Identification of Teachers and Students' Readiness to E-Learning Implementation

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Abstract

The purpose of this study is to determine the readiness to implement e-learning in school, parents, and students at SD UMP, seen from the readiness of human resources, finance, and technology skills. The research method used is qualitative research with descriptive method. Participants in this study included a principal, 15 teachers, and 32 students, and the data were collected through observation, interviews, and documentation. This study shows that principals and teachers are ready for implementing e-learning from the side resources, finance, and technological skill. However, students and their parents have unprepared for it. They need more time to adapt the e-learning and the allocation their expenditure to it.

Keywords: *Covid-19; elementary school; e-learning; readiness*

1. INTRODUCTION

Education is one of the sectors most affected by the current COVID-19 pandemic. All students should study from home using digital platforms. The current covid-19 pandemic has forced all school to be temporarily closed not only school in urban areas but school in remote areas are also closed to avoid crowds and the spread of the pandemic (Ouajdouni et al., 2021; Senthilkumar & Kumari, 2020; Zhu & Liu, 2020)

The impact that can be felt by students with the Covid-19 pandemic is that students forced to study remotely without adequate facilities and infrastructure at home (Karagozlu, 2021;

Mokhtar et al., 2020). Even though these facilities are essential for the smooth teaching and learning process, for Online learning at home should be provided with facilities such as laptops, computers or mobile phones that will make it easier for students to listen to the online teaching and learning process (van Riesen et al., 2018; Zhu & Liu, 2020).

Learning that is carried out for several months requires a large quota, so parental expenses will also increase (Herliandry et al., 2020; Putra et al., 2020; Rasmitadila, Aliyyah, et al., 2020; Tadesse & Muluye, 2020). The obstacle faced by parents is the addition of

internet quota fees for their children; besides, that, parents also have to spend extra time with their children (Novianti & Garzia, 2020). Parents must guide their children when online learning takes place and must be able to divide time with daily routine activities (Herliandry et al., 2020; Rasmitadila et al., 2020). Usually, the teacher will participate in education and do assignments with their children. Online education also forces teachers to technology mastery (Magana, 2014; Zhu & Liu, 2020).

Parents must be able to use technology to help their children in learning. but sometimes parents do not understand the use of the internet, so that children's education hampered by parents being less accompanied (Vaiopoulou et al., 2021)

The impact of Covid-19 pandemic is that students have to study remotely without adequate facilities and infrastructure at home (Ke et al., 2021; Mudenda et al., 2020; Rasmitadila et al., 2020; Purwanto, et al. (2020). Hence, teachers inevitably have to learn to use technology (Nikdel Teymori & Fardin, 2020; Zhu & Liu, 2020). In addition, the limited learning time makes the teacher must deliver learning materials in a fast time to students through e-learning (Mladenova et al., 2020; Rasmitadila, Aliyyah, et al., 2020).

Education itself cannot be separated from the use of technology in learning. Information technology has revolutionized the current way of learning, where learning is now not limited by space and time (Karagozlu, 2021; Zhu & Liu, 2020)

The problems and objectives of this research are to find out how the readiness of the implementation of e-learning-based learning in school (principals & teachers), parents, and students, and to know the supporting and inhibiting factors of the performance of e-learning-based education.

2. LITERATURE REVIEW
a. E-learning

E-learning has become one of the necessities in the field of education, especially during the COVID-19 pandemic (Verawardina et al., 2020; Zhu & Liu, 2020). E-learning is a way of teaching by utilizing technology as a medium of interaction that can done anytime and anywhere, and is not limited by space and time.

Learning by using e-learning provides many benefits (AlMulhem, 2020; Irene & Zuva, 2018; Rolfe & Gray, 2011). They suggested several benefits of e-learning, including (1) can increase student interaction with one another and also with lecturers; (2) the availability of unlimited learning resources. (3) E-learning that is well developed, and will effectively improve the quality of graduates and the quality of higher education; (4) form a learning community that interacts, gives, receives, and is not limited to one location; and (5) improving the quality of lecturers because they dig up more and even unlimited information.

