Digital Literacy Of Teachers In Online Learning At Elementary School In Bandung City

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ABSTRACT. *This study reveals the digital literacy in learning activities using mediated communication between teachers and students at primary school in Bandung City during the COVID-19 pandemic. This study uses a qualitative method with a case study approach to reveal the experiences of primary school teachers in conveying online material to their students, how messages delivered, and what obstacles they face in the process. Data collected by interviews with teachers of several primary schools in Bandung City who implement online teaching, supported by literature sources related to this research.The informants selected with the snowball-sampling technique. The results showed, at the beginning of the implementation of distance learning, elementary school teachers in Bandung had limited knowledge about the use of communication media in learning and how to deliver learning materials. This is because there is no material preparation to be taught. Over time, teachers learn to recognize online communication media for learning. Delivering messages carried out through social media. Some teachers prepare lesson material well and deliver it through existing digital platforms, directly to children or through parents. However, some teachers still have difficulty using applications related to photo processing, so it is not uncommon for teachers to ask parents for help to operate the program or combine photos.*

KEYWORDS:distance learning; social media; communication messages, digital literacy

1. INTRODUCTION

Coronavirus 2019 (COVID-19) spread rapidly and has caused many victims to die and undergo treatment that has raised great concern from the world community, including Indonesia. Various attempts were made to break the chain of the virus to spread. Spread of the virus that first appeared in Wuhan City, China, at the end of 2019. WHO recommends various efforts, including washing hands with soap, using masks, avoiding enormous crowds, and implementing social distancing or maintaining a minimum of 1.5 meters in small-scale and social interactions between individuals.

The Work From Home (WFH) policy was implemented by many countries in the world to break the chain of the spread of COVID-19. This policy invites residents to work, study and worship from home, to avoid social interactions that can trigger the spread of COVID-19,

which transmitted through touch, or fluids released through sneezing from people exposed to COVID-19.

The WFH policy also impacts educational activities at various levels, from preschool to university. Through the Circular Letter of the Minister of Education and Culture Number 36962 / MPK.A / HK / 2020 dated 17 March 2020, learning activities in schools and colleges stopped and replaced by online/ distance learning from home to break the chain of COVID-19 spread. In addition, the National Examination, a requirement for graduating high school students, eliminated one year earlier than planned.

The government has even reinforced the rules for acting from home by issuing Government Regulation no. 21 of 2020, 31 March 2020 concerning Large-Scale Social Restrictions (PSBB) in Accelerating the Handling of Corona Virus Disease 2019 (COVID-19). This rule limits the space for people to take action. School, work, and worship should be done at home.

A social change occurred suddenly due to COVID-19 so anticipation had not been prepared. Online learning also becomes a challenge for teachers, students, and parents, because there is no preparation for it.

Online learning is currently the first experience for most teachers, students, and parents. so that it creates difficulties in its implementation because there is no technical guide in its implementation. Another obstacle is the material that will be provided by the teachers so that it can be taught at home without burdening parents, as well as the issue of quotas for the continuity of online learning, which includes social media. (Bbc.com, 2020).

Moreover, the use of social media to support work and school/college materials is only a small part, around 23.3 percent. The largest portion of the internet use in Indonesia is for communication, social media, leisure time, playing games, and watching movies, amounting to 60.8 percent. The rest is for news, product information, and so on. Adaptation is needed to get used to the use of technology as a learning medium. William F. Ogburn referred the unpreparedness to face the sudden change as a *cultural lag*(Toharudin, 2020)

Unpreparedness in the face of distance teaching and learning process online has made the school have to prepare material that will give quickly too, sometimes even on weekends. As reported by BBC News Indonesia online (18/3/2020), one of the private elementary schools in Bandung, has prepared learning materials for online learning marathons on weekends, after the announcement of implementing home learning for students in Bandung City. The school has never implemented a distance learning system.

> "Our school does not yet have an online learning system. We just use WhatsApp for grades 1 to 3, but for grades 4 to 6 use Google Classroom," said Irvan, one of the teachers at the school(bbc.com, 2020).

Some teachers hold a meeting on Monday morning so the students receive assignments in the afternoon.The implementation of distance learning is not only in Bandung City but also in other cities/regencies in West Java. In practice, there may be differences, according to local school conditions.

Based on the background, this research aims to 1) Reveal the online learning process that took place between teachers and students of elementary schools in Bandung, during the COVID-19 pandemic; 2) Reveal the process of delivering messages in distance learning using online media in elementary and middle schools in West Java during the COVID-19 pandemic; 3) Reveal the obstacles in implementing online learning in elementary and middle schools in West Java during the COVID-19 pandemic.

