Development of the Citizenship Education Method in Fostering Digital Citizenship Through Information and Communication Technology in Schools

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Abstract

The presence of information technology generally has a fairly high positive impact on society. This can help facilitate various community activities. However, unfortunately, there is a lot of misuse of this technology, so as a result there is a need to learn the norms for using technology, especially among students. This research then aims to look at strategies for developing PKN methods so that they can foster digital citizenship by utilizing information and communication technology in schools. This research will be carried out using a qualitative approach. The population used in this research was class XI students at Rawamerta State Vocational School. The results of this research then found that increasing understanding of the concept of digital citizenship can be stimulated through the preparation of Citizenship Education materials that attract students' interest. The attraction of a topic will be an incentive for students to be more active in learning, especially when the material is integrated into the context of everyday life. Contextual digital citizenship material can be presented in the form of concrete experiences, making it easier for students to understand the learning content. Thus, the development of digital citizenship can be successful through this approach.

Keywords: *Digital Citizenship, ICT, Citizenship Education, Rawamerta State Vocational School.*

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A. INTRODUCTION

Information and communication technology is currently developing rapidly along with the discovery and development of science which of course influences the development of information and communication. The influence of information and communication technology can provide very diverse benefits in life in the current global era (Choi, 2020). With communication technology, you can send emails, news from social media, and letters quickly. Meanwhile, with advances in information technology, it is easy to access online (internet) with technology everything that is needed in everyday life, both in institutions such as schools and in the general public, has become close and easy (Mehraj et al., 2021).

Technology was created by humans to help facilitate all activities, but science and technology can have a bad impact if humans misuse it. The rise in misuse of technology has increased over the past few years in Indonesia (Choi et al., 2022). Deviations regarding misuse of technology such as in August 2014, Florence Sihombing, a UGM postgraduate student; insulted Yogyakarta via social media status

on Path, Florence Sihombing was reported by an NGO and charged with Article 27 of the ITE Law, in conjunction with Article 45 paragraph and detained with a sentence of 2 months in prison (Aditya & Al-Fatih, 2021).

Then in June 2016, Bagus Panji, a resident of Benelaran Lor, Kabet District, the perpetrator posted a status on social media insulting Islam and the Prophet Muhammad, because his lack of education encouraged the perpetrator to post an inappropriate status on social media. This caused Bagus Panji to be suspected and reported by PCNU and MUI Banyuwangi for violating Law no. 11 of 2008 concerning electronic information and transactions (ITE/) in Articles 28 and Article 45 in conjunction with Article 27, violates Article 156 of the Criminal Code. Several incidents above show the widespread misuse of technology. In 2016, data from the Ministry of Communication and Information stated that it blocked 773 thousand sites that were indicated to be fake news based on 10 groups, namely racism, religion, fraud, intellectual property rights, and elements of pornography. The government has a stance regarding the phenomenon of misuse of technology in several articles, including the Criminal Code, Law No. 11 of 2008 concerning electronic information and transactions (ITE/), and Law No. 40 of 2008 concerning the elimination of racial and ethnic discrimination (Walker-Roberts et al., 2020).

Several incidents above show that currently there is widespread misuse of technology which should help people meet their needs, but there has been a shift in its use. The majority of internet users in Indonesia are aged 13-34 years, which is half of the total internet usage in Indonesia, namely 54%, in 2017 which illustrates that internet users in Indonesia are those in the digital native category. The digital native generation mostly fills their lives with computers, and videos, and digital natives consider digital technology to be an inseparable part of life (Woodlock et al., 2020). In the opinion of Ku & Soulier, the character of digital navies refers to enjoying something that is completely online; likes something that is like working as a game; expecting an award; random access. The internet has different ways to facilitate individuals with the same information but different processes. The digital environment can build students' skills or abilities in the 21st century. Students are accustomed to using digital technology such as cellphones, iPads, game equipment such as Microsoft X-Box, and other digital technology (Burgess & Jones, 2023).