E-learning has disadvantages (Amelia et al., 2020; Özkan, 2012; Slameto, 2014). They suggested that there were some shortcomings of the implementation of e-learning include (a) lack of interaction between teachers and students, (b) tend to ignore academic and social aspects, (c) role changes Teachers from conventional teaching techniques are then required to master teaching techniques that use information and communication technology.

b. E-learning readiness

E-readiness defined as the extent to which a society is ready and has the potential to participate in a global network (Al-Absi et al., 2020; Mourlas et al., 2009; Ojo et al., 2005). They argued that the component of e-readiness, ICT infrastructure, human capital, regulations, policies and internet penetration.

One of the widely known e-learning evaluation models is the Chapnick (2000) model called e-learning-readiness. Chapnick grouped e-learning readiness into eight groups, including (1) Psychological readiness; (2) Sociological readiness; (3) Environmental readiness; (4) Human resource readiness; (5) Financial readiness; (6) Technological skill (aptitude) readiness; (7) Equipment readiness; and (8) Content readiness.

Assessment of readiness to use E-learning proposed by Aydin and Tasci (2005). This developed model can used for the level of e-learning readiness (ELR) in organizations or school. The description of the factors proposed by

Aydin & Tasci (2005) is (1) technological factors, (2) innovation factors, (3) human factors, (4) self-development factors.

According to some researchers (Mercado CA, 2008; Hadjiathanasiou, 2009; Irene & Zuva, 2018; Onditi Luoch, 2017) e-learning readiness were influenced by several factors, such as: (1) Technology Access, like the availability of access to computer and internet technology by e-learning users; (2) Technology Skill Teacher, like the essential ability of the teacher. in using computers, the internet and literacy skills using technology; (3) Student Technology Skills, such as students' basic abilities in using computers, the internet and literacy skills using technology; (4) Teacher Attitude towards e-learning, like how to teach, motivate and time management by teachers towards the implementation of e-learning; (5) Student Attitude towards e-learning, namely student learning habits, motivation and time management of students towards the implementation of e-learning; and (6) Institutional readiness, namely institutional support in preparing resources and administrative support such as policies, instructions, and commitment to the implementation of e-learning

3. METHODS

This research uses descriptive qualitative research. The qualitative research method is a research method based on the philosophy of postpositivism used or interpretive, used to examine the condition of natural

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objects, where the researcher is the key instrument, the data collection technique done by triangulation, the data obtained tends to be qualitative data, the data analysis is inductive/ qualitative and qualitative research results are to understand the meaning, understand the uniqueness, construct phenomena, and find hypotheses (Sugiyono, 2018:17). The researcher intends to describe a state of school readiness in implementing e-learning-based learning during the covid-19 pandemic.

The place of this research was carried out in SD UMP. The subjects of this study were the principal of the Elementary School, Teachers, and Students. The respondents of this study consisted of the principal of SD UMP, 15 classroom teachers, and 32 students. The data collection techniques used observation, interviews, and documentation. According to Sugiyono (2018:64), researchers can only work based on data, such as facts about the world of reality obtained through observation and interviews. All observation questions will assessed using a rating scale in the form; of five categories, namely (1) Very Unprepared, (2) Unprepared, (3) No opinion, (4) Ready, (5) Very Ready.

The model used in this study is a model to measure the readiness to implement e-learning-based learning. The model is a combination of 3 characters, namely Chapnick (2000), Aydin and Tasci (2005), and Mercado (2008). Researchers take human resource readiness, financial readiness, and technological skills readiness.

4. RESULTS AND DISCUSSION
a. Human Resources Readiness

The data obtained from the results of questions using observation, interviews and documentation with respondents totalling 48 people consisting of a principal, classroom teachers, and students, which were then analyzed to answer the research objectives.