Previous research on distance learning carried out by Eko Budi Setiawan and Moch Varna Yusman regarding the development of E-Learning as a means of online learning at Junior High School (SMP Negeri) 8 Bandung. (2014). This study focuses on making e-learning applications to facilitate the teaching and learning process outside the classroom. The results showed e-learning SMP Negeri 8 Bandung can make it easier for teachers to deliver material, manage assignments, and determine the level of student understanding of the material given. The appearance of the e-learning website makes it easier for students to get material and speed up students to find out the results of the exercise. The principal can easily monitor the academic progress of his students.

The next research on distance learning is the use of Facebook to support independent online teaching and learning activities, conducted by Lintang Patria and Kristianus Yulianto. This research aims to determine the use of Facebook as an online learning medium. This research reveals several Facebook features that can be used to improve the quality of online tutorials at the Open University.(Patria & Yulianto, 2011).

Compared to the two previous studies, this study has a different focus of research. The first research focuses on making e-learning applications to support face-to-face learning activities. This research focuses on the process of how distance learning conducted. The second study focused on analyzing the use of Facebook for distance learning at the Open University. Onthis research, Facebook used as a medium of online learning

The theory used in this research is the Social Action Theory which was developed by Max Weber, a sociologist from Germany. For Weber, social action is all individual behaviour that has subjective meaning for himself and is directed to the actions of others (Weber in (Ritzer, 1975). The action here can be overt or hidden, it can be a positive intervention in a situation or deliberate silence as a sign of agreement in the situation.

According to Weber, the action is insofar as a person's social feeds his subjective to the action, taking into account the behaviour of other people and is oriented in his appearance.

For Weber, every human behaviour is based on certain motives that he/she wants to achieve, following the purpose of communication. Related to this research, distance learningis a form of social action that has deep meaning for them and speaks to other people or parties involved in these activities for meaning.

Distance learning is a method of giving education without having to meet face to face. Many terms are embedded in distance learning. Some say distance learning or distance education, remote learning, e-learning, virtual learning, and others. However, distance learning does not require tutors or educators or students to meet in person. Distance learning requires an interactive telecommunications system that connects teachers and students. Electronic learning (e-learning) or online learning (online) is part of distance education that specifically

combines electronic technology and internet-based technology(Simonson, Smaldino, Albright, & Zvacek, 2006).

Distance education programs can be distance learning, or a combination of distance learning with class meetings, which is called a hybrid (Tabor, 2007)or*blended learning*(Vaughan, 2010).The United States uses distance learning methods since 1892 when the University of Chicago launched its first distance learning program for higher education. Distance learning methods continue to develop using a variety of communication and information technologies including radio, television, satellite.

The widespread use of the internet by the public in various countries in 1996 became a growing phenomenon and was followed by the emergence of various digital contents (Grant & Meadows, 2010). In the same year, John Bourne developed the Asynchronous Learning Network Web, which refers to the ability to provide education anytime and anywhere via the internet.

Technological advances with a variety of digital innovations that continue to develop present new challenges for education providers to continue to adapt education infrastructure to these new technologies (Herold, 2016).

Computers and the internet are widely used in distance education. Through computers and the internet, students can access teaching materials in digital form anywhere and anytime and can interact through various applications, such as electronic mail, videoconferences, or online discussion forums (Munir, 2009: 45). Communication can undergo electronic devices or gadgets, such as tablets, laptops, or smartphones.

The research that carried out seeks to reveal the learning methods implemented by teachers, students, and parents, which are carried out as a transformation of learning methods that were originally carried out face-to-face in schools to distance learning methods, which are caused by the outbreak of COVID-19.

Mediated communication is communication that uses channels or means to forward a message to distant and many communicants. One part of media communication is computer-mediated communication (CMC), which is defined as human communication that occurs through the use of two or more devices (McQuail, 2005). The most commonly used form of CMC is communication on social media. The internet has a big role in the process of social media communication because this communication can only occur if it is on the internet network.

> "The Internet as computer-mediated communication (CMC), this means that the communication process carried out using computers, involving humans, occurs in certain contexts where it involves forming media for various purposes." (TomicinAstuti, 2011: 217)

Communication on the internet apart from having a mass communication context also forms many personal communications, namely internet users in communicating face to face with large numbers of other users, each of whom acts as a communicator and communicant. Thus, the nature of communication in social media takes place interactively(Effendi, 2010).

In this study, media communication studied was the use of internet-based media for the teaching and learning process, which was carried out as a substitute for the face-to-face teaching and learning process in schools.

Using online media as a liaison channel in distance learning is a solution that applies to maintain the continuity of the face-to-face teaching and learning process which is disrupted by the COVID-19 pandemic.

Gilster stated that digital literacy is the ability to understand and use information from various digital sources, and the ability to use technology and information from digital devices effectively and efficiently in various contexts, such as academics, careers, and everyday life (Kurnianingsih, Rosini, & Ismayati, 2017)

Based on the descriptions and the concepts previously described, this research formulated the main question, "How is digital literacy in online learning for elementary school teachers and students in Bandung?"

