ANALYSIS OF THE URGENCY OF USING DIGITAL LITERACY IN THE IMPLEMENTATION OF EDUCATION DURING A PANDEMIC IN SDN 106790 SEI MENCIRIM KAB.DELI SERDANG

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ABSTRACT

Along with increasingly rapid technological developments, the use of digital literacy in the implementation of education is very much needed, especially in the era of the Covid 19 pandemic which requires all parties involved in the learning process to be skilled in the use of facilities and various platforms that can facilitate all learning activities. Therefore, the urgency in using digital literacy during the educational period during this pandemic is a top priority and a necessity. The purpose of carrying out this literacy study is to determine the urgency of using digital literacy in the implementation of education during the pandemic at SDN 106780 Sei Mencirem. The method used is literature study. The steps taken are identifying, reviewing, evaluating, and interpreting all available research that is relevant with a study of the urgency of digital literacy in the implementation of online education. The results obtained are that digital literacy is needed and a priority that must be developed in education, especially during the pandemic of online-based education, digital literacy in education is no longer just important but has become a necessity.

Keywords: Digital Literacy, Covid 19 Pandemic, Digital Learning During the Covid 19 Period

INTRODUCTION

Literacy comes from the Latin "litera" (letters) which means involving writing systems and all the conventions that accompany them (Hartati, 2016). Etymologically literacy can be interpreted as literacy or the ability to write and read (Hasan Subekti, 2017) while in terminology literacy is a person's ability in writing, reading or certain scientific disciplines which are his professional expertise (Christiane Schroeter, 2015) in the Big Indonesian Dictionary explained that literacy is the ability to write and read (Indonesia, 2000) means an individual's ability to process information and knowledge for life skills (Hassugian, 2008). Therefore, in a scientific perspective, literacy is often interpreted as information literacy, namely a person's ability to access information and use it properly.

Digital literacy is the awareness and ability of an individual to use digital equipment and facilities appropriately and accurately (Shopova, 2014). Every individual who has digital literacy skills is expected to be able to use, access, manage and analyze digital information effectively, this can build new knowledge, and be able to communicate with many parties. In determining the concept of digital literacy, some experts tend to define it as a connection between the skills and competencies needed to use the internet and digital technology effectively (Falloon, 2020) Falloon states that digital literacy involves combining several types of literacy, including information technology literacy, information literacy, technological
literacy, media literacy, and visual literacy that have received new roles which are becoming increasingly important in the presence of a digital environment. Digital literacy is the ability to manage, sort out the right applications to use and gain a deep understanding of the contents of digital information. (Falloon, 2020). The term digital literacy was popularized by Paul Gilster who published his book in 1997 with the title Digital Literacy. According to Paul Gilster in his book entitled Digital Literacy (1997), digital literacy can be defined as the ability to understand and use information in various forms from a very wide variety of sources which are accessed through computer devices. Computer literacy developed in the early 1980s, when computers with micro capabilities were increasingly being used, not only in business, economics, education and also in society. Then information literacy only spread widely in the 1990s when information became easier to obtain, organize, access, and then disseminate through networked information technology. Technological developments and the Covid 19 pandemic blinded students to do independent learning. Self-learning is a cycle in which people learn without the help of others who are upheld by computerized and versatile innovations, innovation applications created to exploit the idea of independent learning (Walsh, 2017; Curran et al., 2019; Kim, Olfman), Ryan, and Eryilmaz, 2014). Computerized innovation here covers a wide range of PC devices and programming, such as PDAs, web instruments, application programming, correspondence, and capacity administration (Mohammadyari and Singh, 2015); (Wang, 2012). Encouraging students to become independent students is an ongoing goal for instructors, but not all students have the self-guidance skills that are essential for online training (Tichavsky, L, Hunt, A, Driscoll, and Jicha, 2015). Research from (Bullock, 2013) suggests that recognizing the use of sophisticated innovations can enforce independent learning how to react to the clear needs of future educators. Then, at that time, research from (Curran et al., 2019) that advanced and portable innovation is an important asset that helps self-development requirements. Research on free learning in the computerized age is generally lacking, but there is an expanding use of cell innovation as a methodology for working with independent, casual, and accidental learning (Merriam and Bierema, 2013; Fahman, Habibullah, and Nihayah, 2017). For this situation, no one has researched continuing education related to self-directed learning. As far as possible problem computerized proficiency to task ability, thinking ability, joint effort ability, mindfulness ability.

