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Blended Learning with Science-Technology-Society Approachment: A Literature Review

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ABSTRACT

One of the efforts made so that humans are able and able to develop their potential is through a learning process. Blended learning encourages students to be more active and increases independence in learning. Students are required to learn and access material independently, and complete assignments given by the teacher, both individually and in groups. This literature review aims to discuss strategies for implementing blended learning as a student learning method. With the development of science and technology which is increasingly rapid, nowadays it has a lot to affect human life so that it can have a positive impact, namely improving the quality of life and making human work easier. The negative impact is that it can cause changes in the values, norms, rules, or morals of life adopted by the community. Therefore we need people who are able to think critically, creatively, logically and take the initiative in responding to issues in society that are caused by the impact of the development of science and technology, especially in the world of education.

1. Introduction

One of the efforts made so that humans are able able to develop their potential is through a learning process. In the 1945 Constitution, in article 31 paragraph 1, it is stated that every citizen has the right to receive instruction, and in paragraph (3) it is emphasized by the sentence that the government strives for and implements a National education system that increases faith and devotion as well as mulian morals in order to educate the nation's life as regulated by law. (Asfar et al., 2015)

If we pay attention to the progress and development of the nation, it cannot be separated from the world of education, meaning that education is not just a form of media that means passing on cultural values to the

next generation, but in the world of education has a goal of being able to change and develop the form and pattern of life. nation in a better direction. The rapidly developing civilization demands ready human resources, so it requires reliability, problem-solving skills, broad insight and high intellectuality. From this, it can be understood that the world of education remains a priority and a concern of the government, society, and related parties as an effort to educate the nation's life.

One of the pillars of improving the quality of education is the learning system, which aims to improve quality in the world of education. One of the efforts to improve the quality of education is



improvements related to the management of learning. Teaching activities concern the role of educators in carrying out teaching and learning process activities. Teaching is an activity (process) of teaching-learning (Alhabeeb, 2015; Allen et al., 2003)

As explained according to Asfar et al. (2015), that blended learning encourages students to be more active and increases independence in learning. Students are required to learn and access material independently, and complete assignments given by the teacher, both individually and in groups. This literature review aims to discuss strategies for implementing blended learning as a student learning method.

2. Literature Review

Blended learning, is a term taken from two syllables; namely blended and learning. Bernard et al. (2014) state that Blended has the meaning of a combination or mixture. Meanwhile, Learning has the meaning of knowledge or learning. In another opinion said by Bonk et al. (2007) define Blended Learning is a combination or combination of face-to-face and virtual learning. Likewise, Bristol (2014) explains that blended learning-based learning is a form of learning that combines the advantages of learning through three main learning sources, namely face-to-face, offline and online learning. Carini et al. (2006) argued that blended learning is a collaboration between face-to-face learning in class and online learning, through e-learning portals, blogs, websites, and social networks. Bonk et al., (2007) explained that blended learning follows the concept of learning which is carried out as a combined concept of face-to-face classes and e-learning.

More than that, in implementing blended learning must-have conditions, as stated by Cobb et al. (2012) stated that the absolute requirement that must be in the implementation of blended learning is that the school must have IT, namely that there must be computers, teachers and students who can operate

and be able to access the internet. As also stated by Dalsgaard et al. (2007) and Dziuban et al. (2018) that blended learning always combines face-to-face activities and e-learning as an effort to facilitate the teaching and learning process. So it can be concluded that blended learning is learning that is carried out in collaboration between face-to-face and online learning, using e-learning portals, blogs, websites, and / or social networks and by using a variety of learning models and media in order to improve participant learning outcomes. students. (Dziuban et al., 2011)

When talking about problems related to learning, Fisher et al. (2009) stated that the optimal learning characteristic is the involvement of learners with learning subjects. From these thoughts, it can be used as a starting point in looking for an answer to the question, namely "what should be done by learning technology so that learners are encouraged to be involved in learning events". These questions, it will have an impact on the implications for the design, implementation, and implementation of the learning assessment or evaluation. This statement is an expression of the form of thinking about the renewal of how to treat learners as part of the subject of learning, and not as an object of learning and what must be provided for him so that the learning event hits him. (Freeman et al., 2007)

Fu (2013) explains that a good learning process is to fully involve students in formulating their own mastery of the material. The involvement of the teacher is only as a facilitator and mediator in the learning process. According to Law number 20 of 2003 article 1, it is stated that education 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 skills. what is needed by himself, society, the nation and the State. Education is a process in order to influence students to adapt as best as possible to their environment. Thus it will cause changes in him that



allow him to function as a whole in people's life (Zainuddin et al., 2018)

With the development of science and technology which is increasingly rapid, nowadays it has a lot to affect human life so that it can have a positive impact, namely improving the quality of life and making human work easier. The negative impact is that it can cause changes in the values, norms, rules, or morals of life adopted by the community. Therefore, we need people who are able to think critically, creatively, and logically and take the initiative in responding to issues in society that are caused by the impact of the development of science and technology, especially in the world of education. More than that, there is a statement that states that education is a process in order to influence students to adapt as best as possible to their environment. Thus, it will cause changes in him that allow it to function as a whole in people's lives (Zainuddin et al., 2018).

