
ISLAMIC PRIMARY SCHOOL TEACHERS' PERCEPTIONS ON DIGITAL TECHNOLOGY-BASED LEARNING

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Abstrak

Pembelajaran berbasis digital menjadi salah satu alternatif yang cocok untuk kegiatan belajar mengajar jarak jauh sebagai respon terhadap apa yang terjadi saat ini. Dalam melaksanakan kegiatan e-learning dari rumah, pendidik dituntut untuk secara mandiri mengakses dan memahami materi yang diberikan. Tujuan penelitian ini adalah menganalisis persepsi guru sekolah dasar terhadap pembelajaran berbasis digital menggunakan e-learning pada masa pandemi Covid-19. Penelitian ini merupakan penelitian deskriptif kualitatif dengan teknik pengumpulan data melalui wawancara terhadap 12 orang guru yang menerapkan e-learning di Kabupaten Lamongan. Keabsahan data diperoleh dengan menggunakan triangulasi sumber. Teknik analisis data dihasilkan dari kondensasi data, penyajian data, dan kesimpulan penelitian. Hasil penelitian ini menunjukkan bahwa sebanyak 68,75% guru menyatakan pembelajaran berbasis teknologi digital dengan menggunakan e-learning berada pada kategori baik yang berarti dengan bantuan e-learning dalam pembelajaran jarak jauh guru terbantu khususnya dalam mengatasi permasalahan yang mungkin terjadi saat belajar dari rumah. Untuk itu diharapkan terjadi sosialisasi pengembangan wawasan bagi seluruh guru tentang pembelajaran berbasis teknologi digital.

Kata kunci: Covid-19, Teknologi Digital, Pembelajaran, Persepsi, Guru.

Abstract

Digital-based learning is a suitable alternative for remote teaching and learning activities in response to what is happening nowadays. In carrying out the e-learning activities from home, educators are required to autonomously access and understand the materials provided. The purpose of this study is to analyze primary school teachers' perceptions of digital-based learning using e-learning during the Covid-19 pandemic. This research is descriptive qualitative research employing data collection techniques through interviews with 12 teachers who apply e-learning in Lamongan Regency. The data validity was obtained using source triangulation. The data analysis techniques were yielded from data condensation, data display, and research conclusions. The results of this study indicated that as much as 68.75% of teachers claimed that digital technology-based learning using e-learning is in a good category, which means that with the help of e-learning in distance learning, teachers are aided, especially in overcoming problems that may occur when learning from home. For this reason, it is hoped that there will be a dissemination of insight development for all teachers about digital technology-based learning.

Keywords: Covid-19, Digital Technology, Learning, Perceptions, Teachers.

INTRODUCTION

The Covid-19 pandemic has hit the globe. The education sector is also affected and even worse, schools in approximately 107 countries had to be closed temporarily on March 18, 2020, one of which included Indonesia (Viner, etc. 2020). According to Circular Number 15 of 2020 concerning the guidelines for the administration of learning from home in an emergency case of the COVID-19 spread, it is explained that during the COVID-19 outbreak, students have to get their right to receive education according to the learning objectives while still maintaining the safety and health of all school members. Therefore, learning activities are carried out remotely from home with the help of technology and digital information developed by many experts (Hubalovsky, 2019).

The technology and digital information advancement today grant implications for learning patterns for schools. The emergence of digital-based learning innovations, one of which is e-learning, fosters the independent learning process. Learning is not only limited by class participation and study period, but also information searched online via computers and smartphones anytime and anywhere (Wahyudi, 2019). Thus, digital-based learning using e-learning is compatible during the outbreak period in which formal study cannot be performed directly at school. In undertaking learning from home with the e-learning method, students are required to be independent in accessing and learning the teaching materials provided in the form of teaching videos from the teacher. Hence, distance learning will be more meaningful and less dull.

