Implementation of Digital Literacy in Increasing the Learning Independence of Fourth-Grade Students at SDN 1 Krandon

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Abstract

Indonesia is currently entering the 21st century, where almost all activities are side by side with technology, one of which is information that can be published on digital media and can be seen anywhere and at any time. The existence of digitalization, which is widespread throughout the world, gives rise to two opposing sides, namely challenges and opportunities. The use of digital technology can be a good opportunity in the world of education, namely by implementing digital-based literacy as an effort by educators to familiarize themselves with a culture of literacy and familiarize students with using digital technology wisely. With the implementation of digital literacy in schools, students are free to search for information from various sources independently. The aim of this research is to describe the implementation of digital literacy in increasing the learning independence of fourth-grade students at SD N 1 Kradon, describe the supporting and inhibiting factors in the use of digital literacy in increasing the learning independence of fourth-grade students at SD N 1 Kradon, and describe solutions to overcome factors inhibiting the use of literacy. digital in increasing the learning independence of fourth-grade students at SD N 1 Kradon. This research is descriptive qualitative research, which is a research process to understand a phenomenon by creating a comprehensive general picture presented in the form of words. Therefore, the data collected in qualitative research is presented in the form of descriptive text or narrative data. Data collection was carried out through interviews, observation, and documentation. Validity of data using source triangulation and techniques. The data analysis techniques used in this research are data collection, data reduction, data presentation, and drawing conclusions. The results of this research show that the implementation of digital literacy in schools can increase student learning independence. Implementation of digital literacy can increase students' learning motivation, responsibility, initiative, and self-confidence.

Keywords: *implementation, digital literacy, independent learning*

Introduction

In an increasingly digitized and globalized society, most young people's communication and social relationships are conducted through smartphones and other digital tools (Susanne et al., 2022). The Internet can make it easier for humans to get their work done. The Internet has spread to various fields of technology and information and has reached the world of education. The Internet has a vital role in the world of education. The Internet makes accessing information and educational resources more accessible and more comprehensive.

The era of education 4.0 is a modern era where the Internet has a vital role for students and teachers. One of the utilization of the Internet in education is as a literacy media. In the field of education, literacy is currently a topic that is very often discussed, this is because literacy is considered capable of providing students with the impetus to be able to compete intellectually in the global world. Digital literacy is not just the ability to use new media. However, digital

literacy has a broad meaning, namely the ability to evaluate, use, create information and utilize it in a healthy, wise and intelligent manner (Naila, 2021).

Internet usage in Indonesia, based on the survey results of the Indonesian Internet Service Providers Association (APJII), in the period 2023, reached 215.63 million people; this number increased by 1.17% compared to the previous year. Of all students and college students based on the survey, 98.8% use internet access daily. The Internet use by 98.8% of all students and university students in Indonesia does not always have a positive impact. Therefore, these students need the role of teachers to help their students to be able to make the most of advances in information technology (Ahmad et al., 2020). Teachers throughout Indonesia should utilize this Globalization era to align literacy with technology or the Internet by implementing digital-based literacy (Anggun et al., 2021). The way that can be used to implement based literacy is by creating a learning model that directs students to seek information through various sources instead of just being told.

The use of good digital literacy will have a positive impact on students, namely students will be more accessible to accept the learning delivered by the teacher. In the current generation, students have higher learning motivation than the previous generation because of the many sources from the Internet; students are more independent in doing assignments from teachers (Uswatun et al., 2019). Learning independence is one of the potentials that must be possessed by students. Learning independence is defined as an individual's effort to carry out learning activities based on his own will to master and prepare material so that it can be used to solve his problems (Mulyadi & Abd. Syahid 2020).

The problem in the field is that many students are not optimal in utilizing digital literacy, which hampers learning independence. If digital literacy can be utilized optimally, students can get good learning resources and literature; students can also easily and quickly find information and share information by utilizing digital media as needed (Anggun et al., 2021). Technology can also hurt students if it is not utilized correctly; for example, it is only used to play games.

A high level of learning independence possessed by students can make students desire to learn without being influenced by others; this makes individuals with an attitude of learning independence able to exploit thinking power, make their own decisions, and be creative and confident. The attitude of learning independence is an attitude that every student must possess. However, the reality in the field, according to the results of preliminary observations made by researchers in class 4 at SD N 1 Krandon, is that there are still many students who always ask to be directed continuously during teaching and learning activities by the teacher, lack of enthusiasm when learning activities take place. There are still many students who cheat. These problems indicate that many students still do not have an attitude of learning independence.