In the 2006 curriculum, there were information and communication technology lessons that only equipped students to be able to use them but did not equip them with norms when using them. With the 2013 curriculum changes, there was a change where information technology subjects were abolished. Therefore, it is necessary to have a subject that has a platform to instill norms in the use of technology in students because technology is developing rapidly and there is a revolution in the fields of technology and communication (Natarajan et al., 2021). The Citizenship Education Program as part of the educational curriculum has the function of developing abilities and forming character to make the nation smarter. According to Winaputra, citizenship education is truly multidimensional because it has 3 domains, namely the academic domain, curricular domain, and socio-cultural domain. The reality of the

conditions above confirms that the digital era brings us character education which is demonstrated in a digital lifestyle (Kabatiah et al., 2021).

Based on the brief explanation above, the researcher then intends to look at how to develop the PKN method to foster digital citizenship through the use of information and communication technology in schools.

B. LITERATURE REVIEW

1. Civic education

Humans are perfect creatures, humans have human potential within themselves, namely character that is formed by education. Humans need education in their lives. Education is one way to develop potential within oneself. Through the learning process. The main problem of education is how to develop all the basic abilities that one has to play a role both as an individual being and as a social being (Khaidir & Suud, 2020). Referring to SISDIKNAS Law no. 20 of 2003 is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, intelligence, noble morals, and the skills needed by themselves, the nation's community and the state (Andrei, 2023).

Besides that, John Dewey explained that "education is the process of forming fundamental intellectual and emotional skills towards nature and fellow humans". Meanwhile, J.J. Rousseau explained, "Education is giving us provisions that were not available in childhood, but which we need in adulthood". From several experts above, it can be concluded that the educational process can develop abilities and behavior that follow educational goals. By changing the student's behavior, the student's character can be formed (Estrada et al., 2021).

Citizenship Education is a subject whose task is to prepare the younger generation to become intelligent and good citizens. Citizenship education is a non-condition in Indonesian national education. The importance of Citizenship Education in Indonesia is one of the ways to realize the ability to "think globally, act locally, and be committed to the nation and state (Stein, 2021).

In this philosophical context, it must be understood that the objectives of citizenship education which are embedded in the objectives of national education reflect that the scientific objectives of citizenship education are clear, not as a vehicle for secular scientific development, but rather as a scientific vehicle which is prophetic/not secular (Missira, 2019). Lasmawan further stated that the characteristics of learning are caused by "citizenship education is the knowledge that can be transferred completely from the teacher's thinking to students so that conventional learning methods are still applied". Citizenship education attempts to equip students with basic knowledge and skills regarding citizenship and the state (Reicher et al., 2021).

The concept of digital citizenship emerged along with the rapid development of information and communication technology. In Mosssberger's opinion, digital citizenship is a concept related to efforts to build healthy and safe interaction

relationships in the internet environment by sustainably using digital technology (Al-Abdullatif & Gameil, 2020). Meanwhile, Young explained that digital citizenship is how a person behaves when using digital tools, including understanding how to surf the internet safely and communicate effectively using digital tools such as SMS to email to social networks (Yue et al., 2019).

In general, digital citizens have the knowledge and ability to operate information technology as a medium for communication, but there are still many people who are irresponsible digital citizens, ignoring the norms of politeness and the rules of etiquette in communicating. Teachers as educators in schools are expected to play a role in preparing students to achieve civilized digital citizenship (Choi & Park, 2023).

2. Information And Communication Technology

Entering the century of Technology and Communication (ICT) is needed, as humans develop, science and technology in all fields also develop. Information technology is the science needed to manage information so that the information can be searched easily and accurately. Information is said to be data that has been processed, usually, the data or information is in the form of writing, images, and so on (Szymkowiak et al., 2021).

Communication is a systematic process of exchanging information between parties, usually through a common symbol system. Scientific communication is the process of conveying messages or information from the sender to the recipient using certain symbols. From the definition above, it can be concluded that information and communication technology is the process of conveying information through data processing which involves sending and receiving information using certain symbols (Aririguzoh, 2022).

