvantages (Karunia & Ridlo, 2022), namely: The advantages of blended learning: Can be used to convey learning anytime and anywhere. Learning occurs online and face-to-face, both of which have advantages that can complement each other. Learning can be more effective and efficient. With combination learning, it is easier for students to access learning materials. Learning becomes more enjoyable and less rigid, while the disadvantages of blended learning are: 1) Unequal online learning facilities owned by students such as computers, smartphones, and internet access; 2) Lack of student knowledge of the use of technology. Based on the opinion above, it can be concluded that the advantages of blended learning are that learning becomes more flexible because learning occurs online and face-to-face. The drawback of blended learning is that not all students have facilities that support online learning because not all students come from economically affluent families. Therefore, before implementing blended learning, careful planning is needed so that obstacles that may occur can be minimized.

The steps of the Blended Learning Learning Model that can be carried out by the teacher are:

- Learning Planning: Specifically, Professor Steve Semler suggests six stages in designing and implementing blended learning so that the results are optimal (Darma et al., 2021). The six stages are as follows: 1) Determine the types and materials of teaching materials. Teachers must understand what teaching materials are suitable for application to distance education (PJJ), some of which are carried out face-to-face and online; 2) Determine the design of the blended learning used. The learning plan must be well designed, and must also involve e-learning experts to help. This is intended so that the learning design that is made is suitable and facilitates face-to-face and distance learning systems, instead of making it difficult for students. Things that need to be considered in making blended learning designs are how the teaching materials are presented, which teaching materials are mandatory and which are recommendations to enrich knowledge, how students can access the two components of learning, what supporting factors are needed, for example, what software is used, whether group or individual work is needed; 3) Establish an online learning format. Are the teaching materials available in PDF format, or videos, also need to be notified of what hosting the teacher uses, whether Yahoo, Google, Facebook, or others.
- Conduct a test of the design that is made. This test was conducted to find out whether the learning system was running well or not. Starting from effectiveness and efficiency, attention is paid to whether it makes it difficult for students and teachers or even really makes learning easier.
- Organizing blended learning well. Previously there had been socialization from teachers regarding this system. Starting from the introduction of the tasks of each educational component, how to access teaching materials, and others.
- Setting up standards for conducting evaluations. Examples of evaluations carried out are: 1) Easy to navigate, how easily students can access all the information provided during learning. The criterion, the more accessible the better; 2) Content/substance, how is the quality of the content used? For example, how are the instructions for studying the teaching materials prepared, are they by the

learning objectives? The criteria: the more appropriate the contents of teaching materials with learning objectives, the better.

- Layout/format/appearance and learning packages (materials, instructions, or other information) are presented professionally. The criteria: the better the presentation of teaching materials, the better.
- Interest, in the sense of how much the learning package presented, can attract students to learn. The criteria: the more students are interested in learning, the better.
- Applicability is how far the learning package can be applied easily. The criterion: the easier the better.
- Cost-effectiveness/value, how cheap is the cost incurred to participate in learning? The criterion: the cheaper the better.

The conclusion from the expert opinion above is that there are several stages in blended learning planning so that the results are maximized, namely, determining the type and material of teaching materials, determining the design of the blended learning used, establishing online learning formats, testing the designs made, organizing blended learning with well, setting standards for evaluation. Examples of evaluations that can be carried out include how easily students can access the information provided in learning, how is the quality of the content of teaching materials with learning objectives, how is learning presented professionally, how much learning is presented can foster student interest in learning, how far is learning which can be practiced easily, and how cheap it costs to take part in the learning. Blended learning planning should be done as best as possible according to the character and potential of the students so that students can study well using this blended learning method which they may not be new to.

E- Modul

The development of technology and information is slowly starting to experience a transition from print media to digital media. Initially, information and publications were only documented through print media and switched to electronic media as an alternative, including electronic media such as electronic books, and electronic modules (e-modules). The term electronic module is a combination of the term module in the form of electronic teaching materials (e-books). Presentation of learning media in electronic form will be more interesting and provide various conveniences. A digital book or also called an e-book is a publication consisting of text, images, and sound and published in digital form that can be read on computers or other electronic devices (Shiratuddin et al., 2004). An electronic book or commonly known as an e-book is a display of information or text in a book format that is recorded electronically using a hard disk, diskette, CD, or flash disk and can be opened and read using a computer or electronic book reader (Jamali et al., 2009). Electronic modules are a form of presenting independent learning materials that are arranged systematically into the smallest learning units to achieve certain learning goals, which are presented in electronic format (Nokelainen, 2006). Print learning media modules can be transformed into electronic form, giving birth to the term electronic module or e-module. There is no definite definition of an e-module so far. Referring to the various related terms, it can be identified that the electronic module is a combination of the term module with electronic learning media (e-book).

Based on the description above, it can be concluded that e-modules are a set of digital or non-printed learning media that are systematically arranged to be used for independent learning purposes, making it easier for students to learn independently and solve problems in their way. E-modules can be implemented as independent learning resources that help students improve cognitive understanding by not relying on the only source of information.