The formulation of the problem is further detailed into the following research questions 1) How were the distance learning activities in elementary schools in Bandung during the COVID-19 pandemic? 2) What is delivering messages in distance learning to use online media in elementary schools in Bandung during the COVID-19 pandemic? 3) What are the obstacles in implementing online learning in elementary schools in Bandung during the COVID-19 pandemic?

2. METHOD

This study uses a qualitative method with a case study approach. A case study is a comprehensive description and explanation of various aspects of an individual, a group, an organization (community), a program, or a social situation. Case study researchers seek to examine as much data as possible about the subject under study. By studying as much as possible an individual, a group, or an event, researchers aim to provide a complete and in-depth view of an object under study.(Mulyana, 2010: 201),

According to Yin (2011: 1)Case studies are a more suitable strategy when the research question is about why or how, if the researcher has little opportunity to control the events to investigate, and if the focus of the research is on contemporary phenomena. Case studies can add value to our unique knowledge of individual, organizational and political phenomena, case studies allow researchers to maintain the holistic and meaningful characteristics of real-life events, such as a person's life cycle, managerial processes, environmental change social, international relations to industrial maturity(Yin, 2011: 4)

This study explores the communication experience elementary school teachers in conducting online learning during the COVID-19 pandemic. How the learning performs, how the message process conveyed, and what are the obstacles and how to solve them, will be the focus of discussion in this study.

The data source of this research is elementary school teachers in Bandung who carry out online learning during the pandemic. Primary research data were obtained through interviews with teachers from elementary schools who carry out online learning.

Informants selected purposively through the snowball sampling technique relates to the research objectives (Bungin, 2011 p. 107). The criteria for the interviewed teacher were to undergo online learning, interact with their students, and be willing to share their experiences in teaching online during the COVID-19 pandemic.

There are four teachers and two school administrators who are willing to share their experiences in communicating through media in online learning. Three teachers from SDN 261 Margahayu Raya Bandung and three teachers from SDN 164 KarangPawulang Bandung. The six teachers represent grades 1 to 3, and grades 4 to 6, as well as school managers as policymakers in implementing the online learning system in their respective schools.

Secondary data is obtained through library data and documents related to research. The data validity test was carried out by triangulation and reference adequacy.

This research was conducted online and used a bibliography of literature and documents related to the problem under study. The data collected through online interviews with informants who selected purposively through the snowball sampling technique according to the research objectives (Bungin, 2011: 107), and literature study. The data validity test was carried out by triangulation and reference adequacy. Sources of data from this study are elementary school teachers and students in the city of Bandung who carry out online learning.

In this study, we use three components of data analysis, namely data condensation, data display, and conclusiondrawing/ verification. The three types of analysis activity and the activity of data collection itself form an interactive, cyclical process. The researcher steadily moves among these four nodes during data collection and then shuttles among condensing, displaying, and conclusion drawing/verifying for the remainder of the study(Miles, Huberman, & Saldana, 2014).
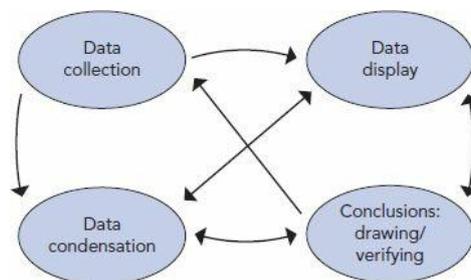

Figure 1. Components of Data Analysis: Interactive Model
(Source: Miles & Huberman, 2014, p.33)

This research is in Bandung City. The informants who contacted online lived in the city of Bandung. The research was carried out over 5 months, May to September 2020.

3. RESULT AND DISCUSSION

Online learning that occurs in Bandung City is almost the same as other cities in Indonesia. The process occurs suddenly, especially in the even terms of the 2019/2020 school year. Teachers, students, and parents never imagined having to face home learning activities.

Therefore, during the first period of learning at home, the learning process was full of limitations because of a lack of preparation. Many teachers not yet accustomed to using devices as media for dstancelearning.

Some teachers whose schools are already Edubox admit that they were not surprised when online learning was implemented. Learning activities that have been carried out before are helpful when online learning has to do.

The online learning process through the social media platforms that have provided, for example, WhatsApp, video calls, and Zoom. Among the three, Zoom is rarely used, because they consider it less effective, considering that children cannot muffle their voices when learning through zoom is in progress. Besides, Zoom drains the internet quota, so it is only held once a month.

WhatsApp is the most used application. Teachers and parents communicate by creating WA groups. In the group, the communication that takes place is the attendance report, to inform the assignment and send the results to the subject teacher who gives the assignment.