Web use in Indonesia has experienced tremendous growth over the past ten years (Suwana and Lily, 2017). Computerized changes and the Internet have greatly impacted securing more capabilities that help schools and their foundation for the work environment (Techataweewan and Prasertsin, 2018). Free learning in the computerized age is also a growing feature with suggestions for student learning and assessment systems (Curran et al., 2017) (Fahlmann, 2013) (Scott et al., 2014). The web and advanced innovation provide the main correspondence platform and direct it in the routine routines of individuals (Techataweewan and Prasertsin, 2018). Expanding the use of innovation has significant consequences for associations and work environment approaches that can support strong self-learning processes in old age (Curran et al., 2019). Whenever innovation upholds the authoritative information of executives, workers must have high educational skills, for example how to make data using PowerPoint, media, and so on (Silamut and Petsangsri, 2020). People who learn through innovation need to have not only the abilities and capacities related to the utilization of mechanical equipment, but also
information about the standards and practices of lawful use, known as computerized education (Meyers et al., 2013). Innovation plays an important role in supporting executive information, but it is important to know how to benefit from further education (Silamut and Petsangsri, 2020). Computerized proficiency is a well-known term used today (Gilster, 2016). Continuing education is characterized as a singular ability to utilize computerized gadgets to help achieve goals in individual life situations (Payton and Hague, 2010), (Martin and Grudziecki, 2006). The ability to utilize computerized innovation makes it easier for someone to carry out independent learning (Bullock, 2013). With regard to teaching in Indonesia, innovative advances must be transformed into learning frameworks and designs that change in schools or universities. The era of computerization in the world of education requires reforming and working on advanced characteristics by using sophisticated media to obtain logical data and work with achieving learning objectives, because computerized media will really want to help introduce learning material in context-oriented and general media so that learning can occur in an engaging, intuitive and intelligent way, participative (Rusman, 2014). Advances in data and web innovation today have brought sophisticated data-based accounts to be different and abundant (Indah Kurnianingsih, 2017) with the goal of computerized learning becoming a necessity and unavoidable. Therefore, learning exercises that have so far been burdened with traditional literary models that use books as a fundamental reference must begin to be carried out by utilizing computerized media (elderly education). As well as through observations of elementary schools, especially at SDN 106790 SEI MENCIRIM, it was found that teachers use online learning which is also linked to digital literacy. Therefore, in this case the researcher wants to examine the urgency of digital literacy in education, especially elementary schools.

METHOD

The method used is literature study. In the literature study stage the writer studies and understands the theories that serve as guidelines and references obtained from various books, journals and also the internet to complete the treasury of concepts and theories, so that they have a good foundation and knowledge to solve the problems discussed in this research and study research that is relevant to the problem under study.

As a supporting material that is very useful for writers to find or collect data needed in this study, the authors use several methods, namely: a. Observation This observation activity is carried out by direct observation of the object to be studied in order to find out directly about tourism in the village of Karangbenda. b. Interview (Interview) The author conducted field research by conducting interviews with related parties to obtain the data needed by the author, in this case interviewing several teachers at SDN 106790 Sei Mencirim.

