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Analysis of Teachers' Digital Literacy Skills

In Integrating Digital Storytelling in Elementary Schools

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Abstract: Lack of understanding of teachers' digital literacy skills makes it difficult for teachers to implement digital-based learning. This study aims to analyze teachers' digital literacy skills in teaching digital media in elementary schools. The target of this research is a homeroom teacher and the coordinator of literacy activities at Muhammadiyah 1 Elementary School in Sidoarjo. This research employs a descriptive qualitative method, utilizing data collection techniques that include observation, interviews, and documentation. Researchers conducted observations to assess the literacy environment in schools. After conducting observations,

researchers continued by conducting interviews with target teachers to gain a deeper understanding of literacy in schools. They then documented the media and related materials to support the research. After collecting data, the researcher found that teachers still face obstacles, namely that they do not widely understand current digital technology. This is evidenced by one of the moments when the researcher conducted observations in Class 4 while implementing Indonesian language learning using narrative text materials. At that time, researchers saw how teachers work and carry out the learning process using digital technology. Thus, it can be concluded that teachers still need to enhance their digital literacy skills to ensure a smooth learning process.

Keywords: Digital literacy, Teacher Skills, Digital Storytelling

Abstrak: Kurangnya pemahaman terhadap keterampilan literasi digital guru membuat guru kesulitan dalam melakukan pembelajaran berbasis digital. Tujuan penelitian ini, guna untuk menganalisis keterampilan literasi digital guru dalam mengajar media digital di sekolah dasar. Sasaran penelitian ini adalah satu guru wali kelas dan juga menjadi koordinator kegiatan literasi di SD Muhammadiyah 1 Sidoarjo. **Penelitian ini menggunakan metode kualitatif deskriptif dengan menggunakan teknik pengumpulan data melalui observasi, wawancara, dan dokumentasi.** Peneliti melakukan observasi guna mengetahui kondisi lingkungan literasi yang ada di sekolah tersebut. Setelah melakukan observasi peneliti melanjutkan untuk melakukan wawancara kepada guru yang menjadi sasaran tersebut untuk mengetahui lebih luas terkait literasi yang ada di sekolah, setelah itu peneliti melakukan dokumentasi terhadap media dan hal yang bersangkutan dengan penelitian. Setelah melakukan pengumpulan data, peneliti menemukan hambatan yang di alami guru yaitu guru masih belum memahami secara luas pada teknologi digital yang ada saat ini. Hal ini dibuktikan dengan salah satu moment ketika peneliti melakukan observasi di ruang kelas 4 saat melakukan pembelajaran bahasa indonesia pada materi teks naratif. Pada saat itulah peneliti melihat bagaimana cara guru bekerja dan melakukan proses pembelajaran dengan menggunakan teknologi digital. Sehingga, dapat disimpulkan bahwa guru masih perlu meningkatkan keterampilan literasi digital yang dimilikinya agar proses pembelajaran dapat berjalan dengan lancar.

Kata Kunci – Literasi digital, keterampilan guru, Penceritaan Digital

INTRODUCTION

Educating a superior and highly competitive young generation is crucial in addressing the challenges of global dynamism. Currently, we are witnessing a paradigm shift in organizing the learning process, because the times are constantly changing, and digital transformation is developing very rapidly (Suwarjo et al., 2022). The digital era is characterized by the transition of mechanical and analog technology to digital technology that continues to grow (Rahmat & Restendi, 2021). The digitalization era creates a new world (cyberspace) that offers a variety of activities in an unlimited virtual space (Rahmat & Restendi, 2021). However, the transition to technology-based education cannot be separated from essential challenges and considerations, including the issue of digital literacy. Paradoxically, although technology opens up great opportunities for educational development and innovation. The challenge of digital literacy is becoming increasingly complex as integrating technology into the curriculum requires not only technical skills but also a deep understanding of the ethical, safety, and security implications to society of using digital technology (Gilang Mas Ramadhan, 2021).