The results of the research revealed that students could utilize online learning available at their respective homes with good criteria of 47.05% and 27% with very good criteria. It clearly illustrates that although the learning activity is carried out online, the students can endeavor distance learning well and evenly despite obstacles, such as the occasionally poor internet connection. However, these obstacles can be addressed properly, and learning at home can still be done by students (Novikov, 2020). Additionally, another study also mentioned that 88.75% of students studied at home using learning technology assistance during the COVID-19 pandemic. Online learning technology helps students understand the materials, motivates students to learn independently, and improves students' learning achievements due to the emergency case of the COVID-19 outbreak (Mulyanti, 2020).

In Indonesia, the utilization and integration of e-learning technology in the learning process still a substantial issue for educators today. Global disparities require identification to find innovative solutions and new policies related to the use of digital technology in the form of e-learning to support the learning process (Haryanto, etc. 2018). Some schools in Lamongan Regency are also still facing problems in implementing digital technology-based learning using e-learning. The difficulties are varied, for instance, the confusion in the implementation of using e-

learning because they have not been able to keep up with the changes that occurred due to the Covid-19 outbreak.

Moreover, there are still many students who cannot access e-learning by themselves without the help of their parents. Besides, low-class students also find it tough to cope with digital technology well (Pituch, 2006). This impacts students' scores while learning from home these days. During the process of independent learning, the total score percentage obtained by students was 74% below the minimum passing grade. The main reason is that teachers were not able to supervise students directly during distance learning and not all parents could assist their children during the independent learning process at home (Ariesta, 2019).

Based on research that has been carried out (Hidayat, 2019), This research study aims to systematically review a variety of digital technologies that are currently developing so rapidly to be optimally utilized according to the ability of teachers and technological devices owned by schools, teachers, and students. However, this research is still a literature review that examines research articles published in journals. Other research (Utami, 2021) researches the need for science learning using digital learning. The difference in this research is that it is focused only on science learning. (Hasnawati, 2021) also researches digital learning but only examines its impacts on learning. This research aims to find out Islamic primary teachers' perceptions about digital-based learning using e-learning to answer major problems that still occur in the Indonesian education environment. By identifying the perceptions, the local government and the school parties can provide training guidance for teachers related to e-learning implementation and provide adequate facilities for teachers to support distance learning so that they can teach students well and able to improve learning outcomes even though it is carried out at home.

METHODOLOGY

This research employed a qualitative research method using descriptive analysis. Qualitative research methods as a research procedure that produces the data descriptive form of words written or spoken by people and observed behavior (Moleong, 2007). It was done by analyzing the responses of teachers in primary schools regarding the teaching and learning process using digital technology such as e-learning during the Covid-19 outbreak. The research subjects were 12 elementary school teachers in Lamongan Regency who implemented e-learning during the learning from home phase. The sample was selected using purposive sampling, namely class teachers who teach 1- 6 graders using e-learning. The choice of respondents was not delimited by the age or the work period. The research was conducted at schools situated in the urban and suburban areas in Lamongan. The data was collected with interview guidelines about teachers' perceptions in implementing e-learning using an interview instrument which consists of 4 aspects: (1) the convenience of using e-learning, (2) the presentation of information using e-



learning, (3) the innovative, creative, and engaging functions of e-learning, and (4) the assessment using e-learning. The interview technique was undertaken to describe the research subjects' personal information in more detail.

The data analysis techniques employed included data condensation, data display, and drawing conclusions. Furthermore, the validity test adopted the source triangulation (Miles, Huberman, & Saldana, 2014). The data condensation was carried out to classify the results of interviews into data tables to find the answers from each respondent. Meanwhile, the data display was performed until the presentation of the results finished identifying the four aspects related to digital-based learning. The conclusions were drawn to find out the final results of research questions from the discussions related to teachers' perceptions about the integration of digital technology using e-learning during the distance learning period in primary schools. In addition, identification was executed to discover the perceptions of teachers on digital learning using e-learning which has been implemented well, and that digital technology is necessary for elementary school teachers. In this study, teachers were allowed to express constructive views and claims in the form of opinions, facts, expectations, and targets to be achieved in their self-perceptions.