There are many approaches in order to improve effectiveness in learning abilities, and learning outcomes from students, one of which is Community Technology Science (STM), Community Technology Science (STM) is an approach that involves interaction between individuals and the social environment by presenting problems from the real world which includes all aspects of the world of education, so this is where students can implement science products into technology and use it for the benefit of society. From the above opinion, there is research conducted by (Dziuban et al., 2018) which states that the application of Community Technology Science (STM) can increase student activity and learning outcomes. Also expressed by (Fisher, 2009) with the conclusion that the application of the Community Technology Science (STM) approach can improve student achievement. The more rapid development of science and technology, of course, has a great influence on human life, which has a positive impact on human behavior, namely by improving the quality of life by making it easier to work. Meanwhile, the negative

impact, namely causing changes in the values, norms, rules, or morals of life adopted by the community. Therefore, we need people who are able to think critically, creatively, and logically and take the initiative in responding to issues in society that are caused by the impact of the development of science and technology, especially in the world of education. The role of the teacher in the context of trying to create harmonious communication between teaching. Teaching activities involve the role of a teacher in the context of trying to create harmonious communication between teaching itself and learning. For that, a teacher must have a form of strategy so that learning objectives can be achieved properly. Teaching activities involve the role of a teacher in the context of trying to create harmonious communication between teaching itself and learning. For that, a teacher must have a strategy so that learning objectives can be achieved properly. One of the problems that make learning less successful is the choice of learning strategies that are not suitable for the learning process. Choosing inappropriate learning strategies will have a negative impact on learning outcomes. Teachers should be able to determine learning strategies that are seen as being able to teach students through a learning process that is carried out so that goals can be achieved effectively, and learning outcomes are expected to be further improved. Related to the learning strategy, this factor is considered very necessary to achieve the desired learning goals, so that students / students gain broad knowledge because science is an inseparable need in human life to achieve life goals, both the life goals of the world and the hereafter.

In order to improve the quality of education so that citizens can be cautious, intelligent, skilled and have a noble character, one of the efforts is through Islamic education. Islamic religious education is a very important tool in the formation of human beings who believe and obey God Almighty. The Science of Islamic Religious Education seeks to realize the mission of



Islamic teachings, namely spreading and imparting Islamic teachings into the human soul, encouraging adherents to realize the values of the teachings of the Al-Quran and Al-Sunnah as mentioned above, and encouraging adherents to create patterns of progress in life that can make personal welfare and society and human dignity, and so on.

Zainuddin et al., (2018) suggest that there are four basic concepts of teaching strategies, namely: first, determining the specifications and qualifications for behavior change, meaning the expected form of change after learning is implemented with a strategy. Second, determine the choice with respect to the approach to teaching and learning problems, meaning that the selection of learning strategies is based on the problems that arise in learning. Third, selecting procedures, methods, and teaching and learning techniques, after learning problems are found, the next step is to choose the right procedures, methods, and techniques to be applied in learning. Fourth, applying the norms and criteria for the success of teaching and learning activities, the intention is to carry out a strategy that has been chosen in accordance with the steps that have been determined to fit the learning objectives.

Learning strategies are very important to improve the quality of learning that is not saturating because the strategy is the basic design for a teacher, in this case, the teacher of Islamic Religious Education about how he carries out his teaching in class in a responsible manner. Therefore, a suitable strategy is needed so that students are active in learning. Strategy is another term for an approach, method, or way. In the educational literature, the terms mentioned above are often used interchangeably.

Islamic Religious Education is a subject that requires a special strategy in learning. So what the teacher must do in an effort to increase students' knowledge and understanding of Islamic Religious Education material is to carry out several strategies. This is due to various factors, including the use of

learning models, approaches, and methods that are not in accordance with the material being taught, even though the success of the teaching and learning process in general and the learning of Islamic Religious Education, in particular, is measured by the success of students who participate in learning activities that can be observed. from several sides, namely in terms of the level of understanding, level of mastery, and understanding of students of the material being taught.

3. Conclusion

Blended learning with a science-technology-society approach can be applied as an educational method that aims to improve discipline and learning outcomes for students.

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