

The Implementation of Digital Literacy as an Effort to Build Digital Citizenship in SMP Negeri 4 Percut Sei Tuan

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Abstract

The rapid development of Science and Technology (Science and Technology) has an impact on all aspects of life including education. This condition indirectly requires students to have the ability to sort out the content and information they get through the internet network or commonly referred to as digital literacy. The purpose of writing this article is to find out how the implementation of digital literacy at SMP Negeri 4 Percut Sei Tuan so that they can master technological developments. This research uses Descriptive Qualitative method with a scientific setting, the purpose is to interpret the phenomena that occur in the current environment, data obtained through observation, interviews and documentation. The results of this study are First, digital skills, namely giving digital-based assignments or projects. Second, digital culture by integrating digital citizenship values into school rules and culture/activities so that students can understand their rights and responsibilities in carrying out their role as good digital citizens. Third, digital ethics is providing an understanding of digital ethics through classroom learning and socialisation to students and parents. Fourth, digital safety, which provides an understanding and how to create strong passwords and how to keep them confidential.

Keywords: Digital Literacy, Digital Citizenship

Introduction

Currently, the development of technology towards digital technology is accelerating. In this digital era, people have adopted a new lifestyle that cannot be separated from electronic devices. Technology can help most human needs. The utilisation of technology can make it easier to complete a task or job. This significant contribution of technology has ushered in the digital era for human civilisation.

The digital era has brought many positive changes that can be utilised to the fullest. However, the digital era also brings many negative impacts that provide new challenges for human existence in the digital era. Challenges in the digital era also enter various sectors such as politics, economy, socio-culture, security and information technology itself. With the emergence of internet-based digital networks, especially

computer information technology, the digital era was created.

The network-based nature of new media in the digital age makes it vulnerable to manipulation. Information delivery is undergoing a cultural transition, encouraging mass media to embrace new media and the Internet. The ability of media in this digital era makes it easier for people to receive information more quickly. With the advent of the internet, mass media has changed dramatically (Setiawan, 2017).

Indonesia is currently entering the 21st century which is closely related to the digital era. This century is characterised by the availability of information anywhere and anytime. Therefore, as a prerequisite for life skills in the 21st century, people must be able to foster a culture of literacy through integrated education. Changes in education policy have resulted in the development of 21st century skills, namely literacy, competence and character.

Reading and writing literacy, numeracy literacy, science literacy, digital literacy, financial literacy, cultural literacy and citizenship are the six basic literacy categories. Providing reading materials and encouraging reading can be the foundation for improving literacy culture (Setyaningrum, 2022). The world is within our grasp due to advances in technology and information and the increasing sophistication of every device created.

Along with the rapid advancement of information technology, and bringing influence on the form of citizen participation using digital media, a new concept has emerged, namely digital citizenship. Digital citizenship can be defined as a norm of behaviour related to the use of technology, or it can be interpreted that digital citizenship is the ability to participate in online societies) (Fernández-Prados et al., 2021). Digital citizenship can also be interpreted as the ability to use technology competently, interpret and understand digital content and assess its credibility and then create, research and communicate with appropriate tools and be able to think critically about the challenges of the digital world (Afri et al., 2022). So it can be concluded from these two concepts that digital citizenship is the knowledge and skills used to use technology appropriately in the digital world, manage existing risks, and take advantage of the opportunities offered by the digital world appropriately and wisely.

The convenience offered by this technological advancement is often misused for inappropriate things. As has been happening lately, with the widespread flow of information that is easily accessed today through the internet, the information circulating through social media sometimes contains hate speech, fake news, and slander. The circulation of hoaxes, slander, and even blasphemy on social media shows the immaturity in using the internet.

Teenagers as active users of social media are a group that is vulnerable to becoming perpetrators and victims of hoax information. (Fauzi, 2021) in his research found that 8000 students could not distinguish between professional media and fake sites. Moreover, the covid 19 pandemic has caused the learning process to be carried out online (online). Therefore, the importance of digital literacy among students in the midst of the

current hoax information makes SMPN 4 Percut Sei Tuan students more critical in accessing information and smarter in social media. An important role to foster critical thinking in students is the teacher who is integrated in the learning process. The primary source of knowledge is not solely from the teacher, but the teacher becomes a facilitator to facilitate students in obtaining sources of knowledge through internet media. Digital Literacy consists of 4 pillars according to the Kominfo version. Digital Skills, Digital Culture, Digital Ethics, Digital Safety, Digital skills include the ability or proficiency to utilise digital media in everyday life. Digital culture is related to national insight in interacting in the digital space, digital ethics is related to maintaining attitudes and adjusting to remain rational, and digital safety which includes information security.