Students with an attitude of learning independence can be seen from the time management applied and the utilization of various learning resources. This statement is in line with research conducted by (Ni Made Surawati, 2021) that the utilization of learning resources through digital literacy can increase students' learning resources. This can increase students' learning independence in learning the subject matter provided by the teacher, and students are willing to learn independently. According to research by (Anggun et al., 2021), Digital literacy can positively affect student learning independence at SD N Ngadiluwih. In using technology, students need to have digital literacy skills because when someone has digital literacy skills, they can utilize digital media for productive activities and self-development, not for consumptive actions.

Based on the description that has been described, the purpose of this study is to describe the implementation of digital literacy in increasing the learning independence of 4th-grade students at SD N 1 Kradon, identify supporting and inhibiting factors in the utilization of digital literacy in

increasing the learning independence of 4th-grade students at SD N 1 Kradon, and describe solutions to overcome inhibiting factors in the utilization of digital literacy in increasing the learning independence of 4th-grade students at SD N 1 Kradon.

Method

This study involves field research, where the author, acting as a researcher, personally visited the research site. The study used qualitative research as its research methodology. Qualitative research is a type of research that does not rely on statistical procedures to obtain findings. Instead, it focuses on the researcher's understanding and interpretation of the meaning, events, interactions, and behavior of the subject in specific situations, based on the researcher's perspective (Feny Rita Fiantika, 2022). The objective of this qualitative study is to provide a methodical, objective, and precise representation of the facts, characteristics, and connections among the phenomena under investigation.

The used research design is descriptive in nature. Descriptive design seeks to provide methodical, objective, and precise depictions of the facts, characteristics, and connections among the phenomena under examination (Mely G. Tan). Descriptive research is characterized by researchers actively engaging in the field to gather authentic information. This method aims to accurately depict objects as they exist, without manipulating or controlling variables (Cut Medika Zellatifanny & Bambang Mudjiyanto, 2018).

Data collection is a crucial aspect of research as it involves the systematic and strategic gathering of necessary data by researchers (Eko Putro Widoyoko 2012:33). In this research, primary data was obtained through the utilization of three data collection techniques: 1) direct observation; 2) interviews conducted with class IV teachers at SD N 1 Krandon, class IV students at SD N 1 Krandon, and parents of students at IV SD N 1 Krandon; and 3) documentation studies or document searches and documentation in the form of existing archives were employed as supplementary data or secondary data.

The study was conducted at SD N 1 Krandon, including the homeroom teacher, fourth-grade children, and parents of SD N 1 Krandon. Interviews were carried out with the homeroom teacher, fourth-grade students, and parents of children at SD N 1 Krandon. Subsequently, the researchers closely monitored the execution of digital literacy over a period of 4 weeks. When incorporating digital literacy education in the classroom, documentation is acquired via the use of photographs and videos.

Data validity refers to the level of confidence in the study data collected and may be measured (Sugiyono 2015:92). The verification of the data in this study was conducted by the use of triangulation procedures, which included a comprehensive examination of many data sources. The researchers use the method of triangulation, which involves the use of many approaches and sources. The data analysis used in this study is based on the interactive analysis approach proposed by Miles and Huberman (1984) in Sugiyono (2015:334). The process of processing and analysis has four interconnected components: data gathering, data reduction, data presentation, and conclusion/verification.

Results

This research was conducted in fourth-grade of SD N 1 Krandon on November 13, 2023. Researchers made observations on the implementation of digital literacy in schools to increase the learning independence of fourth-grade students. The description of the analysis is described as follows:

Implementation of Digital Literacy in fourth-grade of SD N 1 Krandon

Based on the results of interviews and observations that have been carried out, digital literacy in fourth-grade of SD N 1 Krandon is realized in the form of hardware such as laptops/chromebooks, projectors, speakers, and WiFi. During the learning activities, Mrs. Istiyarsih, the fourth-grade teacher, revealed that the use of Chromebooks as an implementation of digital literacy in schools is carried out at least once a week. This aims to train students to get used to using technology and familiarize children with a culture of literacy. The use of chromebook media in class when learning is usually done by dividing students into 6 small groups consisting of 5 to 6 students, then each group is given 1 chromebook. This is done because of the limited number of chromebooks the school has, then students are given LKPD to work on in groups, then students were asked to surf on Google to look for information and answer the LKPD. After completion, each group was asked by the teacher to present the LKPD they had completed in front of the class.

Student's motivation to study

Based on the results of observations carried out for 1 month in fourth-grade of SD N 1 Krandon, it shows that students seemed enthusiastic when learning took place. When the teacher brought laptops to class to study, students enthusiastically sat in their respective groups and turned on their Chromebooks independently. When researchers conducted interviews with students, 4 out of 5 students felt that using chromebooks could make learning activities easier, as was conveyed by the class 4 teacher, who revealed that when learning using chromebooks, students became more enthusiastic about working on the LKPD given.