RESULT AND DISCUSSION

During the current Covid-19 pandemic, every individual needs to understand that digital literacy is an important thing needed to be able to participate in the modern world and anticipate the spread of bad information during this Covid-19 pandemic. Today's digital literacy will create a society with critical and creative mindsets and views. The current era of pandemic or what we know as the 2019 "Corona" virus (Covid-19) began at the end of 2019 and has infected
citizens in all countries in the world. Many major changes have been made to all sectors of life with the aim of keeping lines of life running amidst the coronavirus pandemic. Various changes have also occurred in the world of education, both at the elementary school to university levels.

The learning process which initially took place face-to-face (offline) then changed to online learning, this refers to the Ministry of Education and Culture Circular Letter Number 1 of 2020 concerning the prohibition of implementing learning, direct face-to-face meetings and then instructed to carry out the entire distance learning process online (online). Currently all countries in the world are faced with a time when they must be prepared to face all life activities in a different way. Activities that are usually carried out with direct physical activity, currently cannot be carried out because we have to limit all activities through virtual activities. All activities that require face-to-face meetings must now be carried out online, such as work, study, lectures, meetings and several other activities that require gathering or discussing with many people. At this time we will discuss learning in elementary schools, which until now still use distance learning or online (online). Many parents, students and educators are not ready for the current conditions, but with the conditions of the COVID-19 pandemic, like it or not, everyone is expected to be directly involved in online learning.

There is no readiness in terms of programs, concepts, media and teaching and learning methods which in the end requires that all parties involved must also participate and cooperate with each other in the whole process of these activities. At present all parties, especially teachers or educators are required to compete with each other to stimulate creativity in carrying out interesting learning programs and are able to increase the motivation of students or students who take part in the learning process. All learning activities are carried out online starting from receiving lesson explanations, directions in completing and giving assignments, all of which must use online media devices. Online learning has been developed as a learning medium that can connect educators and students online in a class called virtual class. Online or online learning is strongly supported by media facilities or electronic devices that can be connected to an adequate internet access network, for this reason a certain amount of budget is needed to set up a quota or wifi that can be connected to the internet to facilitate all online learning activities and activities. The devices needed are gadgets, laptops, notebooks and are supported by platforms used to facilitate the learning process, various platforms including whatsapp, google meet, zoom meeting, google classroom, google form and email which can be used to deliver material, assessments and or even collect assignments.

There are different ways or patterns of learning that are carried out through online learning, namely changing the procedures or patterns of habits that are usually carried out by students or educators, namely digital, one of which is the use of digital literacy. Current technological advances require educators and students to be skilled in the use of electronic media and devices so that they can have a positive impact on their use. Old habit patterns in literacy previously could use books or other printed media to obtain literacy information, but not at this time, because almost all information can be obtained through online media, online books or ebooks or tutorials or online learning as well with the assistance of someone. tutor so that activities can be carried out without having to interact directly with other people outside to avoid direct
physical contact. The ease of internet access makes it very easy for users to freely search for information in cyberspace without limits, it is hoped that users who are able to analyze and analyze all forms of information obtained from the internet. This makes digital literacy a very important thing so that all the information obtained and used can be useful.

The skill dimension used to determine the level of digital literacy is Information, Communication, Content-creation, Safety, dan Problem-solving, as shown in Fig 1. About the concept of digital literacy.

![The concept of Digital Literacy](image)

**Picture 1. The concept of Digital Literacy (Ferrari, 2013)**

In this era of digitalization innovation, almost all circles, especially in the field of teaching, are relied on to master the five skills of advanced education. It incorporates 1. Information: identifying, searching, recovering, storing, finding, coordinating and breaking down advanced data, surveying its significance and reasons (Ferrari, 2013). In this component, students are expected to have the option to investigate data obtained via the web, channel the data obtained, assess the data, convert the data that has been obtained and then share it with others. The more time is made, the easier it is to get new data so students must dominate this aspect to have the option to separate correct or incorrect data so that it can make it easier for students to turn data into valid information.

2. Correspondence, in the correspondence component, students are expected to have the option of being able to talk about material online either with meetings or in person.