The purpose of digital citizenship today is essentially to educate, empower and protect. According to (Luke, 2010) who defines digital citizenship consists of the concepts of responsibility, rights, security.

Based on the description above, the idea can be drawn that the digital era brings us into a new era of Character Education, which is aimed directly at the opportunities and challenges of digital lifestyle life. Therefore, it is necessary to conduct research related to the Implementation of *Digital Literacy* on students as an effort to form *digital citizenship* at SMPN 4 Percut Sei Tuan.

Method

This research uses a qualitative approach because the use of a qualitative approach is very suitable in this research, which will basically find out the implementation of Digital Literacy as an effort to form digital citizenship at SMPN 4 Percut Sei Tuan. The research location used for this research is SMPN 4 Percut Sei Tuan.

In this case, the research informants are determined by purposive sampling, this is because the research orientation is aimed at teachers and students. The teacher in question is the teacher of Pancasila and Civic Education (PPKn).

The informants were chosen based on the consideration that they have been students at the school for a long time and of course

have experienced internet access for a longer time. Data collection techniques used in this research are observation, in-depth interviews, and documentation. After data collection, data reduction was carried out in this study obtained from observation, in-depth interviews. Furthermore, documentation then selected the main data and focused on important things, so that the data becomes clear and systematic. The data is presented in the form of a narrative that describes the research informants, namely describing the implementation of digital literacy as an effort to form students' digital citizenship at SMPN 4 Percut Sei Tuan. The last stage after the data analysis technique is drawing conclusions.

Result and Discussion

Based on the results of the interviews obtained that first, SMPN 4 Percut Sei Tuan has implemented Digital Citizenship Education, it can be seen from the WhatsApp group for each class and group per subject area so that each student can get the latest information from the teacher concerned such as notification of assignment collection, materials for practice or for sharing documentation of learning activities that have been carried out so that parents / guardians of students can find out the learning process carried out by students at school. In addition, the class teacher gets reinforcement and input, even constructive criticism from parents/guardians.

Digitalisation implemented in this school is also balanced with Digital Citizenship Education, which is teaching and coaching students on how to use technology appropriately. The implementation of Digital Citizenship Education at SMPN 4 Percut Sei Tuan is given through: First, digital skills, namely giving assignments or projects that are digital-based. The task can be in the form of projects such as posters or videos and e-form exams. Second, digital culture, which is through integrating digital citizenship values in school rules and culture/activities that aim to make students understand their rights and responsibilities in carrying out their role as good digital citizens. Third, digital ethics is providing an understanding of digital ethics through classroom learning and socialisation to students and parents. Fourth, digital safety

is providing an understanding and how to create strong passwords and how to keep them confidential. And students must be informed about the consequences of inappropriate or dangerous online behaviour such as cyberbullying, accessing pornographic content, spreading hoaxes, avoiding phishing or malware.

Second, the obstacles that occur in the implementation of Digital Citizenship Education at SMPN 4 Percut Sei Tuan can be resolved well even though there are many obstacles faced in its implementation, including the lack of student awareness in complying with the rules set by the school so that students still often commit violations, then during online learning such as during the Covid 19 pandemic many students are still constrained to follow learning from home due to lack of digital access, and the function of supervision and control by teachers to students does not run effectively. Furthermore, the various forms of implementation of Digital Citizenship Education at SMPN 4 Percut Sei Tuan and the obstacles and ways to overcome them, will be explained in the next sub- section.

Digital Literacy

Literacy is the capacity to recognise, understand, interpret, create, communicate and use printed and written materials in a variety of contexts. Literacy covers the spectrum of learning that enables individuals to achieve their goals, develop their knowledge and potential, and participate fully in their communities and society at large.

