School Readiness in the New Normal Era of Online Teaching and Learning at Junior High School

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Abstract

This study aims to determine school readiness for the application of online learning (E-learning) at SMP Muhammadiyah 8 Medan by looking at the factors that affect the increase in the application of E-learning. This is a quantitative study that uses a questionnaire-formatted instrument. The readiness of teachers and school infrastructure is the focus of this research. 11 SMP teachers took part in this study and became respondents. Muhammadiyah 8 Medan. The results of this study suggest that there is learning readiness when using E-learning, but it takes habituation to make online learning more effective.

Keywords: School Readiness, Learning and Teaching Process, E-Learning

1. Introduction

Education is a process that is carried out and organized with a conscious effort by educators and students to be able to explore and develop potential so that they can achieve the desired goals. The purpose of education has been stated in (Republic of Indonesia Law No.20 of 2003) which states about the National Education system Chapter II, article 3, which contains the potential of students to become human beings who believe and have devotion to God Almighty, have a noble character, healthy, knowledgeable, capable, creative, independent and become democratic and

responsible citizens. Education in Indonesia is divided into three parts, namely formal, non-formal, informal, formal education is a clear and structured pathway consisting of primary, secondary, and tertiary education. Middle formal education can be taken to improve the quality of human resources, one of which is SMP (Junior High School) which can be taken after taking previous education, namely elementary school.

Education plays an important role in national development, so it must be improved in all aspects and keep up with the times, given the world of education's increasing demands and fast-paced changes. The minister of education, technology, culture, and research argued that to advance the Indonesian nation, it is necessary to improve the quality of education for all populations so that the human resources produced can dominate and bring about positive change (Suharyanto, 2017a; Suharyanto, 2017b). Schools are formal educational institutions that play an important role in the educational process. Through the learning process in schools, they can choose the method used inappropriate learning to achieve the educational goals. (Foundation, 2013).

Knowledge is becoming increasingly important in the era of accelerated information and technology because it is the source required to create human resources with high skills, as well as the principles that are followed, which are also related to the application of knowledge and technology. The impact of the information era on the world of education in Indonesia can be assessed well because it provides a change in a good direction from the previous era Suharyanto, 2015; Suharyanto, 2013). Distance and time are no longer an issue when it comes to expanding one's knowledge. The current technology in the world of education, one of which is the E-Learning learning system, E-Learning technology is present as a means of supporting education at this time. World conditions and especially in Indonesia are being hit by the Covid-19 virus outbreak which makes schools unable to carry out learning, as usual, namely face-to-face, so schools must implement an online learning system.

According to (Stockley, 2003) \"E-Learning can be used as a solution with the current situation where E-Learning is present to bring a new color in the changes in the education system. E-Learning (electronic learning) is one aspect of the application of technology and information at a school institution, E-Learning is defined as the delivery of learning content or learning experiences electronically using computers or cellphones, or computer-based media.

However, the provision of technology infrastructure and human resource training does not guarantee the success of E-Learning, organizational culture and leadership factors have a major influence on the success of E-Learning. Several other researchers also define it with almost the same meaning, According to (Clark, R, & Mayer, R., 2011) stating that we define E-Learning as instruction delivered on digital devices such as computers or mobile devices that support learning. Similar statements were conveyed by Ong and his friends. His instructional content or learning experiences were conveyed or activated by electronic technology (Ong C,-S, Lai, J., & Wang Y, 2004). "Another argument states that the implementation of E-Learning is expected to improve the quality of education. To compete, schools must be able to adapt and adopt E-Learning. According to the opinion (Wannemacher, K., 2006), this is the same as the opinion (Gotthardt, 2006) states that the use of technology in learning can create a competitive environment, students and teachers become more creative and innovative.

Learning is essentially a process that must be student-centered, which means that students must process knowledge or take an active role in seeking and finding knowledge themselves (Eveline, 2010). the implementation of E-Learning is expected to improve the quality of education. To compete, schools must be able to adapt and adopt E-Learning. According to the opinion (Wannemacher, K., 2006), this is the same as the opinion (Gotthardt, 2006) states that the use of technology in learning can create a competitive environment, students and teachers become more creative and innovative. cost-effective because it does not require many tools, and electronic-based learning methods (E-Learning) are considered capable of complementing conventional learning that has been taking place.

E-Learning is an educational or learning activity that utilizes network and multimedia technology in delivering material (Rusman, 2012; Wijoyo, 2020) Stating that E-Learning is the application of electronic communication, education and training activities that have characteristics. 1) Interactivity, 2) Independence, 3) Accessibility, 4) Enrichment. Continued (Wirastwan G., 2005) Defining E-Learning as a form of information technology applied in the field of education in the form of a virtual school. The use of information technology can be combined with a direct or face-to-face learning process in class. Many educational institutions have used electronic learning as a method in achieving the goals of education. Not only domestic institutions that use this learning method, including Germany, England, France, the United States, Italy, Singapore, London.