RESULTS AND DISCUSSIONS

Teachers' perceptions about the convenience of using e-learning as a tool in teaching and learning carried out remotely as a result of the Covid-19 outbreak yielded some results as follows. As much as 75% of teachers claimed that e-learning was easy to use. Meanwhile, another 25% of teachers said that e-learning was quite convenient to use. Thus, primary school teachers in Lamongan have a positive perception of e-learning implementation. This proves that digital technology-based learning using e-learning can help teachers to facilitate the learning process carried out from home and it enhances the interaction between students and teachers in the learning process which takes place virtually. There were also several obstacles encountered, such as some teachers who were still not familiar with e-learning and digital technology.

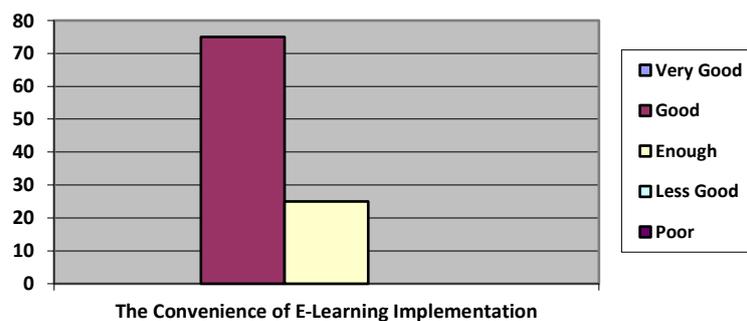


Figure 1. The Convenience of E-Learning Implementation Percentage Diagram

By the implementation of e-learning in the learning process, 89.24% of teachers assumed that it was able to facilitate the online learning process (Eliana, et al., 2016). Therefore, they must keep updated with existing technological advances as learning aids, especially for distance learning.

The teachers' perceptions about presenting information using e-learning were subjected to the complete features of e-learning which supported the distance learning process. Based on the results of the interview data, 16.77% of teachers claimed that it was very good, while 66.6% of them stated that it was fair, and 16.77% of respondents said that it was fair enough. This reveals that the teachers' perceptions of the presentation of information using e-learning are good, meaning that the teacher is aided well in presenting materials using e-learning.

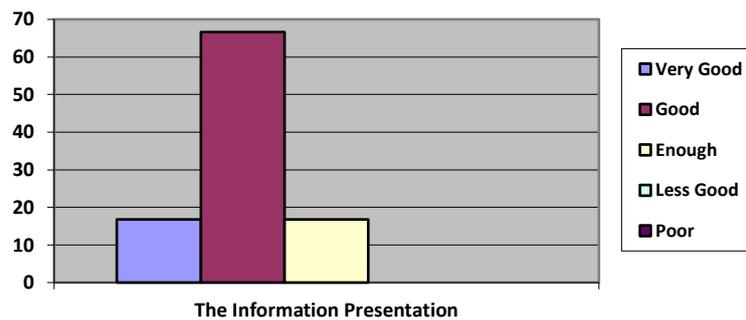


Figure 2. The Information Presentation using E-Learning Percentage Diagram

Online learning can offer opportunities for students to read materials deeper, to practice and to finish assignments, and to interact directly with teachers virtually to provide further motivation and to improve learning outcomes more effectively compared to the conventional classrooms. Online learning can also foster students' skills and can direct students to achieve learning goals (Kubiatko & Vaculova, 2011).

The results of the interview concerning teachers' perceptions of innovative, creative, and engaging e-learning functions revealed that 8.3% of e-learning implementation was very good, while 66.7% of others said it was fair, and 25% of them considered it was fair enough. This proves that teachers' perceptions about using innovative, creative and engaging e-learning are in a good category, meaning that implementing e-learning is able to make students more enthusiastic, independent, focused, and motivated when learning from home.

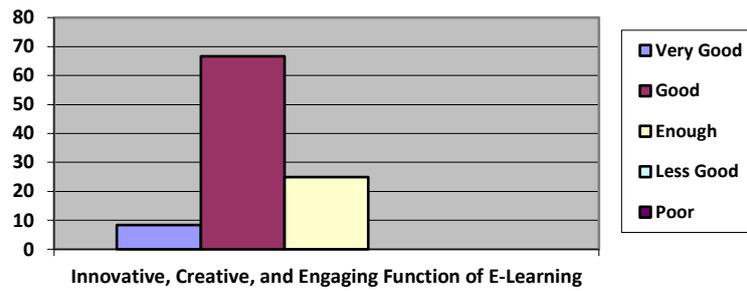


Figure 3. Innovative, Creative, and Engaging Functions of E-Learning Percentage Diagram

The learning process using e-learning can bring novelty in the knowledge transfer process that students have been undertaking so far. Students are more enthusiastic in communicating with teachers and other students with e-learning (Weller, 2005).

