ENGLISH TEACHERS' STRATEGIES IN THE IMPLEMENTATION OF DIGITAL-BASED LITERACY IN CANDI STATE ELEMENTARY SCHOOL, SIDOARJO REGENCY

Rheny Puspita Ratih[1], Endah Yulia Rahayu[2]
Universitas PGRI Adi Buana Surabaya[1,2]
Email: alfatihrandy@gmail.com[1], endahyr@unipasby.ac.id[2]

ARTICLE INFO	ABSTRACT
Keywords: Teacher Strategy, Digital Literacy Application, Elementary School	Technology development in the digital era has changed many industries, including education. Technology integration in learning has led to significant changes in how education is delivered and experienced by teachers and students. One of the key aspects of this transformation is the digitalization of learning organizations, which involves the integration of digital technology into various aspects of educational institutions. This study aims to describe the Strategies of Elementary School English Teachers in Implementing Digital-Based Literacy in the Upper Classes of State Elementary Schools in Candi District, Sidoarjo Regency. This research was carried out in odd semesters in three State Elementary Schools in Candi District. This study uses a qualitative approach with a type of phenomenological research. The data in this study were obtained through observation, interviews, and documentation. The study results show that teachers' strategies to implement digital literacy in the upper class obtain valid information. With various strategies that have been used, teachers can increase curiosity by preparing interesting lesson plans and preparing media to be used, such as computers, mobile phones, the internet, digital libraries, and projectors. In the implementation stage, teachers carry out what has been planned and prepare beforehand. Teachers carry out digital literacy activities through the reading process, such as knowing, reading, and understanding methods. Teachers also use media such as videos, mobile phones, the internet, and computers. The conclusion obtained from this study is that teachers of the superior class of SDN Candi District have implemented teacher strategies in carrying out digital literacy activities in elementary schools through the stages of preparation, implementation, and evaluation of results. At this stage, digital literacy is knowing, reading, and understanding.

ABSTRACT

Technology development in the digital era has transformed many industries, including education. Technology integration into learning has led to significant changes in how education is delivered and experienced by teachers and |

English Teachers' Strategies in The Implementation of Digital-Based Literacy in Candi State Elementary School, Sidoarjo Regency

students. One of the main aspects of this transformation is the digitalization of learning organizations, which involves the integration of digital technology into various aspects of educational institutions. This study aims to describe the Strategy of Elementary School English Teachers in Implementing Digital-Based Literacy in the Upper Grades of Public Elementary Schools in Candi District, Sidoarjo Regency. This study was conducted in three public elementary schools in Candi District during the odd semester. This study uses a qualitative approach with a phenomenological research type. Data in this study were obtained through observation, interviews, and documentation. The results of the study indicate that the strategies used by teachers in implementing digital literacy in the upper grades obtain valid information. With various strategies that have been used, teachers can increase curiosity by preparing interesting learning plans and preparing media to be used, such as computers, cell phones, the internet, digital libraries, and projectors. In the implementation stage, teachers have carried out what has been planned and prepared previously. Teachers carry out digital literacy activities through the reading process, such as knowing, reading, and understanding methods. Teachers also use media such as videos, mobile phones, the internet, and computers. Furthermore, the conclusion obtained from this study is that the superior class teachers of SDN Candi District have implemented teacher strategies in implementing digital literacy activities in elementary schools through the stages of preparation, implementation, and evaluation of results. At this stage, digital literacy is knowing, reading, and understanding.

INTRODUCTION

Technology development in the digital era has changed many industries, including education (Qureshi et al., 2021). Technology integration in learning has led to significant changes in how education is delivered and experienced by teachers and students (Abedi, 2024). One of the main aspects of this transformation is the digitalization of learning organizations, which involves integrating digital technology into various educational institutions, such as teaching, learning, and administration (Ajiza & Rahman, 2023).

Digital technologies have evolved from stand-alone projects to a network of tools and programs that connect people and things worldwide and help address personal and global challenges (Palguna & Utari, 2020). Digital innovation has shown the power to complement, enrich, and transform education (Voronkova et al., 2023). It has the potential to accelerate progress towards the sustainable development goals for education and transform the way universal access to learning is provided (Annisa, 2022). Technology has also changed the way classrooms look and operate. Modern classrooms have various digital tools and resources that

facilitate learning and increase student engagement. Teachers are now expected to demonstrate proficiency in using educational technology in the classroom (Chan et al., 2019).