The use of WhatApp as the most widely used applications by teachers in online learning was stated by Wahsun, a researcher from the Lembaga PenjaminanMutu Pendidikan Jawa Timur (East Java Education Quality Assurance Institute)/ LPMP Jatim.

In his writing on the East Java LPMP website, it was stated that from 1,386 respondentswho were surveyed online, the WhatsApp Group application was used by 390 people (28.14%), followed by RumahBelajar (288 people: 20.78%), Google Suit For Education (269 people: 19.41%), Microsoft Office 365 (89 people: 6.42%), Teacher's Room (71 people: 5.12%) and Edmodo (66 people: 4.76%) (Wahsun, 2020).

Less prepared learning conditions occur in the first three months, or towards the end of the new school year.

In these learning activities, some teachers feel guilty because of limitations in providing material to children. Initially, to make amends for this mistake, teachers would still consider a home visit risky, so it didn't happen. Instead, learning activities in the odd semester of the 2020/2021 school year well prepared so children expected to be better at understanding the material presented by the teacher.

The break period from teaching activities before the turn of the new school year, used by the teachers to prepare learning materials for the next 6 months. Teachers make the material through video conferencing and WA so that the assignments given are more focused and orderly.

There are differences in teaching activities for grade 1 to grade 6 elementary schools. The way of delivering the material varies depending on the grade level of the child.

The class level is divided into two groups, namely grades 1-3 and grades 4-6. For grades 4-6, children can still be directed, while for grades 1-3 still depend on parents.

The obstacles experienced by teachers in providing material to children are quotas, teaching facilities, and communication tools, as well as teachers' lack of skill in operating social media form plates of teaching.

The obstacle from the students' side is that there are students who do not have smartphones or do not have quotas, so they cannot receive learning. To overcome this, the assessment at the

end of the previous semester combined face-to-face. However, teachers cannot give the maximum score to students who cannot take part in online learning. They gave a modest value according to those in face-to-face teaching and learning activities.

The teachers admit that online learning does not fully take place optimally, especially in terms of students' absorption of the subjects. The limited quota by the teacher and student makes the learning given to be short. The choice is that the teacher provides material and assignments via recorded video, or in writing which sent to WA.

Teachers acknowledge that face-to-face learning has advantages over learning online. Through the face-to-face class, there is a human relationship that exists between teacher and student. Emotional bonds are closer than meets virtually.

In the learning process, the teacher could see the children's development so that when a child is having difficulties, the teacher can immediately help him.

Through face-to-face learning, the student's learning process is not only for getting grades. Teachers can monitor a child's development process, including verbal, nonverbal, and psychological abilities directly.

If at home, the development of children's cognition, affection, and conation may not be monitored, because not a few parents are busy so they cannot support their children optimally. Parents only help their children in doing assignments and hope to get good grades. After that, children left with their activities, like playing games on cell phones or watching videos on YouTube, for instance.

The current generation is digital natives. Now children can easily master programs and games on the cellphone by themselves. Thus, in using technology, they appear to be more proficient than their teachers who are classified as digital immigrants.

The online learning system has a positive side of psychological ties among family members. With online learning, parents are aware of their child's emotional development. One of the third-grade teachers at SDN 164 KarangPawulang revealed that one of the positive lessons from online learning is bringing out the actual character of the child.

It is said that one of the 3rd-grade female students who were in school was quiet; it turned out that at home her ability appeared. The child grows up to be active in doing his homework from school, and a person skilled at speaking. The freedom to express themselves at home creates a positive aura from the child.

4. CONCLUSION

Online learning that takes place during a pandemic is a situational condition that is formed because of "coercion" that must carry out. This kind of situation is not desirable.

Initially, teachers' digital literacy skills in distance learning were still limited. However, over time, the instructional media training carried out in schools has increased the ability of teachers in online learning.

Online learning encourages teachers, to learn using social media to communicate in online learning.Through online learning, teachers awareof the importance of having digital literacy skills to meet our life's needs for communication and other things.

A combination of face-to-face learning and digital literacy skills can complement each other. It emerges as a hybrid learning. Face-to-face meetings provide a subject and discussion or presentations that require appearing in front of the audience. Online learning is required in giving written assignments and does not require a practicum. It can also send written assignments and send work paperless. Teachers do not have to check papers, but by looking at assignments sent via cellphone.

5. LIMITATION AND STUDY FORWARD

This research has limitations, especially in extracting information. The conditions of the COVID-19 pandemic that took place when the research carried out caused the research process to have limitations in not being able to meet many teachers to be interviewed. Can not directly see the teaching and learning process, and cannot communicate directly with parents and children.

Forward research can develop through quantitative research to see the effectiveness from the side of teachers, students, and parents. Alsomeasure quantitatively in terms of attitude, motivation, and achievement.

6. ACKNOWLEDGEMENTS

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