Educating a superior and highly competitive young generation is crucial in addressing the challenges of global dynamism. Currently, we are witnessing a paradigm shift in organizing the learning process, because the times are constantly changing, and digital transformation is developing very rapidly (Suwarjo et al., 2022). The digital era is characterized by the transition of mechanical and analog technology to digital technology that continues to grow (Rahmat & Restendi, 2021). Adapting to increasingly complex developments requires the ability to utilize information technology. The digitalization era creates a new world (cyberspace) that offers a variety of activities in an unlimited virtual space (Saputra, 2022). However, the transition to technology-based education cannot be separated from essential challenges and considerations, including the issue of digital literacy. The challenge of digital literacy is becoming increasingly complex as integrating technology into the curriculum requires not only technical skills but also a deep understanding of the ethical, safety, and security implications to society of using digital technology (Gilang Mas Ramadhan, 2021).

Based on a survey conducted by the Ministry of Information and Communication (Kemkominfo), digital culture in Indonesia remains at a relatively low level, or arguably still weak. This comprehensive survey also provides information that educators still have a poor level of digital skills (Shibbriyah & Nuroh, 2023). The movement consists of several stages

according to the components of digital literacy from the perspective of the needs of elementary school teachers (Arsy, Shiddiqy, Syarfan, & Irvan, 2023). Teachers must be able to create learning support efforts that are suitable for use. One of them is creating animated video-based digital learning media. Teachers need to gain knowledge about the rules and the wise use of social media so that it can be helpful in everyday life, especially during the pandemic. Teachers must be able to know the effectiveness of online media and the effectiveness of the information they receive (Suryani & Wiryadigda, 2022). Audio and visual media that are intended to attract the attention of learners and can help convey messages or download information more easily (Media et al., 2021).

Digital literacy according to UNESCO is "the ability to use information and

communication technology (ICT) to find, evaluate, utilize, create and communicate content or information with cognitive, ethical, social emotional skills and technical or technological aspects" which means "the ability to use information and communication technology (ICT) to find, evaluate, utilize, create and communicate content or information with cognitive, ethical, social emotional skills and technical or technological aspects" (Lestari & Muslimin Ibrahim, Syamsul Ghulfron, 2021). According to Haque, digital literacy is the skill of working with and sharing opportunities that often arise and differ, combining and communicating what is understood about when and how to access information technology tools to achieve a goal (Bagus, Astid, Hadi, & Abidin, 2024).

Literacy-based learning enables learner-centered learning and encourages information seeking through various print and digital reference sources (Maria Marczevska-Rytko et al., 2008). For the learning process to be carried out effectively and efficiently, teachers must have essential tasks, components, and roles in guiding students towards achieving the expected goals (Prema Swandewi, Wisna Ariawan, & Gede Erni Sulindawati, 2024). Digital literacy competence itself is the ability to access, manage, integrate, analyze, and critically evaluate information using digital technology, communication tools, or networks.

The difference between previous research and this study lies in the fact that earlier researchers have primarily focused on developing digital literacy instruments. The most widely used concept is Paul Gilster's (Gilster, 1999) the theory of literacy, which says that the opinion of digital literacy is a person's ability to use information in various ways from both computer and mobile device sources (Rahmat & Restendi, 2021). Meanwhile, this research focuses on understanding the digital literacy skills of teachers in the context of digital progress towards achieving digital literacy. The study that researchers use is based on the competencies of ("Hague and Loader(1999).pdf," n.d.), which researchers have already understood from their book. The importance of conducting this research lies in measuring teachers' skills in adapting to changing times, specifically in teaching digital media in the classroom, particularly in an environment that is already literate and utilizes technology in teaching.

The purpose of the study conducted by the researcher is to analyze teachers' digital literacy skills in teaching digital media in elementary schools. This research aims to investigate the digital literacy of teachers, particularly in the context of using digital media in teaching, which remains a relatively underexplored area. Researchers aim to explore the digital literacy skills of teachers, specifically when they use digital media, a topic previously discussed in general terms. The formulation of the problem that the researcher will analyze is related to "What are the Digital Literacy Skills of Teachers in Integrating Digital Storytelling in the Classroom?"

METHODS

The method used by researchers is a descriptive qualitative method (Sugiono, 2013) The purpose of designing this research method is to demonstrate the effectiveness of these results comprehensively and accurately. The type of research used is a case study. This type of research was chosen because it will examine the digital literacy skills of teachers in elementary schools.