Digital literacy is the cognitive and technical ability to use information and communication technologies to find, transmit, utilise, create and communicate information. Digital literacy is the ability to perceive, search, understand, evaluate and apply digital technologies. In this context, digital literacy does not refer to the ability to use computers to write and read, as in the context of general literacy, but rather to a collection of basic skills in the use and production of digital media, transmission and utilisation of information, and participation in social networks to create and share knowledge. (Setiawan, 2017).

It can be concluded that digital literacy is an individual's ability to use, understand, assess and participate in the digital world wisely and effectively. It includes an understanding of technology, the use of software and applications, an understanding of online etiquette, the ability to identify valid information on the internet, as well as the ability to communicate digitally.

The covid 19 pandemic has a tremendous impact on aspects of life, ranging from health, economy, education and even science and technology. The application of social distancing is used to overcome the spread of the covid 19 disease outbreak. The process of learning activities has shifted from offline to online. The use of technology in education requires digital literacy skills.

Indonesia's digital literacy index will increase again in 2022. This result is reflected in the Indonesia Digital Literacy Status 2022 survey conducted by the Ministry of Communication and Information in collaboration with the Katadata Insight Centre (KIC).

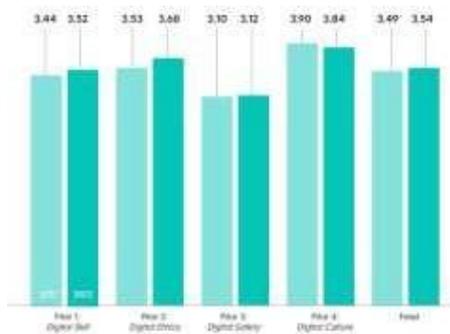


Figure 1. Comparison of Digital Literacy index based on four pillars from 2021-2022.

The score shows that the digital literacy of Indonesian people is in the medium category. The measurement is conducted using four pillars, namely digital skills, digital ethics, digital safety, and digital culture. (Finaka, 2023).

Implementation of Digital Literacy through Digital Skills.

Digital literacy and digital skill development are closely related to the creation of responsible *Digital Citizenship*. Digital literacy is a person's ability to use, understand, evaluate and participate effectively in the

digital world. Digital literacy includes an understanding of technology, information, and ethics in the use of these technologies.

The implementation of digital skills at SMPN 4 Percut Sei Tuan is seen with the use of the WhatsApp platform which is popular and very easy to use. The following is an explanation from Adit, a student of SMPN 4 Percut Sei Tuan.

"Since the covid 19 pandemic, teachers often use WhatsApp groups to interact such as sending notifications of assignments, school schedules or other important information. Sometimes students are also told to submit assignments through groups such as Video assignments".

In addition, the use of Google Classroom or G-Form is also applied for the implementation of the Midterm and Final Semester Examinations. As explained by one of the Civics teachers, Mr Deni.

"For the implementation of UTS and UAS, the school applies paperless with the use of Google Classroom and G-Form, in addition to supporting the environment. I as a teacher am also very helpful because it makes it easier to correct the results of student answers that have been automatically checked".

Of course, the use of the platform is inseparable from the training and knowledge development that has been given to teachers and students at SMPN 4 Percut Sei Tuan. As explained by the Principal of SMPN 4 Percut Sei Tuan.

"In this digital era, I invite teachers and students not to be left behind in terms of digitalisation, from the most basic things, namely the use of WhatsApp which is very easy. Teachers and students can exchange information through the platform so that they can always be connected and even parents/guardians can monitor their children's progress. As well as the implementation of digital-based examinations with the use of Google Classroom and G-Form so that it can save operational costs, such as the use of paper and office stationery, and make it easier to correct student answers. In order for the programme to run well, I provide training and guidance to teachers and students in advance".

By equipping students with strong digital literacy and digital skills, schools and educational institutions can play an important

role in creating responsible digital citizens who are able to interact with technology wisely, ethically and productively. This is an important step in meeting the challenges and opportunities that exist in an ever-evolving digital world.

Implementation of Digital Literacy through Digital Culture

Implementing digital literacy through digital culture is an approach that aims to build a deeper and broader understanding of digital literacy in an environment that reflects the norms, values and practices associated with digital technology. It involves creating a culture that promotes the understanding and utilisation of technology ethically, wisely and effectively.