In addition to changing the classroom environment, technology also affects how teachers are trained (Aramburuzabala et al., 2024). Teacher educators play an important role in preparing the next generation of teachers for integrating technology in education (Desi, 2020). This involves developing teachers' competencies in using ICT in their teaching practices and equipping them with strategies to integrate technology effectively in the classroom (Nurhidayat et al., 2024). However, there are still challenges in implementing technology in education. Some of these challenges include the need for teachers to understand their curriculum more deeply before integrating technology, adequate facilities and infrastructure availability, and the level of teachers' skills in using technology in learning (Faizah et al., 2016).

Technological developments are not only in the form of computers (hardware) but also in the form of rapid advances on the software side. At the beginning of computer use, the applications used were still text-based. Since the discovery of the Windows operating system, which has user-friendly accessibility, supporting applications have emerged that can be used for digital media. Laptops that are currently widely circulated answer the needs of people in the world in the form of ease of mobility. Currently, laptops are starting to be replaced by devices in digital media, which is also in line with the extraordinary increase in internet networks. (Simbolon et al., 2022)

School digital literacy needs to be developed as an integrated learning mechanism in the curriculum or at least connected to the Teaching and Learning System. Students need to improve their skills, teachers need to increase their knowledge and creativity in the digital literacy teaching process, and school principals need to facilitate teachers or education staff in developing a school digital literacy culture.

In the context of teachers' strategies to implement digital literacy in elementary schools, several things or problems need to be considered, and several things are gaps found in the field, including: a) Teacher Strategy: Teachers can implement strategies that involve the stages of learning planning, learning implementation, and learning evaluation. In this case, teachers must understand how to integrate digital literacy into the learning process. b) Digital Literacy: Digital literacy includes understanding and skills in using digital technology. This includes accessing, evaluating, and participating in the digital world. Types of digital literacy include information, media, and technology. c) Benefits of Digital Literacy: Digital literacy helps students obtain valid and relevant information. With digital literacy, they can recognize credible sources and understand how to use digital devices wisely. d) Digital Literacy Competencies: Teachers must understand digital literacy competencies to teach students. This includes skills in seeking information, managing data, communicating effectively through digital media, and understanding online security issues. (Suwarto et al., 2022).

Based on the author's observations in several state elementary schools in Candi District, Sidoarjo Regency, a strategy for teachers to understand digital literacy competencies is needed to improve learning (Wiratsiwi, 2020). Let students learn in a fun atmosphere using digital literacy in English subjects (Wiratsiwi, 2020). Through English learning that is by the material provided at the time of learning and not only using the lecture model but there are still many that are used, one of which is *the digital literacy learning model* so that the learning outcomes that want to be achieved can be carried out properly (Anggeraini et al., 2019). The researcher took the initiative to conduct research using a qualitative descriptive method entitled English Teacher Strategies in the Application of Digital-Based Literacy at the State Elementary School of Candi Sidoarjo Regency.

RESEARCH METHODS

English Teachers' Strategies in The Implementation of Digital-Based Literacy in Candi State Elementary School, Sidoarjo Regency

The type of research used in this study is qualitative research with a phenomenological perspective approach. Where in phenomenological research tries to prove and find the "essence" of the meaning of a phenomenon that several individuals have experienced, Creswell (2018). This type of research with a qualitative approach emphasizes process analysis, namely an inductive thinking process related to the dynamics of the relationship between observed phenomena, and always uses scientific logic. This research focuses on exploring the strategies of elementary school English teachers in implementing digital-based literacy in the Candi District Regional Office.

The problem assessment in this study is a social and dynamic problem. The researcher chooses the type of qualitative research to determine the results and then describe them by searching, collecting, processing, and analyzing the data of the research results. So that a clear pattern can be found. Judging from the presentation of data, this study uses a descriptive pattern, meaning that the research tries to provide an overview and interpret the object according to the research results. Milles and Huberman (2014) put forward their view of qualitative research that data appears in words and not a series of numbers. Data is collected in various ways, including observation, interviews, and documentation.