The **data collection techniques employed in this study** include observation, interviews, and documentation. The observation technique was employed to directly observe how literacy activities were implemented at SD Muhammadiyah 1 Sidoarjo. The observation activities used by researchers were non-participant observations, where researchers observed from the outside without being involved in the activities being observed. The interview technique used by

researchers is a structured interview, where researchers use a list of questions that have been prepared beforehand. The purpose of structured interviews that use a list of pre-made questions is to get answers about the problem being studied based on digital literacy indicators [18]. Furthermore, documentation is used to support data obtained from observations and interviews. The photos used were during literacy activities, and the literacy media used. In addition, to obtain data validity, researchers used source triangulation. Source triangulation is a method of collecting data from various sources to ensure that the data is considered valid. Data is considered valid if the information provided by one informant is consistent with that of another

informant.

The collected data are then analyzed using qualitative data analysis techniques. In this study, the data analysis method used was that of (Hashimov, 2015).

Qualitative Data Analysis According to Miles and Huberman (2014)

Activities include: 1) Condensation is obtained through researchers conducting **interviews and collecting written data in the field. Then, the interview transcripts were sorted to get the research focus required by the researcher.** 2) Presentation of data involves the organization, unification, and presentation of information that has been concluded. By obtaining high-quality data, **researchers can identify patterns, relationships, and themes that emerge from the raw data. This helps the** process of interpretation and drawing research conclusions. and 3). Inference. Here, researchers conclude from the data they collect, including looking for patterns of understanding, noting explanatory regularities, and causal flows (Wanto, 2018).

RESULTS AND DISCUSSION

Result

This study examines teachers' digital literacy skills in primary schools by considering several key components, including functional skills. Creativity, critical and collaborative thinking, cultural and social understanding, collaboration, ability to search and select information, effective communication, and security. Using observation, interviews, and documentation, the researcher will discuss the research results at SD Muhammadiyah 1 Sidoarjo on the digital literacy skills of elementary school teachers. The researcher chose Khalid's class IV as the research subject. Data collected from observations in Khalid's class IV at SD Muhammadiyah 1 Sidoarjo revealed that teachers possess strong skills in storytelling and digital literacy activities. The primary purpose of this section is to determine the level of digital literacy skills among teachers at the primary school level, particularly at SD Muhammadiyah 1 Sidoarjo. Interview data was used to test digital literacy skills. Each of these components is crucial in providing learners with the necessary tools to effectively engage with digital content. The following presents the results of data processing on teachers' digital literacy skills at Muhammadiyah 1 Sidoarjo primary school.

1.1 Functional Skills

Figure 2. A teacher operating a computer

Functional skills refer to teachers' ability to use technology to support education. This includes basic skills such as using computers, cellphones, and software applications. Being able to apply these skills to learn new technologies is an integral part of developing functional skills. The focus is on what can be done with digital tools and what needs to be known to use them effectively. Based on the results of interviews conducted by researchers at SD Muhammadiyah 1 Sidoarjo, it was found that literacy habituation, as an obligation for students at SD Muhammadiyah 1 Sidoarjo, was carried out for 4 consecutive days (Monday, Tuesday, Wednesday, and Thursday). The activity is used regularly for 15 minutes before the start of learning. In literacy habituation, teachers strive to make literacy activities interesting and not boring.

1.2 Creativity

Figure 3: A teacher teaches digital storytelling

Creativity, in this context, refers to a person's ability to think critically and gather knowledge from diverse concepts and sources to utilize digital technology effectively. In using digital storytelling, teachers are expected to encourage students to gain knowledge, think critically, and develop creativity in creating products through digital technology. The strategy employed by teachers at SD Muhammadiyah 1 Sidoarjo in this case involves utilizing existing devices, designing digital storytelling videos, and providing feedback.

1.3 Collaboration

The properties of digital technologies lay the foundation for their cooperation. Digital technologies offer opportunities for team collaboration, allowing participants to engage in discussions, share ideas, and develop new concepts to deepen their understanding. For instance, this includes the ability to participate in digital spaces, provide explanations, and discuss ideas with others within the group. In creating a digital storytelling product, teachers

can collaborate with their students. Based on the interview results, the teacher's strategy involves implementing collaborative learning and utilizing technology, such as assigning group tasks to students for discussion within their respective groups. This method can create a very effective collaboration, so that not only the teacher is involved in digital storytelling, but students are also trained to be involved. When creating digital storytelling videos, teachers collaborate with other class teachers who also utilize digital storytelling videos as learning materials. The collaboration between Class IV teacher Khalid and Class V teacher Mas Mansur involves creating ideas and concepts for the upcoming teaching material.