The implementation of digital culture in schools is that teachers and students are taught about how to communicate ethically in an online environment, including the use of polite and respectful language in emails, discussion forums, and school social media platforms. Based on Yessi, a student of SMPN 4 Percut Sei Tuan.

"I often use social media because it makes it very easy to interact with people from anywhere. I can meet new people, get information and even earn money. However, it can also lead to negative things such as being influenced by hoax news, cursing on social media or pornographic content. Therefore, it is necessary to have a policy in using it such as polite speech, not accessing prohibited sites or being easily provoked by hoax news that can cause division".

To create a *digital culture*, SMPN 4 Percut Sei Tuan implements policies that cover aspects such as data privacy, mobile device usage, and copyright. The following is an explanation from a teacher Mrs Evi Purba, she said that:

"As a teacher here, I always urge students to use social media wisely, such as being polite in posting something or commenting. It is not uncommon for there to be complaints because of mutual insinuations on social media that lead to fights. For this reason, if we find students saying negative words on social media, they are given a warning or sanction".

In this case the school also implements policies that support the creation of a *digital culture* as explained by the principal that.

"As the principal, I try to provide a positive environment and culture, especially in terms of digital literacy, one of the ways is to provide rules or appeals for each student to maintain their speech both verbally and in writing on social media. Filtering information in circulation to prevent the spread of hoaxes, as well as limiting access to dangerous content or sites. Apart from the policies that have been made, I also provide wise examples of digital literacy".

A thoughtful and proactive principal's policy on *digital culture* can help create a school environment that supports the safe, ethical and effective use of technology in education. Principals can also be role models for students and school staff in terms of responsible technology use.

Integrating digital literacy through digital culture is an important step towards creating a digital-appropriate learning environment and helping students and school staff to develop the understanding and skills needed to succeed in an increasingly digitalised world. The implementation of digital culture in schools is an ongoing effort to create a learning environment that is appropriate for the digital age, supports digital literacy, and prepares students to become responsible and skilled digital citizens.

Implementation of Digital Literacy through Digital Ethics

The implementation of digital literacy through digital ethics is an approach that aims to teach students how to use digital technology wisely, ethically and responsibly. It involves understanding and practising how to behave online, recognising and addressing ethical challenges that arise in the digital world, and understanding the concepts of digital privacy, copyright and responsibility.

In this case, SMPN 4 Percut Sei Tuan tries to invite students to maintain their behaviour, speech and even typing to prevent ethical violations in social media or the digital world such as using digital devices outside the knowledge of the teacher during the learning process. Conducting cyberbullying on social

media, creating content or sharing that harms others such as pornography, hoaxes and even downloading other people's works such as music, films and so on legally. The role of teachers is needed to urge students to be careful and apply digital ethics as stated by one of the BK teachers at SMPN 4 Percut Sei Tuan, namely:

"I often give advice to SMPN 4 Percut Sei Tuan students to learn to appreciate before being appreciated both in attitude and behaviour. This is inseparable from the use of social media, which has become another world for students today, especially Generation Z. Because the use of digital devices for networking can have a positive and even negative impact. The implementation of the ITE Law is one of the precautions to implement digital ethics among its users".

In addition, according to the principal of SMPN 4 Percut Sei Tuan that:

"The school already has a rule that every student is allowed to use digital devices with the permission and knowledge of the relevant teacher when using them indoors during the learning process. There is also an ethical way of communicating with teachers through short messages, such as greeting and identifying themselves and their needs, and ending with a closing greeting. As well as encouraging students to develop critical judgement skills when evaluating online information sources. They need to understand how to identify fake news or biased information. Rules that are repeated will become good habits and form ethics, especially in the digital world".

Therefore, implementing *digital ethics* for students is an important investment in helping them become thoughtful, responsible, and aware of the consequences of their online actions. It also helps them shape positive behaviour in an increasingly connected online world.

Implementation of Digital Literacy through Digital Safety

The implementation of digital literacy through digital safety is an important step in helping students become aware of the risks and threats that exist in the digital world and how to protect themselves online. Here's what the school principal said:

"It is very important to give students an understanding of protecting their personal data in order to avoid harmful things such as fraud by disguising, stealing personal data such as NIK, photos or personal numbers which are the target of crime in the digital world. Involve parents in digital safety efforts. Share resources with parents to help them protect their children online".