The role of ICT is very important in the world of education and is expected to improve the quality of education. Information technology is a technology that processes and produces information. Susanto's opinion is that information is the result of data processing, but not all results of processing can become information (Castro & Tumibay, 2021). Communication technology is a technology that supports the delivery, dissemination, or publication of information produced by information technology. Teachers as teaching staff must understand the importance of ICT in the current learning process. By using ICT, teachers can improve the quality of education in Indonesia, especially Civics teachers (Iqbal et al., 2022).

C. METHOD

This research was developed based on the Qualitative approach. According to Creswell, qualitative research focuses on the process that is occurring as well as the product or outcome. Researchers are particularly interested in understanding how things occur. The definition by Creswell above explains that qualitative research is focused on the processes that occur in the study. This indicates that qualitative research cannot be limited. In addition, researchers play an important role in the study

to understand social phenomena that occur during the research process. The population of this study is the 11th-grade class of SMK Negeri Rawamerta, classified as a vocational high school, based on the limitation of a sufficiently high NEM (National Exam Score).

D. RESULT AND DISCUSSION

1. Characteristics of Students in Using Information and Communication Technology

Based on the research results, it is known that 35 of the 67 students from Rawa Merta Vocational School already have computers or laptops. The frequency of use of computers or laptops by students at SMKN 1 Rawamerta is very high, especially in daily activities where most students use computers or laptops every day. The duration of time that students generally spend using a computer or laptop is around 1-2 hours.

During the process of using a computer or laptop, students tend to focus on certain applications. MS Word, Excel programs, and social media applications are students' main choices in their daily activities. Thus, the existence of computers or laptops has had a significant impact on the daily activities of SMKN 1 Rawamerta students.

The importance of these technological devices can be seen from the intensity of their use, which shows that students not only have access to the hardware but also actively utilize it for academic and social purposes. As technology develops, the use of computers and laptops is becoming more widespread among students, playing an important role in supporting their learning and social interactions (Habes et al., 2022).

2. Citizenship Education Model Through The Use Of Information And Communication Technology

One development model to form good digital citizens is through the preparation of teaching materials. The teaching materials provided by teachers to students are included in the 3rd core competency, which includes understanding, analysis, and conceptual and factual knowledge. Cultural aspects with humanitarian, national, and constitutional insights are the main focus in designing this teaching material, especially in competency 3.5 which is related to understanding the national legal and judicial system within the Unitary State of the Republic of Indonesia.

The steps in the citizenship education development model include several stages. First, a preliminary stage was carried out through a literature review, which is initial research to collect data related to students' digital citizenship conditions. The results of this literature review show that understanding of digital citizenship is still lacking, so concrete steps need to be taken to solve this problem. Furthermore, based on these findings, a draft was created as a solution that could be implemented to increase students' digital citizenship understanding and behavior.

Efforts to integrate digital citizenship in Citizenship Education are one form of effort to educate students to be able to behave following appropriate norms and be responsible in using technology. Thus, this development model not only provides

theoretical knowledge but also provides practical solutions that can be applied in the learning process. Targeted citizenship education can be a strong foundation for students to develop positive attitudes and behavior in using digital technology so that they can become responsible and intelligent digital citizens (Althibyani & Al-Zahrani, 2023).

3. Inhibiting Factors and Efforts to Build Digital Citizenship Through Information and Communication Technology

Citizenship education teachers face limitations in understanding digital citizenship materials, especially those related to copyright law. Observations of teachers show that their understanding of the provisions regulated in law, both regarding copyright and the law on information and electronic transactions, is still inadequate. This is a serious concern because copyright has been regulated in Indonesia since the Dutch colonial era and has undergone changes until now. A Pancasila and Citizenship Education (PPKN) teacher has the responsibility to continue to follow developments in changes in the Information and Electronic Transactions Law. In the context of digital citizenship education, teachers not only need to understand legal aspects in general but also must be able to apply this knowledge concretely in learning. Therefore, further efforts are needed to provide understanding and training to teachers so that they can meet the demands of changes occurring within the scope of the relevant laws.