Rusman (2012), further argued that E-Learning can have a positive impact on learning material access activities in its application in a school. Students can use e-learning to access any information that has been taught by teachers from anywhere, without having to wait for class meetings. When a teacher is unable to attend or is unable to oversee his students, the teacher can use online learning to ensure that students do not lose out on the learning materials that the teacher will deliver. Furthermore, online learning can be utilized as an enrichment program for students who do not understand the material previously transmitted by the teacher in the classroom teaching and learning process, and it may also be utilized to complement classroom learning.

In addition to the many advantages obtained by online learning in schools, there are also drawbacks from this online learning, namely because of the lack of socialization between teachers and students or between schools. Because the learning process is carried out online, it means that the geographical location is different from each use, this can be overcome by not eliminating the learning system in the classroom and giving group assignments in online classes so that students can communicate with each other and can also work together and share opinions other. But not necessarily online learning can be used directly in a school environment, the success or failure of online learning depends on how the learning process experienced by students while implementing learning using the E-Learning system.

Slameto revealed that in the learning process that was experienced and the most influential thing for this educational goal was what took place, one of the factors was the psychological factor in it, namely readiness (Slameto, 2013). Readiness is the overall condition of a person that makes him ready to give a response or be able to provide an answer in a certain way to a situation. Furthermore, Slameto stated that the factors in education are divided into five types, namely, 1) objective factors, 2) educator factors, 3) student factors, 4) factors of tools, 5) natural factors surrounding it (Sutari, 1995). Explaining the educator factors, one of which is the learning system that will be used in the teaching and learning process, the student factor is one of which is closely related to the readiness of the teaching and learning process, because without the readiness of students (Teddy & Swatman, 2006)

The test method in the E-Learning development approach is critical since the outcomes of the analysis will define the next development stage. As a result, determining the next steps in the development of E-Learning requires a thorough examination of e-learning readiness. E-learning preparedness is divided into three categories: student preparedness, teacher preparedness, and organizational readiness of teachers, and infrastructure at school.

According to Jamaludin, Teaching and learning process readiness (PBM) in the new normal era, during the emergency response period like this, there are many things that teachers can do to make the distance learning program successful or remote learning with the term "Learning at home". Following the health protocol from the government so that the world of academic education seeks to build cooperation with various parties that focus on developing an online education system (in the network) because all parties have a big responsibility to ensure the continuity of the process of running the education of the nation's children (Jamaludin 2020). In remote learning, many online learning applications can be applied in the world of new normal education at this time, for example, WhatsApp or google Classroom is used by teachers to be used as tools or online learning media used during the teaching and learning process in the new era. normal at this point (Jamaludin et al, 2020; Gusty et al, 2020).

SMP Muhammadiyah 8 Medan is one of the junior high schools that are widely known by the wider community with good achievements and facilities, this SMP is one of the most advanced schools characterized by fairly complete facilities including good classrooms, laboratories, field, prayer room, and other facilities which are classified as good. One of the facilities in the SMP is Wifi which is intended for students and all employees at the school, this wifi facility is one of the technologies that allows students and educators to access all the learning needs needed via the internet. This Wifi makes it easier to access the internet anywhere and anytime, of course, in a school environment. expected to broaden the knowledge of students and educators.

However, the school does not yet have a forum for students and educators to exchange materials or teaching materials when the teacher is unable to attend school, and there is no direct feedback on the assignments given by the teacher to students online. Based on the results of direct observations in the field, the principal of SMP Muhammadiyah 8 Medan wishes to take advantage of existing facilities by implementing E-learning but is constrained by the lack of readiness from s hool.

Knowing the level of readiness for online learning that will be used, it is hoped that the school will be able to determine the next steps that the school will take, the level of readiness in each category being tested in addition to knowing the overall level of readiness, it can also be seen that the readiness category is still very low. The low category's level of preparedness will be in a low category will be followed up and the level of readiness in the high category will be maintained.

2. Research Method

The method used in this research is a quantitative descriptive research method that tries to find appropriate and sufficient explanations of all activities, objects, and teaching and learning processes, so by collecting facts and identifying data, and strengthening it with a questionnaire instrument containing a series of questions about a problem or field. which will be researched, distributed to respondents, namely all teachers in the school to obtain data that will be used as relevant information. The data obtained from the questionnaire were then analyzed using measuring instruments using the product-moment.

3. Results and Discussion

3.1 Teacher Readiness for the Online Teaching and Learning Process

The results of the score in teacher readiness reached 33% lower than the previous factor, but based on the ELR rating scale, the score has reached the target category ready and E-learning can be used, but some improvement is required. Among the indicators in this category are: The teacher is aware of what E-learning is. E-learning is viewed positively by teachers as a means of improving teaching and learning outcomes. Teachers believe the time is right for online learning, especially since the pandemic is far from over. Teachers are eager to integrate and collaborate with E-learning. The teacher is prepared to use Google Classroom to prepare the material for learning to take place.