The advantages of e-module are 1) The costs used are cheaper; 2) Practical and can be read anywhere. 3) Font size can be adjusted according to needs. 4) Can be read in a room with less light intensity. 5) Can be given animated images or multimedia; 6) It's easier for writers to publish books.

While the drawbacks are 1) Requires a special application to open epub; 2) Makes the eyes tired quickly; 3) Must have a smartphone or laptop; 4) Know various software so that it is easy to use; and 4) How to Make E-modules are an adaptation of print modules developed using electronic media.

From the description above, it can be concluded that the use of the e-module-assisted blended learning model is one way that can be used to improve student learning outcomes and to convey all very dense study loads, especially in social studies learning with all the advantages and disadvantages of the blended learning model. Learners can learn independently and repeatedly until they understand and understand and can achieve the learning objectives that have been set.

CONCLUSION

The teacher is the spearhead for achieving educational goals, and because of that, the teacher must be good at dealing with the learning process that will be carried out in the classroom. Many models can be used, and one of them is the blended learning model which combines face-to-face learning with online learning. One of the media that can be used in the blended learning model is the E-Module. Many advantages can be drawn from the e-module-assisted blended learning model, the most important thing is that students can study outside the classroom repeatedly with learning material prepared by the teacher in the form of e module so that students' learning outcomes can be improved.

REFERENCES

1. Bakhtiar, M. I., Saman, A., Irfan, I., Irfan, A., Bakhtiar, B., Syamsuardi, S., & Ratnawulandari, R. (2020). The Effectiveness of Classical Tutoring Services through Blended Learning Based on Google Classroom Applications to Improve Students' Self-Regulated Learning. *International Journal of Innovation, Creativity and Change*, 13(2), 819-830.
2. Darma, I. K., Karma, I. G. M., & Santiana, I. M. A. (2021, March). Schoology based applied mathematics blended learning model to improve the students' problem-solving ability. In *Journal of Physics: Conference Series* (Vol. 1810, No. 1, p. 012040). IOP Publishing.
3. Firman, F., Aswar, N., Sukmawaty, S., Mirnawati, M., & Sukirman, S. (2020). Application of the Two Stay Two Stray Learning Model in Improving Indonesian Language Learning Outcomes in Elementary Schools. *Jurnal Studi Guru Dan Pembelajaran*, 3(3), 551-558.
4. Fiori, S. (2002). Alternative visions of change in Douglass North's new institutionalism. *Journal of Economic Issues*, 36(4), 1025-1043.
5. Gray, C., Pilkington, R., Hagger-Vaughan, L., & Tomkins, S. A. (2007). Integrating ICT into classroom practice in modern foreign language teaching in England: making room for teachers' voices. *European Journal of Teacher Education*, 30(4), 407-429.
6. Ingvarson, L., Meiers, M., & Beavis, A. (2005). Factors affecting the impact of professional development programs on teachers' knowledge, practice, student outcomes & efficacy. *Education policy analysis archives*, 13, 10-10.
7. Isroani, F., Jaafar, N., & Muflihaini, M. (2022). Effectiveness of E-Learning Learning to Improve Student Learning Outcomes at Madrasah Aliyah. *International Journal of Science Education and Cultural Studies*, 1(1), 42-51.
8. Jamali, H. R., Nicholas, D., & Rowlands, I. (2009, January). Scholarly e-books: The views of 16,000 academics: Results from the JISC national e-book observatory. In *Aslib proceedings*. Emerald Group Publishing Limited.

9. Karunia, R., & Ridlo, S. (2022). STEM Integrated Flipped Classroom Learning Tools on Biodiversity Materials to Improve Students' Critical Thinking Skills. *Journal of Biology Education*, 11(2), 242-253.
10. Licorish, S. A., Owen, H. E., Daniel, B., & George, J. L. (2018). Students' perception of Kahoot!'s influence on teaching and learning. *Research and Practice in Technology Enhanced Learning*, 13(1), 1-23.
11. Nokelainen, P. (2006). An empirical assessment of pedagogical usability criteria for digital learning material with elementary school students. *Journal of Educational Technology & Society*, 9(2), 178-197.
12. Malik, R. S. (2018). Educational challenges in 21st century and sustainable development. *Journal of Sustainable Development Education and Research*, 2(1), 9-20.
13. Rao, B. J. (2019). Innovative Teaching Pedagogy in Nursing Education. *International Journal of Nursing Education*, 11(4).
14. Rokhmania, F. T., & Kustijono, R. (2017). Efektivitas penggunaan E-Modul berbasis flipped classroom untuk melatih keterampilan berpikir kritis. In *Prosiding Seminar Nasional Fisika (SNF)* (Vol. 1, pp. 91-96).
15. Suarsana, I. M., Mahayukti, G. A., Sudarma, I. K., & Yoga, I. N. B. A. (2018). Development of interactive mathematics learning media on statistics topic for hearing-impaired student. *International Research Journal of Engineering, IT and Scientific Research*, 4(6), 55-66.
16. Shiratuddin, N., Landoni, M., Gibb, F., & Hassan, S. (2004). E-book technology and its potential applications in distance education. *Journal of Digital information*, 3(4).