Source: Miles and Huberman (2014)
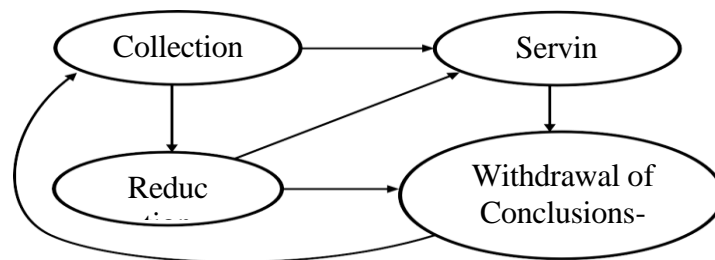
The validity of data is important through the credibility (trust) of existing data. In this study, data triangulation is carried out to obtain reliable data. Data collection techniques through triangulation are interpreted as techniques that combine various data collection techniques and existing data sources (Sugiyono, 2007). If the researcher collects data by triangulation, then the researcher actually collects data that at the same time tests the credibility of the data, namely checking the credibility of the data with various data collection techniques and various sources.

Triangulation aims not to seek the truth about some phenomenon but to improve the researcher's understanding of what has been discovered. Therefore, the triangulation technique is carried out by checking data obtained from various data collection techniques. Data from observations are confirmed through interviews and documentation, data from interview results are confirmed through observation and documentation, and data from documentation is confirmed through interviews and observations.

RESULTS AND DISCUSSION

The research subjects chosen by the researcher in this study are three teachers and students at the elementary school level in Sidoarjo Regency, with a sample of three elementary school institutions and English subject teachers with random classes. The research locations are: a) SDN Gelam I, b) SDN Gelam 2, c) SDN Klurak. The time chosen to conduct this research is in the first semester of the 2024/2025 school year, from October to November 2024.

Rheny Puspita Ratih, Endah Yulia Rahayu

Research observation was carried out during four meetings, and interviews with three teachers were conducted once.

Use of Digital Literacy

Strategy and Implementation

Implementation as a strategy for elementary school English teachers can be identified through the results of interviews. Observations are focused on a variety of criteria that reflect teacher and student engagement with digital devices and literacy. Integrating digital devices in education has become an important aspect of modern teaching, improving the teaching process and student engagement. The study examines the experiences of three teachers who have incorporated various digital platforms and resources into their elementary school English classes. Teacher 1, with seven years of teaching experience, focuses on platforms like YouTube and PMM to create an interactive and engaging learning environment. Teacher 2, the most experienced with eight years in the field, emphasizes the use of the school's digital library and online resources to enhance student creativity and independent learning. Teacher 3, with four years of teaching experience, integrates the Literacy Cloud platform to cultivate reading skills and use structured digital learning tasks. Through diverse approaches, each teacher has developed unique strategies to overcome challenges, improve learning outcomes, and continue professional development while adapting to the ever-evolving digital education landscape. The following is a documentation of the results of class observations and researcher interviews with resource persons:

Figure 1. Observation and Interview of Researchers and Informants

Based on the observations of researchers in the field, researchers see that the use of platforms such as YouTube and PMM for English teachers to utilize digital literacy is indeed very influential. As we know, the Independent Teaching Platform, more often abbreviated as PMM, is an educational platform that provides various references for teachers to teach according to the Independent Curriculum. Through this platform, teachers can align learning according to students' abilities. PMM Independent Curriculum also provides training that can improve teacher competence. Furthermore, PMM is an ecosystem that makes accessing various information, references, and inspiration easier. One of the main characteristics of the independent curriculum is the flexibility of teachers. In practice, flexibility and differentiation of learning require teachers to be effective so that they can teach according to student achievement and development.

Utilization of Digital Literacy Media

Teaching experience is certainly very important for a teacher because teachers must be inspirational and innovative, so learning is not only that. Teachers need experience from

anywhere so that teachers have a lot of knowledge that they get. Experience is essential for the future, so teachers should make more use of learning, and students will not feel bored. Teachers can be said to be successful when they can make their students better than before in various ways, and there is no boredom for teachers to provide input, provide knowledge, and do something that can change students to be better than before. Inspirational teachers certainly have various ways to do this.