1.4 Communication

Communication is about a person, which means being able to communicate effectively through digital technology. The ability to share ideas, concepts, and understanding is closely related to digital literacy and effective communication. Based on the interview results, teachers utilize digital technology, such as creating learning videos and PowerPoint presentations using the Canva application. Through these media, teachers can help learners present their digital storytelling to a broader audience. That way, the videos produced can be reached more widely in all circles.

Teachers can ensure that communication in digital storytelling among students runs effectively, namely, by ensuring that students can understand and respond actively to what they have learned. For example, when the teacher explains the details related to digital storytelling of "Sumur temple and Pari temple", students can listen attentively, and they respond actively when the teacher asks. By understanding and responding effectively, teachers can ensure that learner communication is very effective, providing a smooth learning experience.

1.5 The Ability to Find and Select Information

The ability to seek and select information is the most critical component. It relates to the careful consideration of how the process of finding information and using sources, especially about representation, language, production, and audience, is approached. Based on the interview results, the teacher confirmed that the digital storytelling created by the learners can reflect critical thinking. This can be seen in the results of digital storytelling created by students, as well as in how they communicate it. This certainly has steps in assessing information sources. The steps taken by teachers to evaluate information sources for accuracy and high quality when using digital technology include analyzing the sources to be used and utilizing technology effectively.

The strategy carried out by the teacher in selecting and finding accurate and relevant information in digital storytelling is by taking responsibility, observation, providing explanations of the story, and providing opportunities to try. The responsibility referred to in this case is how the teacher guides the students skillfully, and the observation made by the teacher is to find information from trusted sources.

1.6 Critical Thinking and Evaluation

Critical thinking is required when receiving information on the internet and conducting evaluations. This component focuses on obtaining and interpreting information, not only passively, but also to analyze, contribute to, and improve students' critical thinking. "When I look for some materials that I will use, I don't use them directly, because we also have to consider several factors, such as the learning objectives of students, how the information I receive is, and whether the information is by what I need, I'm afraid the information is a hoax, I'll be the one who loses," said grade IV teacher Khalid. Based on the results of interviews conducted by researchers, it is shown that teachers at SD Muhammadiyah 1 Sidoarjo do not immediately accept and agree when choosing information from the internet. This is because information cannot be accepted raw, but must be evaluated more deeply before being given to students.

1.7 Cultural and Social Understanding

Digital literacy must be adjusted to the social and cultural understanding of the environment. A person's culture and social environment significantly influence how they interact with others. In this case, the teacher uses the theme "the origin of the Pari temple and the Sumur temple". Based on the teacher's work, the video clearly and in detail explains the origins of the Pari Temple and the Sumur Temple. The relationship between the video and socio-cultural understanding is that the teacher prioritizes learning materials whose culture is in their own environment, namely the Pari temple in Porong district. Based on this, the digital technology used by the teacher includes tools such as creating learning videos, using slides from the Canva application, and PowerPoint. Through these media, teachers can help students present their digital storytelling to a broader audience. That way, the resulting video can reach a wider audience across all circles.

The strategy employed by teachers in incorporating local cultural phenomena into

digital storytelling involves integrating local cultural elements through science and P5 learning. "Through this science and P5 learning, there are various cultural phenomena in Sidoarjo that can be learned by students, and through P5 activities, it can be used as a place to express work ideas according to cultural phenomena, such as knowing traditional foods in Sidoarjo, later it can be done through activities to make traditional foods using used materials," said grade 4 teacher Khalid.

1.8 E-Safety

This component emphasizes the development of security practices that utilize digital technologies such as the internet and smartphones to identify what is searched for and posted. Based on the results of interviews on using digital technology, teachers can model safe technology use by teaching digital literacy and utilizing technology properly. The strategy used by teachers to help students consider the impact of digital storytelling publications involves providing an understanding of the importance of maintaining ethics and privacy in the digital world. "Ethics and privacy are very important in digital storytelling publication. Ethics are our politeness and our way of appreciating other people's work, while privacy is protecting copyright, permission if someone else's work wants to be used," said the homeroom teacher for grade 4. Through this understanding, students can find out what ethics should be followed when publishing digital storytelling.