Figure 1 showed the teacher readiness to e-learning implementation. All teachers have opinion that they ready to e-learning implementation. Based on the results of observations and interviews with respondents, it was concluded that they had attended training related to e-learning. The forms of exercise received include training using web on class, then training using zoom or google meet. So teachers at SD UMP can deliver learning materials through e-learning-based smoothly.
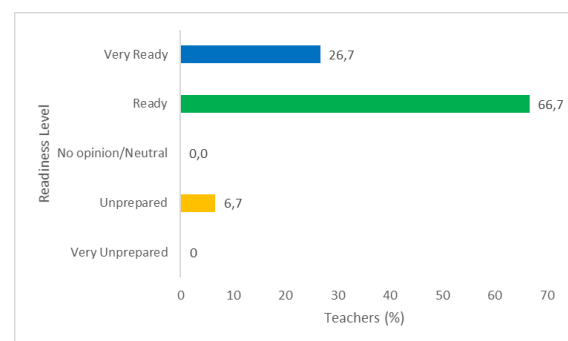

Figure 1. Teacher resources readiness

The result research has supported with some research (like as Mercado, 2016; Hadjiathanasiou, 2009; Irene & Zuva, 2018; Onditi Luoch, 2017). They

suggested that e-learning readiness technology access, like the (1) availability of access to computer and internet technology by e-learning users; and (2) technology skill teacher, like the essential ability of the teacher. in using computers, the internet and literacy skills using technology; and (3) teacher attitude towards e-learning, like how to teach, motivation and time management by teachers towards the implementation of e-learning Student Attitude towards e-learning, namely student learning habits, motivation, and leadership. Student time on the performance of e-learning (Hadjilouca & Constantinou, 2019; Irene & Zuva, 2018).

Figure 2 showed the student readiness to e-learning implementation. Many of them were not ready to it. There some reason caused of the unsuccessful of e-learning. They must study remotely without adequate facilities and infrastructure at home (Ke et al., 2021; Mudenda et al., 2020; Rasmitadila et al., 2020; Purwanto, et al. (2020). Then, many parents are unable to fully accompany their children while they study because they must work or do not have the ability to teach their children (Purwanto et al., 2020; Rasmitadila, Rachmadtullah, et al., 2020).
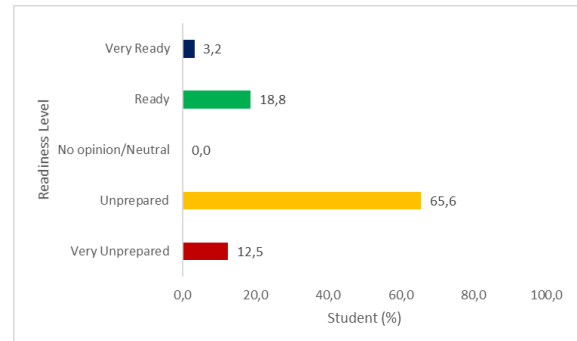

Figure 2. Student resources readiness

become one of the necessities in the field of education, especially during the COVID-19 pandemic (Verawardina et al., 2020; Zhu & Liu, 2020). E-learning is a way of teaching by utilizing technology as a medium of interaction that can done anytime and anywhere, and is not limited by space and time.

b. Financial Readiness

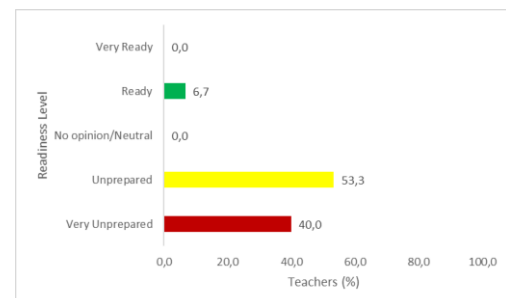The readiness of teachers and students' financial were reported in Figure 3 and 4.
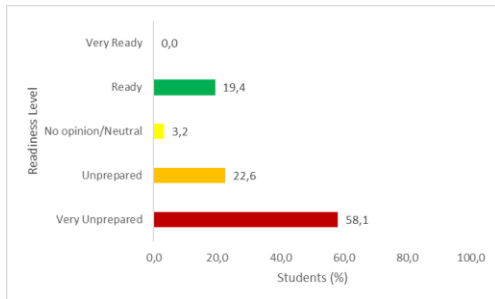

Figure 3. School financial readiness

Figure 4. Student financial readiness

Figure 3 and 4 showed the teachers and students readiness to e-learning implementation based on their financial. Based on both of figures the results indicate that the teachers and parents have the high expenditure during learning using e-learning.