With the use of digital media as literacy development, which is almost an average of between 3-5 years of use, the use can be effective. The following are the results of the documentation of learning the application of digital literacy through the Literacy Cloud and PMM platforms that teachers on student learning have carried out:

Figure 2. Student Educaply Games

Educational games can be useful as a learning medium to convey information, science, or subject matter interactively and interestingly for children. Educational games can stimulate children's minds and creativity. Educational games can create a dancing, safe, and fun play environment that can improve the quality of children's learning. In line with Paul Gilster's opinion, Gilster defines digital literacy as a person's ability or skill to understand and use information from various digital sources effectively and efficiently in various formats. Eshet added that digital literacy emphasizes the ability to use a wide variety of digital resources effectively.

Bawden offers a new understanding of digital literacy based on computer literacy and information literacy. Computer literacy developed in the 1980s when microcomputers began to be widely used to touch society. In line with technological developments, information literacy continued to develop in the 1990s when information was increasingly easy to operate, access, and disseminate through networked information technology. Hague also stated that digital literacy is the ability to create and share in various modes, such as creating, elaborating, communicating effectively, and having an understanding of when and how to use information technology devices to support the process.

Implementation of Digital-Based Literacy
Comprehensive Digital Implementation Strategy

Effectively integrate various digital tools to enhance the learning experience. They use YouTube videos to deliver interesting themed vocabulary lessons, making language learning more dynamic and relevant for students. To further enrich the curriculum, they leverage resources from PMM, ensuring lessons are aligned with educational standards. Teacher 1: *"I use learning videos from YouTube, resources from PMM, apps like Google Classroom for assignments, and digital quiz platforms for interactive exercises."* Google Classroom is used for efficient task management, simplifying communication, and assignment submission.

Additionally, digital quiz platforms are used to conduct interactive assessments, encourage student engagement, and provide immediate feedback on their progress.

By adopting a careful approach to using digital tools in learning and prioritizing resources that improve student engagement and academic outcomes. They use the school's digital library as their primary resource, providing students with access to a wide range of reliable and relevant materials. Teacher 2: *"I use my school's digital library, online learning platforms, English practice apps like Grammarly, and learning videos from trusted sources."* An online learning platform is included to facilitate interactive discussions, encouraging active participation and collaboration among students. To support English language development, they implemented apps like Grammarly, which allow students to practice and refine their writing skills independently.

Integrate the PMM platform to provide additional learning materials that enhance the curriculum. Technology-based assignments are a key component of their teaching strategy, allowing students to apply their knowledge in creative and practical ways. Teacher Resource 3: *"I have started to actively utilize digital literacy, especially with the Literacy Cloud platform which provides reading resources in English, as well as other media available on the Merdeka Teaching Platform (PMM)".* In addition, Teacher 3 designed a structured, digital-based learning environment, ensuring that lessons are organized, accessible, and engaging. This approach reflects a commitment to leveraging digital devices to create a comprehensive and effective learning experience. The following is a documentation of student learning activities with the use of Youtube media in the classroom:

Figure 3. Utilization of YouTube Media in Student Learning Activities

See Figure 3. The enthusiasm of students in participating in learning activities in the classroom with the use of YouTube media is very high, plus the media presented is able to invite curiosity and will provide a pleasant learning experience. By adding new information for students, as well as information related to digital literacy, students will be able to develop rapidly. The conceptualization of digital literacy consists of four main components, namely basic digital literacy skills, information knowledge background, main digital literacy competencies, and information user attitudes and perspectives.

In line with Martien Ercuiless's opinion, the basic skills of digital literacy consist of basic skills such as the ability to read, write, understand symbols to present language and perform numerical calculations, as well as basic computer literacy skills which include the ability to use computer hardware and software. The main competencies of digital literacy include understanding digital and non-digital information formats, the ability to create and inform digital information, the ability to evaluate the information obtained, the ability to apply

knowledge, information literacy skills, and media literacy skills. According to Gilster, the digital literacy competencies that need to be possessed by a learner are internet searching, which is the ability to search for information through the internet using a search engine, as well as carrying out activities against it, *information content evaluation*, which is the ability to think critically and give an assessment of what is found on the internet, as well as the ability to identify the completeness or truth of information.