DISCUSSION

According to Paul Gilster's book (Gilster, 1999), digital literacy is a skill that involves understanding and utilizing information from various complex sources accessible via a computer network. Digital literacy is also defined as a skill that involves understanding and using information from various sources that can be accessed via a computer. The results of Fauziah and Kurniawan's research (Aqil Siroj, Witono, & Khair, 2022) show that teachers can use digital literacy to increase students' interest in reading and maximize. Based on several points, it can be concluded that digital literacy encompasses the understanding and skill of using networks, communication tools, and digital media to collect, evaluate, use, create, and utilize information in an appropriate manner to integrate relationships in everyday (Aveny, Trio Mahendra, & Saputra, 2023). The results of an interview with Khalid's teacher in grade IV showed that the teacher's literacy skills were very appropriate to the needs of his students. This aligns with the theory of ("Hague and Loader(1999).pdf," n.d.), which posits that digital literacy comprises eight components. It can be seen that the teacher has mastered the eight theories, so that the data can be explained as follows:

2.1 Functional Skills

Functional Skills are the abilities to adapt to new situations, which are an essential part of developing overall skills. The focus is on what can be done with digital tools and how to utilize them effectively. According to the theory of Hague and Payton (2010), functional skills are a crucial technical foundation that enables someone to use and access various digital tools (Fuad, Amala, & Muhammad, 2023). These skills include understanding how digital devices function and ensuring that people have a strong technical foundation to navigate the complexities of the digital world.

By possessing these skills, teachers can utilize various applications to create digital storytelling. Teachers can understand and explore the use of the internet because schools already provide various tools and devices used in learning. Therefore, teachers study them autodidactically or ask for explanations from the computer teachers on site.

2.2 Creativity

The implementation of this learning media was created to overcome two primary difficulties: understanding long stories and concluding a story. However, it is not uncommon for teachers to use other editing applications, such as Kinemaster and CapCut. "For the video on the origins of Pari temple and Sumur temple, I specifically use the Canva application, because it is easier and has many free features that I can use," said grade IV teacher Khalid. The benefits of learning media are to help teachers deliver lessons that produce more innovative and effective learning (Sabilla, Hakim, Yulia, & Herlambang, 2022). Based on the conclusions above, the researcher found that the material provided to students was a digital storytelling video entitled "The Origins of Candi Pari and Candi Sumur". This video was created to help students who have difficulty understanding a long story. The video was created by emphasizing intonation, demonstrations, and expressions that convey a soulful tone, making it easier for students to understand the story.

2.3 Collaboration

Collaborative skills are skills for producing meaning and knowledge. Improving digital literacy in young people means teaching them how to work together effectively using

digital technology and how technology can facilitate collaboration in both the outside world and the classroom. The teacher's obligation is not limited to teaching, but needs to be improved in terms of understanding broadly related to understanding in the digital space. Digital media in the digital space is very easy to apply for teachers who already understand it. Teachers can more easily explain learning materials that previously required searching for information through Google, Chrome, or other websites. Additionally, using easy-to-understand language to explain concepts obtained from internet searches will meet the needs of students. By implementing learning like this, it will be easier for both students and teachers to understand new information that has never been received before.

2.4 Communication

Communication involves people talking to each other, exchanging ideas, and understanding each other. The skill of working with others is the skill of producing meaning and knowledge. Improving digital literacy in young people means teaching them how to work together effectively using digital technology and how it can enhance collaboration in both the outside world and the classroom.

The increasing use of digital technology can make it easier for everyone to communicate. By fostering effective communication, teachers can disseminate information about the culture that needs to be preserved, enabling students to understand the differences between Indonesian and foreign cultures. However, students often misuse digital use. Therefore, teachers need to provide students with supplementary learning information that they obtain from the internet.

2.5 The Ability to Find and Select Information

Everything that **previously had to be done manually can now be done automatically** and quickly. Information that was previously developed slowly can also be spread quickly. Information search skills refer to a person's ability to recognize, understand, and utilize information effectively (Rozan & Dewi, 2022). In his book "Digital Literacy" (Gilster, 1999), digital literacy is defined as the ability to understand and utilize various forms of information from diverse sources that can be accessed through computer devices.

This component analyzes the skills required to search for information in the digital world and then select relevant information, such as identifying misleading content interpretations, spelling errors, or explicit expression words (Al-Zou'Bi, 2025). To find information, teachers must know how to search for it correctly and then evaluate the results. These skills include communication, social awareness of the digital world, knowledge of electronic security, and the creation of new information. Digital and information literacy is supported by critical thinking and evaluation.