Every day, students learning activities use online, and also use zoom, google meet, google classroom, google form, and also SD UMP on class. Then, teachers must download the results of student work. So, most of them say that they must provide large funds to buy internet quota during covid-19 pandemic.

Parents also spend a lot of money on internet quotas. This condition has been reported is by some researchers (Nikdel Teymori & Fardin, 2020; Pratama et al., 2020; Senthilkumar & Kumari, 2020). Parents said that their expenses have increased drastically during the Covid-19 pandemic.

c. Technology skills readiness

Figure 5 showed the teacher technological skills in SD UMP. Based on it indicated that teachers were ready, even very ready, to e-learning implementation. They have attended training before carrying out e-learning-

based learning. So, when carrying out learning using zoom, google meet, on class and google classroom, they could use very well.
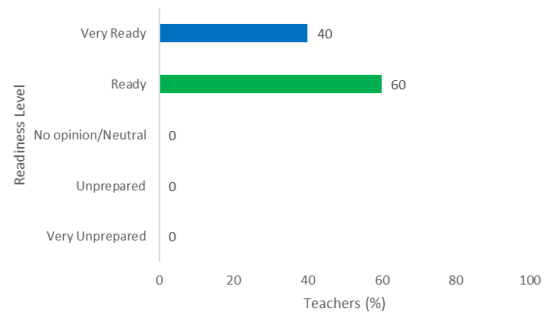

Figure 5. Teacher technological skill readiness

The successful of e-learning implementation were influenced by ICT infrastructure, human capital, regulations, policies and internet penetration (Al-Absi et al., 2020; Mourlas et al., 2009; Ojo et al., 2005). Thus, it were influenced of the teacher technology access and their technology skill (Mercado CA, 2008; Hadjiathanasiou, 2009; Irene & Zuva, 2018; Onditi Luoch, 2017).

Figure 6 showed the readiness of students and parents technology skills on e-learning implementation. The figure indicated that both of them were unprepared to it. They complained that the implementation adaptation time was too short. In fact, the success of this program is also determined by their technological skills (Mercado, 2008; Onditi Luoch, 2017; Hadjiathanasiou, 2009; Irene & Zuva, 2018).
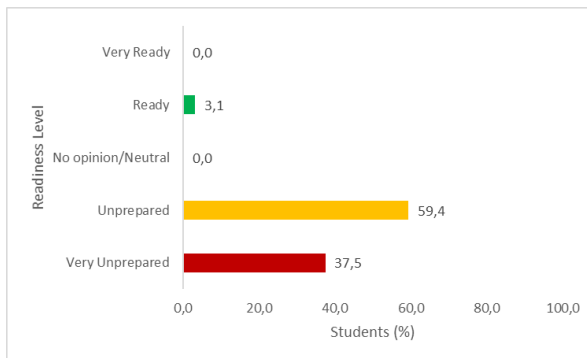
Figure 6. Student technological skill readiness

The inhibiting factor for the e-learning implementation based on the results of observations and interviews is the signals are unstable, so that when delivering material via zoom and google meet is not optimal. They must make a summary for students who are constrained by signals so that they do not miss the learning material presented.

5. CONCLUSION

SD UMP is ready to carry out learning activities using e-learning. The teachers have been ready to e-learning implementation from the side resources, finance, and technological skill. But, students and their parents have unprepared to it. They need more time to adapt the e-learning and the allocation their expenditure to it.

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