Approximately 25% of teachers' claimed that the assessment using e-learning was very good, while 66.7% of them said that the assessment using e-learning was fair, and 8.3% of the rest stated that it was fair enough. This also clarifies that teachers' perceptions about assessment using e-learning are in a good category, meaning that using e-learning can help improve student's learning outcomes positively even though learning is carried out in their respective homes.

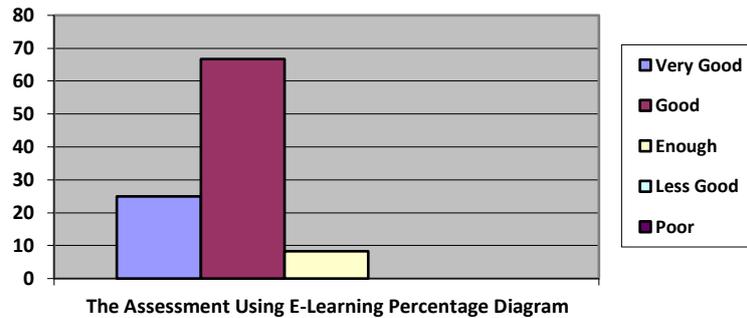


Figure 4. The Assessment Using E-Learning Percentage Diagram

The implementation of e-learning, such as providing online learning videos and presenting materials suitable with learning objectives in power points, was proved to be effective. This was indicated by as much as 74.67% of respondents claimed that it was able to support students' learning outcomes. The use of e-learning in the learning process leads to an increased learning achievement of students than before (Mundy et al., 2012). Over the last twenty years, tremendous change has occurred in online learning. g research, has impacted virtually all departments, and the strategies to adapt to this change is highly interdisciplinary, as demonstrated throughout this study (Lund, 2021).

Based on the interview results from the 4 aspects elaborated above, it can be concluded that 68.75% of teachers in Lamongan Regency asserted that digital

technology-based learning using e-learning during the Covid-19 outbreak is in a good category, which means with the help of e-learning, teacher can be aided in overcoming issues which may occur during the distance learning. Moreover, the existence of technology-based learning can be an effective solution in conducting teaching and learning process which cannot be carried out face-to-face in the class.

According to previous research, 89.2% of students felt that e-learning was the right solution offered during the Covid-19 pandemic (Hermawan, 2021). E-learning gives a challenge for teachers and students to be familiar with new learning tools to support the knowledge transfer process by far. In addition, students can also learn to be more self-determined, flexible, and responsible in managing their schedules since learning is done independently in their respective homes (Luaran, 2014).

However, the teachers still encountered some obstacles, one of which is the difficulty of delivering Mathematics lesson to students. Some teachers who are unable to operate technology well also experienced the difficulty to create an engaging lesson using E-learning (Crawford, 2020). Besides, the absorption of knowledge also tended to be less optimal because the teachers' audio or voice was poor occasionally and it affected the process of transferring knowledge to students. Previous studies conducted by Bączek (2020) highlighted the lack of interaction, technical problems, and inactive students as major weaknesses. For this reason, it is expected that there will be a dissemination of insight development for all teachers about digital technology-based learning.

CONCLUSION AND SUGGESTION

As much as 68.75% of primary school teachers' perceptions about digital technology-based learning using e-learning projected that this method was in a good category, which means that with the help of E-learning, teachers can be aided in overcoming problems that may occur during distance learning. Above all, technology-based learning using e-learning can be a potential alternative in conducting teaching and learning processes which cannot be carried out face-to-face in the classroom.

For further research, we can develop various kinds of sophisticated and interesting technology-based learning media so that learning is more fun and can provide an interesting learning experience for students.

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