Currently, SMKN 1 Rawamerta does not yet have a specific policy regarding digital citizenship within the school. In general, schools hope that students have adequate technological skills so they can compete with students from other schools. This is considered important because the close relationship between schools and technology can support the learning process. The use of the internet in schools has become one of the main sources of learning materials, and the presence of wifi in schools has become an integral part of the learning environment.

However, challenges arise when students are not only expected to have the ability to use technology but are also expected to use technology wisely. Even though there are regulations at school that prohibit students from carrying cell phones, in reality, there are still students who violate this rule. Some schools even enforce stricter rules, where cellphones must be kept in the teacher's room throughout school hours, and can only be taken by students after class ends. The purpose of this regulation is so that the use of cell phones does not interfere with the learning process.

Differences in regulations also appear when it comes to bringing laptops to school. Some schools allow students to bring laptops, especially if they are used for presentation purposes in group work. This policy indicates that the use of technology may be permitted in certain contexts and for specific learning purposes. Although there are still different approaches to managing the use of technology in schools, the importance of ensuring that technology is used effectively and does not interfere with the learning process remains the main focus (Alirezabeigi et al., 2020).

4. Digital Citizenship and the Role of PKN

Students have experienced learning about digital law regulated in the Information and Electronic Transactions Law. In this context, discipline is defined as habits or actions that must be carried out consistently with all forms of rules or regulations that apply at school. This includes students' understanding of the legal norms governing the use of information technology and electronic transactions. Apart from that, students also gain experience in learning digital ethics, which includes respect for the surrounding environment when using information and communication technology. This digital ethics involves students' positive behavior and attitudes in using technology, such as avoiding the spread of false information, respecting other people's privacy, and understanding the impact of their online actions. Therefore, learning about digital ethics does not only emphasize the legal aspects but also the moral values and behavior that every technology user should have.

Collaboration of digital citizenship materials in the citizenship education curriculum is an alternative preventive effort to deal with legal and ethical issues related to the increasingly rampant use of information and communication technology. In this context, Citizenship Education plays a crucial role in creating solutions to the problems faced by the nation. One of the tasks of educators is to prepare prospective Civics teachers to be able to face challenges in learning, where students can utilize information and communication technology in the school environment.

The importance of integrating digital citizenship material in the citizenship education curriculum is a manifestation of awareness of the huge impact caused by technological developments. This collaboration is not only preventive against legal or ethical violations but also aims to shape students into intelligent and responsible citizens in the use of technology. Thus, citizenship education does not only focus on theoretical aspects but is also oriented toward preparing students to face increasingly complex digital realities.

This approach emphasizes that the challenges for prospective Civics teachers are not limited to conventional knowledge, but also involve the ability to adapt student characteristics to technological developments. Teachers are required to understand and respond to students' needs in utilizing information and communication technology in schools. Therefore, the integration of digital citizenship material in the curriculum can be a solid foundation for ensuring that citizenship education makes a maximum contribution to the formation of quality digital citizens.

E. CONCLUSION

Characteristics of students in using information and communication technology: almost 75% have computers or laptops class X students in the computer network engineering skills program from 2 groups where each class has 33 students. The majority of students use a computer or laptop for approximately 1-3 hours, related to the program used by the majority of students, namely the MS Word program, 33%

and 42% use other programs. The majority of students do not take courses or training in operating computer programs. Based on the aim of accessing the internet, students access the internet to communicate with social media which can be accessed related to student assignments. The frequency of accessing social media is done every day by the majority of students as many as 67 students and to access social media more than 50% carry out online transactions, namely to buy goods and services. Rawamerta Vocational School students are digital citizens because they have the characteristics of digital natives because almost the majority of students access the internet every day, both social media and others. Almost 97% of students have never taken special training to be able to operate computer programs. Rawamerta Vocational School students have a character who is very active in using digital technology networks and can have skills in operating internet-based technology. The development of digital citizenship through the development of Citizenship Education teaching materials is supported by students' interest in the material, which will motivate students to further increase students' desire to be able to learn it, supported by contextual digital citizenship material that can be packaged in concrete experiences, to make it easier for students to understand the teaching material.

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