Integrating Technology in Learning

Learning activities that are pleasing to students are one of the things that must be considered, with activities that are pleasing to students are able to provide new experiences in learning. Students will feel happy without being burdened with burdensome material. With a varied and innovative methodological approach in integrating technology in learning. In the Independent Curriculum, digital devices such as tablets, laptops, and smartphones can be used to support the learning process. Teachers can use interactive educational apps to explain difficult concepts, provide online quizzes, and create a fun learning environment. The following is documentation of students who use digital literacy applications in the digital library accompanied by a reading journal for students of SDN Gelam II Candi:
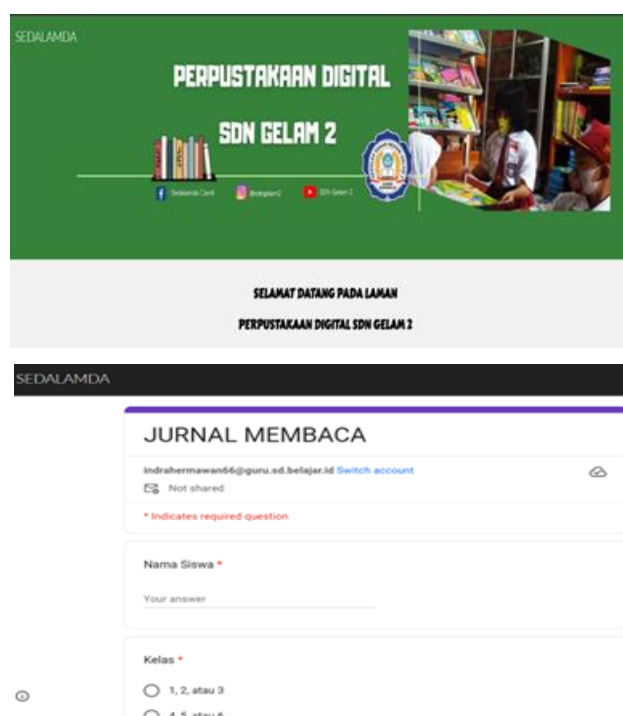
Figure 4. Digital Library and Reading Journal Applications

Figure 4 shows the extent of the use of digital literacy applications with their various variations that can be used by students, such as in a journal (Suherdi 2021) that writes about digital literacy is the knowledge and skills of users in utilizing digital media, such as communication tools, internet networks and so on. This includes the ability to search for information, interact with technology, and understand various types of digital media. Digital literacy involves the ability to think critically about information found online and use it ethically and responsibly.

Digital literacy has brought many benefits in life. Digital literacy can increase students' insight from various information read, improve students' ability to think critically and improve individual verbal skills. With digital literacy, it can help students find the information they need faster. The speed of searching for information by utilizing this technology can save time. The digital library application is a service from the Inc. library that provides several reading books or magazines that can be accessed for free. The digital library application also provides electronic books or audiobooks of various genres that suit your preferences. Starting from local books, translated books, novels, recipe books, books about lifestyle and others can be found in this application. Of course, it will add to a fun learning atmosphere because it can be accessed anywhere, making it an exciting learning experience for students.

CONCLUSION

Understanding and mastering learning strategies is a very important skill for a teacher. By understanding effective learning strategies, a teacher can improve student engagement, facilitate better understanding, face various learning challenges, and improve teaching effectiveness. To become an influential and successful teacher, a teacher needs to invest time and effort in learning and developing learning strategy skills. By doing this, a teacher can provide a meaningful learning experience and influence student development in a positive way.