The implementation of digital literacy through a focus on digital safety helps students become more aware of online risks and improves their ability to protect themselves online. It also helps to create a safer and more positive digital environment in schools.

Digital Literacy Shapes Digital Citizenship

Digital literacy plays an important role in shaping digital citizenship. Digital citizenship is a concept that includes behaviours, rights, responsibilities, and norms that apply in the digital world (Putri & Setyowati, 2021). Digital literacy is the foundation for creating digital citizens who are aware of their actions in the online space and understand the consequences of their behaviour. Here is how digital literacy shapes digital citizenship:

1. **Understanding of Online Ethics:** Digital literacy helps individuals understand the ethics and values they should apply in communicating and interacting online. This includes respect for privacy, use of polite language, and avoidance of behaviour that harms others.
2. **Risk and Security Awareness:** Digital literacy helps people to become more aware of risks and threats in the digital world, such as cyberbullying, phishing and identity theft. This enables them to take appropriate security measures.
3. **Responsible Use of Technology:** Digital literacy involves understanding how to use technology responsibly. This includes using strong passwords, protecting personal data, and reporting illegal or harmful actions online.
4. **Positive Social Media Use:** Digital literacy assists individuals in using social media positively and building healthy online communities. This includes

participating in useful discussions and avoiding demeaning behaviour.

5. **Critical Appraisal of Information:** Digital literacy involves the ability to critically appraise information, identify fake news, and seek out reliable sources of information. This is important in an information age that is full of invalid information.
6. **Rights and Responsibilities in Information Sharing:** Digital literacy helps individuals understand their rights and responsibilities in sharing information and digital content. They should respect copyright and avoid privacy violations.
7. **Active Participation:** Digital literacy encourages active participation in the digital world, whether in terms of contributing positive content or participating in useful online projects.
8. **Good Online Co-operation and Communication:** Digital literacy helps in the development of effective communication skills in an online environment and encourages positive co-operation with others.
9. **Understanding of Digital Law:** Digital literacy includes an understanding of digital law, such as copyright, privacy rights, and the legal consequences of online actions.
10. **Respect for Diversity Online:** Digital literacy promotes respect for diversity of opinion and culture in the digital world. This involves respecting different points of view and avoiding online discrimination.

With strong digital literacy, individuals can become more aware, responsible and active digital citizens online. They will be better able to contribute positively, protect themselves, and promote healthy and productive digital communities.

Conclusion

The conclusion of this paper is that digital literacy has a crucial role in shaping digital citizenship in the school environment. At SMPN 4 Percut Sei Tuan, the implementation of Digital Citizenship Education is well done through several

approaches, namely digital skills, digital culture, digital ethics, and digital safety.

1. **Digital skills:** The school has adopted technologies such as WhatsApp, Google Classroom and G-Form to support online learning. This helps students develop the digital skills needed to communicate and learn online.
2. **Digital culture:** Schools endeavour to create a culture that promotes ethical understanding and practice in the use of digital technology. This involves teaching about how to communicate politely and respectfully in online environments.
3. **Digital ethics:** The implementation of digital ethics is done to teach students about responsible and thoughtful online behaviour. Students are taught to avoid harmful behaviours, such as cyberbullying, and to respect privacy and copyright.
4. **Digital safety:** Digital safety is an important focus, with education to students on how to protect themselves online and avoid the risks that exist in the digital world.

In addition, this paper also notes some barriers in the implementation of Digital Citizenship Education, such as students' lack of awareness, limited digital access and ineffective supervision. However, the school managed to overcome some of these barriers through training, supervision, and thoughtful policies.

In addition, digital literacy is clarified as an individual's ability to use technology wisely, understand online etiquette, and identify valid information. This has become more important during the COVID-19 pandemic, where learning is moving to online environments.

Finally, digital literacy is an important foundation in shaping digital citizenship, which includes an understanding of rights, responsibilities and ethics in the digital world. With strong digital literacy, individuals can become responsible, risk-aware digital citizens who can participate positively in online communities.

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