Responsibility

When the learning was taking place, the students worked well on the LKPD. There were no students who deliberately opened the Chromebook to play games or watch videos that had nothing to do with the learning. After the researcher conducted an interview with the homeroom teacher, this was an agreement that had previously been discussed at the beginning of the learning: that students are not allowed to open anything except Chrome to look for information, as an expression of appreciation when students finish working on the LKPD. 5 minutes before class ends, students are allowed to watch the videos they like. This agreement is one way for teachers to get used to being responsible towards students, namely having to study during class time and being allowed to play when study time is over.

Initiative

Based on interviews conducted with three sources, namely class IV homeroom teachers, class IV students, and parents of class IV students, The homeroom teacher revealed that 20 out of 30 students were able to use Chromebooks to open Google or YouTube to search for material, while at home, 3 out of 5 parents also revealed that their children had started actively doing their assignments independently without being asked, although there were also students who were still being monitored. parents to do homework at home. In interviews, students also admitted that when they are having trouble completing a teacher-assigned task, they initially turn to their cellphones for information before asking their parents for assistance.

Self-confident

Based on the results of observations made by researchers during learning, it was seen that students were able to answer questions from the teacher aloud. When the interviews conducted by researchers with students took place, 3 out of 5 students were able to answer fluently and loudly. Students also expressed that they wanted to answer questions from the teacher because they already understood the material asked by the teacher in class.

Discussion

Implementation of digital literacy for increasing student learning independence

Digital literacy is a skill that a person has in using digital media and the ability to use the internet (Pierre Mauritz Sundah & Rizky Karo Karo, 2020). Ida Safitri, Sufyarma Marsidin, and Ahmad Subandi (2020) also stated that digital literacy is a person's understanding of digital content. Herlina (2019) also stated that digital literacy is the ability to use digital technology and information effectively and efficiently in various contexts, such as academics, careers, and everyday life. From these definitions, it can be concluded that digital literacy is not only an ability or skill in using technology, but also a person's ability to read and understand information from the use of technology. Therefore, the implementation of digital literacy must be familiarized in schools so that students are able to use and utilize it. technology wisely, and apart from that, by implementing digital literacy in schools, it is hoped that teachers will innovate in the learning process so that the learning process is not monotonous and boring.

Based on the results of research conducted in class IV, once a week the use of Chromebooks in routine learning activities is carried out. From the results of interviews conducted with class 4 guardians, it is stated that using Chromebooks once a week is the teacher's effort to implement digital literacy at school. The fourth-grade teacher also revealed that digital literacy is very important for students. By getting used to digital literacy, students are able to sort out information in the media and use technology wisely. This is in accordance with the research results of Fitriyani and Arief Teguh Nugroho (2022), who found that digital literacy is important to implement in learning in elementary schools as an effort by teachers to increase students' ability to increase knowledge, accompanied by adjustments to the use of technology that students must master in the modern era.

Apart from using Chromebooks, teachers also use projectors and speakers to display interesting videos as material for students' digital literacy. This is in line with Dhimas Arsyad Arrajiv's (2021) research. Students are more interested in audio-visual media in the form of shows than in reading because using audiovisual media has the advantage of making the message conveyed easier to understand.

Implementation of digital literacy that is carried out optimally can increase student learning independence. Independent learning, namely learning activities by moving oneself through thinking power so that one can achieve the direction of the learning, allows students to motivate themselves so that they remain strong during the learning process (Irfan Sugianto et al., 2020). So, learning independence is an encouragement that comes from oneself to carry out learning activities with full confidence and confidence in one's ability to complete one's learning activities without help from other people.

Indicators of learning independence: students have a tendency to behave, namely being enthusiastic when learning or having motivation to learn, being responsible, taking initiative, and being self-confident (Siti Rohmah et al., 2023). Based on the results of observations and interviews with fourth-grade teachers, fourth-grade students, and fourth-grade parents, it shows that the implementation of digital literacy has been carried out optimally so that it can have implications for student learning independence, as evidenced by the students' attitudes when participating in the learning process and good student evaluation results.

1. Learning Motivation

The results of interviews conducted with fourth-grade teachers also stated that with digital media participants were more interested in learning because with digital media students could freely search for the information, they needed either through Google by reading or on YouTube by watching videos. Therefore, students were able to overcome learning difficulties because

with digital literacy students are free to choose what media they want to use for learning and to help with assignments when they experience difficulties. This is in accordance with the opinion of Rahayu (2019) that one indicator of learning independence is learning motivation. A student can be said to have the desire to learn if he or she is diligent in studying, willing to learn continuously, has discipline in learning, and plans his or her learning activities. (Suharni, 2021) also revealed that learning motivation can be interpreted as a person's strength, which can foster the will to carry out learning activities.