2.6 Critical Thinking and Evaluation

Thinking is one of the things that distinguishes humans from each other. Meanwhile, critical thinking is a high-level thinking skill that contributes to moral development, social

development, mental development, and cognitive development. In many countries, educational goals include developing critical thinking skills, which are among the key objectives to be achieved. In line with (Fitriani, Zubaidah, Susilo, & Al Muhdhar, 2020), if we think critically, we will not easily get caught up in things that can put us in danger and harm us. In line with the opinion of research conducted by (Atris Yuliarti Mulyani, 2022), it is stated that students' critical thinking skills and their cognitive learning outcomes can be improved through problem learning.

The skills to manage digital space have been evaluated as a necessity and accompanied by responsibility. Human existence has undergone a significant transformation in the digital space controlled by electronic speed (Hefni, 2020). Critical thinking skills can be enhanced through practice and habituation. To improve critical thinking skills, eight steps can be taken: (1) determining the problem, real issue, project, or decision being considered; (2) determining the point of view; (3) explain why the point is considered; (4) make the necessary assumptions; (5) use clear language; (6) make conclusions based on convincing facts; (7) make conclusions; and (8) determine the consequences of the conclusions (Oktariani, 2020).

2.7 Cultural and Social Understanding

Cultural literacy encompasses an understanding of the practices, symbols, values, and traditions that characterize a particular culture. This includes an understanding of social norms, ethics, and beliefs that influence interactions and behavior in society. In addition, cultural literacy encompasses understanding and appreciating cultural diversity, as well as fostering an inclusive perspective (Chadijah, Suhana, & Wahyuni, 2023). The goal of a culture of literacy is to create a culture of critical thinking among students, starting with reading and writing activities. This is reinforced by the opinion according to Zuriana in the

study (Awa, 2023), stating that the implementation of a culture of literacy in schools has three advantages, namely: (1) improving children's basic skills in reading, writing, and arithmetic; (2) improving critical thinking skills; and (3) building reading habits as a first step towards a culture of literacy. In addition, students with high literacy skills will be better equipped to receive, process, and apply information; and (3) prepare students to enter the world of school. The culture of literacy in schools is closely related to students' critical thinking skills. The higher the literacy skills of students, the more critical they tend to be. In line with List's (2019) opinion, many teachers and educators argue that digital literacy experiences can influence cultural and social perspectives. Cultural values can help combine information in the digital world with socio-cultural understanding (Dinata, 2021).

2.8 E-Safety

According to Thurlow (Ahyati, Sya'rawi, & Permanasari, 2023), netiquette is defined as the rules of social behavior on social media and the proper use of the internet. Digital literacy encompasses information, media, visual, and technology literacy. Understanding internet security enables teachers and educators to ensure the security of personal and public data that is suitable for use as learning materials or resources (Tomczyk, 2020). Digital ethics is a crucial aspect of digital literacy, encompassing an understanding of the responsibilities associated with technology use, the importance of protecting privacy, and the need for ethical behavior when interacting online. This is increasingly important in a globally connected

world to maintain personal security and integrity in the digital world, on the basis of innovation.

Digital literacy encompasses several essential elements, including teaching individuals how to identify security threats, create strong passwords, manage application permissions, and avoid phishing attacks (D. F. Saputra, 2023). Digital literacy enables individuals to understand their rights regarding personal data and how to protect it, allowing them to make informed decisions about when and how they share their data (Ursic, 2018).

CONCLUSION

From the discussion above, it can be concluded that the fourth-grade teacher, Khalid, at SD Muhammadiyah Sidoarjo understands digital literacy skills very well. Literacy activities can be observed in the morning habituation, 15 minutes before learning begins. Digital literacy skills in teachers are defined by eight indicators, according to ("Hague and Loader(1999).pdf," n.d.). Of the eight indicators, it aligns closely with what teachers do to achieve digital-based learning targets in today's era. Literacy activities at SD Muhammadiyah 1 Sidoarjo are extensive, facilitating the smooth implementation of digital literacy. Apart from that, further efforts are needed to overcome existing problems, especially to improve teachers' digital literacy skills so that they can continue to advance and develop with the technology available in today's era. Not only that, but the existence of several digital technologies also provides teachers with a choice of tools to use. the selection of technology media greatly influences learning. When implementing digital literacy activities, students play an active role and participate fully in these activities, ensuring that boredom is avoided.

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