The importance of digital literacy for students is not only limited to the ability to use technological devices such as computers or tablets, but also includes a broader understanding of how technology works. Digital literacy means that students must be able to find, evaluate, and use digital information correctly. These skills help them filter out valid information amid the flow of news and data that floods the internet every day. With digital literacy, students can become independent and critical learners, able to distinguish right information from wrong, and understand how to use technology effectively to achieve their learning goals. Digital literacy is the ability of individuals to use to research, create, and communicate more effectively at home, at school, at work, and in daily life. Digital literacy is an important skill for students of all ages, including elementary school students. The digital world allows everyone to connect with each other, collaborate, innovate, and discover new information that is constantly evolving. Through the process of implementing digital literacy activities, teachers determine the goals of digital literacy, the form of digital literacy to be implemented, the digital literacy media used, and determine the supporting devices for digital literacy activities.

Digital literacy also plays an important role in shaping students to become responsible individuals in cyberspace. In this digital era, the ethical use of technology is also an important part of this literacy. Students are not only taught how to use technology, but also how to protect privacy, understand cybersecurity, and behave ethically on the internet. With strong digital literacy skills, students will be better prepared to face the challenges of an increasingly digitally connected world in their education, work, and social life.

REFERENCE

Abedi, E. A. (2024). Tensions between technology integration practices of teachers and ICT in education policy expectations: implications for change in teacher knowledge, and teaching practices. Journal of Computers in Education, 11(4), 1215–1234.

Ajiza, M., & Rahman, N. A. (2023). Strategi pembelajaran Bahasa Inggris pada murid Sekolah Dasar (SD). Jurnal Komunitas: Jurnal Pengabdian Kepada Masyarakat, 5(2), 215–220.

Anggeraini, Y., Faridi, A., Mujiyanto, J., & Bharati, D. A. L. (2019). Literasi digital: Dampak

dan tantangan dalam pembelajaran bahasa. Prosiding Seminar Nasional Pascasarjana, 2(1), 386–389.

Annisa, N. (2022). Kompetensi Seorang Guru Dan Tantangan Pembelajaran Abad 21.

Aramburuzabala, P., Culcasi, I., & Cerrillo, R. (2024). Service-learning and digital empowerment: The potential for the digital education transition in higher education. Sustainability, 16(6), 2448.

Chan, F., Kurniawan, A. R., Herawati, N., Efendi, R. N., & Mulyani, J. S. (2019). Strategi guru dalam mengelola kelas di sekolah dasar. International Journal of Elementary Education, 3(4), 439–446.

Desi, Y. P. (2020). Gerakan literasi digital berbasis sekolah: Implementasi dan strategi. Jurnal Ilmu Komunikasi, 17(1), 51–59.

Faizah, D. U., Sufyadi, S., Anggraini, L., Waluyo, W., Dewayani, S., Muldian, W., & Roosaria, R. (2016). Panduan gerakan literasi sekolah di sekolah dasar. Direktorat Jenderal Pendidikan Dasar dan Menengah.

Nurhidayat, E., Mujiyanto, J., Yuliasri, I., & Hartono, R. (2024). Technology integration and teachers' competency in the development of 21st-century learning in EFL classroom. Journal of Education and Learning (EduLearn), 18(2), 342–349.

Palguna, I. G. R., & Utari, L. P. S. (2020). Implementasi Penilaian Kinerja Karyawan pada PT. Gae. Jurnal Syntax Transformation, 1(5), 125–135.

Qureshi, M. I., Khan, N., Raza, H., Imran, A., & Ismail, F. (2021). Digital technologies in education 4.0. Does it enhance the effectiveness of learning?

Simbolon, M. E., Marini, A., & Nafiah, M. (2022). Pengaruh literasi digital terhadap minat baca siswa sekolah dasar. Jurnal Cakrawala Pendas, 8(2), 532–542.

Suwarto, D. H., Setiawan, B., & Machmiyah, S. (2022). Developing digital literacy practices in Yogyakarta elementary schools. Electronic Journal of E-Learning, 20(2), pp101-111.

Voronkova, V., Vasyl'chuk, G., Nikitenko, V., Kaganov, Y., & Metelenko, N. (2023). Transformation of digital education in the era of the fourth industrial revolution and globalization.

Wiratsiwi, W. (2020). Penerapan gerakan literasi sekolah di sekolah dasar. Refleksi Edukatika: Jurnal Ilmiah Kependidikan, 10(2), 230–238.