2. Responsibility

Based on the results of interviews with the homeroom teacher, students always carry out assignments given by the teacher and submit assignments on time. From the results of the researcher's observations when conducting observations, students were also able to fulfill the learning contract, which is usually carried out at the beginning of learning. In an interview, one of the fourth-grade students, named A also revealed that using technology can also help when doing assignments at home. This is in accordance with research conducted by Dhimas Aryad Arraji (2021), who also said that with digital literacy, students can save time in doing assignments because they are able to search for information quickly and easily, not only in the form of reading but also in the form of videos. Apart from that, Rahayu (2019), in his research, revealed that one indicator of learning independence is responsibility. Responsible students will always try to complete their assignments and evaluate the learning activities they have carried out.

3. Initiative

Fourth-grade students are able to search for information from various sources according to their own wishes without help from the teacher. Based on interviews conducted with parents, students also said that their children were able to do their assignments at home without asking for help. What children usually do is look for answers on the internet when they experience difficulties. This is in line with the opinion of Rahayu (2019), who says that one of the indicators of learning independence is initiative. Students can be considered to have initiative if they learn of their own accord and are creative in finding various alternatives for reading material. Gusnita et al. (2021) Initiative is a form of independent learning, namely being able to solve problems without expecting help from other people.

4. Be confident

According to the results of observations made by researchers when learning was taking place, students were able to express their opinions loudly, were willing to make presentations in front of the class, and were also clever in determining learning resources that would help them when studying. This is in line with the opinion of Rahayu (2019), who says that one of the indicators of learning independence is self-confidence. A student can be said to have self-confidence if he is able to make his own decisions, develop skills independently, improve his abilities, and solve his own problems. Apart from that, students are also able to carry out group activities well and are able to communicate with each other, both between friends and with the teacher. This is in line with the results of research conducted by Irman Syarif et al. (2021), who found that one example of self-confidence is that students are able to discuss freely so that they do not cause fear in communicating either between friends or teachers.

Supporting factors and inhibiting factors for implementing digital literacy

Implementing a policy cannot be separated from the existence of supporting and inhibiting factors. These two factors determine the success or failure of the implemented policy.

1. Supporting Factors
   a. Educators or teachers who master technology
   b. There are facilities in the form of wifi, a projector, and a laptop or Chromebook.

c. Collaboration with parents in the form of support and motivation

These supporting factors are similar to the research results of Ginanjar et al. (2019), who found that parent cooperation in implementing digital literacy is important, one of which is communication from the school to parents via the WhatsApp group. Apart from that, school facilities and infrastructure are also supporting factors in implementing digital literacy. Al-Azhar 29 Middle School Semarang provides facilities in the form of tablets to all students to support digital literacy in schools. Apart from that, teachers, as instructors, are also involved in training conducted by external parties regarding the use of technology.

2. Inhibiting Factors
   a. Insufficient number of adequate facilities and infrastructure
   b. Lack of parental involvement in literacy activities
   c. The absence of a particular digital literacy program held by the school

These inhibiting factors align with research conducted by R Hendaryan (2021). One of the inhibiting factors in implementing digital literacy in schools is the availability of devices, in addition to the availability of infrastructure in the form of hotspot areas and insufficient multimedia classes.

Solutions in overcoming inhibiting factors in digital literacy implementation

The inhibiting factor of digital literacy implementation is the cause of the failure to implement digital literacy effectively. Therefore, it must immediately find a solution to overcome it. The things that can be done include using the existing infrastructure at school as much as possible, namely by learning in groups so that students can use the school's Chromebook facilities together with their group mates, then the importance of socializing with parents directly to communicate so that cooperation between teachers and parents continues to be well established. The last is to make school policies by familiarizing digital literacy for all students, not only in one class, because the implementation of digital literacy is crucial and must be applied early. This description aligns with research conducted by Linda Rahayu (2019), namely teachers can participate in more self-development activities, participate in multimedia classes, manage time proportionally and collaborate with peers.

Conclusion

From the results of the discussion analyzed by the author in the previous chapters, the following conclusions can be drawn: Implementing digital literacy in schools can increase students' learning independence. Implementing digital literacy in class IV SD N 1 Krandon has positively impacted students' learning independence; students can find their material by choosing their learning resources without being told or forced. As for the factors that influence the success and failure of the implementation of digital literacy at school, there are supporting factors consisting of educators or teachers who master technology, the existence of infrastructure facilities in the form of wifi, projectors and laptops / Chromebooks and cooperation with parents in the form of support and motivation, as for the inhibiting factors, namely the insufficient number of adequate facilities and infrastructure, the lack of parental involvement in literacy activities and the absence of a particular digital literacy program held by the school.

The suggestions that researchers can convey are that this research is still not perfect. Therefore, it is hoped that further research will perfect this research. Teachers can apply digital literacy as an alternative learning strategy by adjusting the learning objectives. The results of this study can be used as a reference for future research.

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