From the indicators above, ten questions are described in determining teacher readiness. These questions include, Q1: teacher knowledge about E-learning, Q2: the usefulness of E-learning in improving the teaching and learning process, Q3: the need for implementing E-learning, Q4: the readiness of E-learning integration in classroom learning, Q5: the ability of teachers to use computers and the basic internet, Q6: the ability of teachers in following the instructions on the computer screen, Q8: the teacher's ability to use technology, Q9: the difficulty of the teacher getting internet access: and Q10: the cooperation of teachers with students in completing assignments.

Table, 1 Score of Data Teacher Readiness

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Question	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	
Total score	41	42	40	47	40	45	43	41	38	39	
Total score factor	416										
Mean per Quastion	3.7	3.8	3.6	4.2	3.6	4.0	3.9	3.7	3.4	3.5	
Mean of factor	3.74										

Source; data processed by researcher using product-moment 2021

Teachers' understanding of E-learning with an ELR score of 3.7 so that there is still a little bit to be improved so that it can be said that E-learning is ready and continued to be applied, E-learning knowledge in teachers can be overcome by schools carrying out socialization or training for teachers that aims to enable teachers to apply distance learning system (Online). 8 other indicators must also be improved slightly because the ELR score obtained is not adequate and there must be an increase, 4.2, namely the minimum score to be said to be ready and to be continued in the application of E-learning.

E-learning is said to be unable to fully assist in unifying classroom learning because teachers' knowledge of E-learning also still needs to be improved, with the existence of E-learning socialization and training, it is hoped that teacher knowledge can increase about E-learning and can improve teacher tasks in the process. teaching and learning in class even with an online learning system. As for other things that must be improved by teachers, the ability to use computers/laptops as the basis for teachers can also be improved by the school organizing training for teachers. So that teachers at these schools can improve their abilities in using computers/laptops so that they can facilitate the role of teachers in implementing learning methods from the network (online).

Teacher readiness in online learning is very important because apart from the teacher as a very important component in carrying out the teaching and learning process and also its role in these activities, students need it. So that all aspects of the teacher need to be considered, including readiness. Teachers' readiness in carrying out ongoing learning will determine learning outcomes, improvements in this aspect are deemed necessary so that teacher readiness increases in implementing online learning.

3.2 Infrastructure Factors in The Implementation of the Online Teaching and Learning Process

The result of the overall score of the infrastructure factor is 33%, meaning that it is said to be ready but requires a little improvement, the three indicators that are considered to provide an ELR score, 3.4 <x <4.2 in the range of values and categories used in the study, the score shows that the measured factor is adequate. ready but still needs a little improvement in its implementation. In this infrastructure factor, there are 5 indicators of teacher perception that are assessed in this aspect, namely; Q1: Can the IT infrastructure in the school support the implementation of E-learning; Q2: Can the school laboratory support the implementation of E-learning; Q3: Does the Technician at the school have strong enough support for the implementation of Online learning; Q4: Is the school willing to help the cost of implementing online learning in carrying out the teaching and learning process; Q5: Does the school add internet access to support teachers' facilities in carrying out the teaching and learning process at school

The three indicators, the researcher can describe the five questions that will be used by the researcher in the form of an ELR table for infrastructure factors.

Table. 2 Score of Readiness School Infrastructure Data

Question	Q1	Q2	Q23	Q24	Q25			
Total Score	38	40	40	42	41			
Total score factor	201							
Mean of quastion	3.4	3.6	3.6	3.8	3.7			
Mean of factor	3.62							

Source: data processed by researcher using product moment 2021

School infrastructure that supports E-learning requires a little improvement, such as by increasing the number of computer laboratories and increasing the number of computers used by teachers in terms of technical improvements that support remote learning made by schools so that online learning can run optimally.

Additional school budget costs for implementing E-learning or the proposed additional budget for the government to implement E-learning, especially during the Covid-19 epidemic, schools simply cannot implement face-to-face learning systems. So that almost all existing schools implement an online learning system so that students can continue to learn as usual, then the school must also increase internet access in schools which is used to support the facilities of teachers in carrying out the teaching and learning process in schools amidst limitations. As a result of this pandemic, teachers access learning through applications such as Google Classroom and also Google Meet to carry out online learning.

4. Conclusion

The researcher's conclusion reveals that the school is ready for the application of online learning based on the score described by the category of assessment. However, it also requires habituation so that learning can be carried out optimally, this habituation also supports improvement and improvement-oriented to the quality of online learning. In terms of teacher readiness, some teachers at the school have been unable to use computers or Android mobile phones in carrying out teaching and learning in the new normal era, so they require special assistance and training for some teachers who are still not optimal in using ICT. The readiness of infrastructure in schools is not maximally adequate due to limited access to Wi-fi networks, so it is necessary to increase access capacity and balance its capacity. So that the implementation of remote learning does not experience network and connection barriers.

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