3. Content creation, in the substance creation component, students are relied upon to be able to create content, and concentrate on material in an inventive way in creating content. This aspect can influence students to have choices to develop their imaginative nature.

4. Welfare, in this component students are expected to have good morals in utilizing computerized gadgets.

5. Critical thinking, in this component students are expected to be able to deal with problems regarding the material in learning and furthermore about the problems of everyday life through the developed world, and have choices to deal with the problems they face.
This aspect guides students to have options to take advantage of the developed world and to have options to act creatively, so that they can help students complete tasks. Every educational institution should establish an effective program to plan mechanical training for students to have the option to be dynamic within the learning framework through both developmental based learning and exceptional introductory activities to introduce and organize the five segments of advanced skills. (Sari and Nada, 2020) People who learn through development need not only abilities and limitations related to the use of mechanical devices, but also data about principles and practices in the lawful use of these tools, which we call level abilities. (Meyers et al., 2013).

Advanced capability is a term commonly used today (Gilster, 2016). Mechanical training is described as a discrete capacity to use complex devices to aid goal achievement in individual life circumstances (Payton and Hague, 2010). The capacity to use mechanical development makes it easier for someone to do independent learning (Bullock, 2013). Independent learning is a cycle where individuals learn without the help of others managed by computerization and cell development, progress applications are made to take advantage of the possibility of free learning (Curran et al., 2019). Modern developments here include various devices and PC devices such as mobile phones, web devices, application software, correspondence, and boundary organizations (Mohammadyari and Singh, 2015). Helping students become independent students is an ongoing goal for teachers, but not all students have the self-sufficient abilities expected for online schools (Ticavsky et al., 2015).

The idea of computerization skills does not remain single, because it is connected with several other educational ideas. The large number of students who use this computerized library shows that the millennial age currently has high skills. They can select and sort the expected data to meet their data needs (Farida and Adhi, 2020). The top ten perceived benefits of continuing education are save time, learn faster, save money, make more secure, think forward 100% of the time with data, consistently relate and relate, make better choices, can get you working, gets you happier, and impact the world. (Sumiati and Wijonarko, 2020). Being well-educated means having options for dealing with different types of data, having options for receiving messages, and having options for discussing successfully with others in different types of utilization. For this situation, the structure in question includes making, collaborating, giving, and working as indicated by moral guidelines, and getting when and how innovation must be used in order to survive in achieving goals (Sutrisna, 2020).

The computerized proficiency measure consists of four variables containing 12 markers, in particular (Figure 4): the main factors and related work abilities consist of affirmation, disclosure, and performance, the next element is thinking ability which consists of examination, judgment, and imagination, the third element is the ability of coordinated effort consisting of cooperation, system administration, and sharing, the fourth component is mindfulness ability consisting of morals, legal education, and self-care (Techataweewan and Prasertsin, 2018).
The digital literacy criteria consist of four elements containing 12 markers, in particular (Techataweewan dan Prasertsin, 2018): 1. The main factor, Operational ability consists of three markers: understanding, disclosure, and performance. The main marker is an affirmation that refers to information and understanding about ICT and computerized media. It combines determination and separation of exploiting innovations in different circumstances and appropriate ways. Development guidance refers to the ability to incorporate and apply ICT and advanced media to find jobs, create information, or improve. Demonstrate pointers is the ability to introduce further substance in different settings, for example, selecting suitable organizations for key interest groups to give and receive successful critiques. 2. The next component, thinking ability consists of examining, evaluating, and creating action. Checking is the capacity to consider, digest, decipher, and track content connections in computerized data. This includes arranging substances in configurations such as arranging, ordering, or calculating, for summing or other specified purposes. Judgment is the capacity to evaluate data in terms of necessity, use, accuracy, idealism, and dependability, and recognize fraud, publicity, and disparaging discourse. Imagination includes the capacity to think critically, different responses, adaptability, and positive reasoning that is applied to new revelations and information for long-term benefits. 3. The third component, Collaboration capability consists of three things, namely specific, collaboration, system administration, and sharing. Collaboration is the capacity to involve ICT and computerized media in a joint effort with others either as pioneers or individuals of a group. It incorporates full utilization of the potential to work together and achieve group goals. Network pointers are the ability to create or buy into online organizational meetings to build generally profitable connections. Sharing is the ability to trade data through ICTs in advanced configurations and through appropriate channels of value and convenience to beneficiaries. Computerized Literacy Operational Skills - affirmation - disclosure - show Thinking Skills - investigation - assessment - imagination Collaboration Skills - cooperation - organizing - sharing Awareness Skills - morals - halal education - self care 4. The fourth component, the faculty of Consciousness consists of three directions: morals, skill regulation, and self-preservation. Morals refer to practices recognized by society as a whole or by convention. This includes the netiquette of paying attention to diversity and imbalance encounters in computerized innovation correspondence. Halal education is information,
understanding, and compliance with regulations and guidelines related to the utilization and access to data innovation and sophisticated media. Protecting yourself is the ability to control individual information by understanding the dangers inherent in the Internet.

Research results based on direct observation to SDN 106790 Sei Mencirim obtained digital literacy is a necessity that should be developed and given training on digital literacy, especially for teachers in elementary schools. These results were obtained by interviewing 12 teachers at SDN 106790 Sei Mencirem “According to teachers, Digital Literacy is really needed, but there are still many teachers who do not understand digital literacy, from use to teaching with digital literacy, only a few use it, therefore not all students get learning with digital literacy.”

Following are the results of a teacher opinion survey table about digital literacy.

Table 1. Results of the Teacher Needs Survey SDN 106790 Sei Mencirim related to digital literacy

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Survey Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Literacy Much Needed</td>
<td>85%</td>
</tr>
<tr>
<td>Digital Literacy Not Really Needed</td>
<td>12%</td>
</tr>
<tr>
<td>Digital Literacy Not Required</td>
<td>3%</td>
</tr>
</tbody>
</table>

Then based on the results of the presentation can be made in a bar chart obtained

![Diagram Hasil Survey Terhadap Guru SDN 106790 SEI MENCIRIM](image)

Diagram 1. Survey Results of Teachers SDN 106790

So that it can be known through literacy studies of various journals and observations and direct interviews with teachers at SDN 106790 Sei Mencirim Digital literacy is very much needed
and important, therefore it is also important for the government to socialize training related to this digital literacy.

This study discusses digital literacy because information literacy does not only limit the ability to understand and select information. But computer or ICT literacy is directed at mastering tools, while digital literacy is focused on digital platforms that are able to place mediation as the main issue. 'Digital literacy' does not only involve the ability to 'operate' tools such as computers and cellphones/gadgets, but also the ability to adjust the capabilities and limitations of these tools to take into account their use. In other words, while we may at times seem to focus quite a bit on the 'digital' part of digital literacy, that is, on thinking about the capabilities and limitations of these new technologies, what is really of interest is not the tools themselves, but the process of acquiring information in a digital way. digital and accurate, the process by which people use these tools to achieve certain social practices, starting with accessing, using and utilizing the various information obtained

CONCLUSION

The conclusion in this study is that digital literacy is very important and needed in the field of education. Because according to technological developments and the Covid 19 pandemic, learning is online (in the network). All schools in Indonesia carry out online learning. So that in addition to information literacy, digital literacy is also very much needed to show the success of online learning. And based on literacy studies from several studies, it is revealed that digital literacy has become a need that should be able to be fulfilled, especially during a pandemic, which can also have a positive impact on the development of education. Also, through the results of an observational survey at SDN 106790 Sei Mencirim, 85% of teachers stated that digital literacy is important and a necessity in education. Therefore, this literacy study should be followed up by the government or subsequent researchers to conduct training or socialization related to digital literacy in education.

REFERENCES


