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KNOWLEDGE, EXPERIENCE, AND VALUES OF DIGITAL CITIZENSHIP IN THREE APPLE DISTINGUISHED SCHOOLS IN MALAYSIA

Muhamad Syukri Sulaiman*¹, Noor Banu Mahadir Naidu²,
Wibowo Heru Prasetyo³

¹ Department of Moral, Civics and Character Education, Faculty of Human Sciences, Sultan Idris Education University, Malaysia. Email: muhamadsyukrisulaiman@gmail.com

² Department of Moral, Civics and Character Education, Faculty of Human Sciences, Sultan Idris Education University, Malaysia. Email: noor.banu@fsk.upsi.edu.my

³ Department Civic Education, Faculty of Teacher Training and Education, Universitas Muhammadiyah Surakarta, Indonesia. Email: whp823@ums.ac.id

*Corresponding author

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Abstract

This study examines the extent of knowledge, experience, and values of digital citizenship among teachers and students at an Apple Distinguished School in Malaysia. A qualitative approach was used to complete this study, where two teachers and five students were selected for the interview process. Digital communication, digital ethics, and digital safety were the elements focused on in the study because all three are closely related to teachers and students in the school. The findings show that the respondents did not have a precise understanding of digital citizenship. However, the respondents demonstrated experience and values related to digital citizenship when using technology. The implications of this study provide information to schools and the Ministry of Education that digital citizenship is an important matter that should be incorporated into the school curriculum in line with the ongoing digitalization of education to produce responsible teachers, students, and communities in using technology.

Keywords: Digital Citizenship, Digital communication, Digital Etiquette, Digital Security

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Introduction

The use of technology among teenagers today is increasingly widespread. According to the Digital Report released by Hootsuite and We Are Social in 2018, 75% of the Malaysian population, out of 31.83 million, are active internet technology users (Malaysia, 2018). A study by the Malaysian Communications and Multimedia Commission (MCMC) found that internet usage among Malaysians in 2018 had increased by 10.5% compared to 2016 (Meeker & Wu, 2018). This study aims to explore the knowledge, experiences, and values of both teachers and students regarding digital citizenship.

Seven schools in Malaysia have been recognized as Apple Distinguished Schools (ADS) from 2017- 2019, demonstrating their commitment to leveraging educational technology, particularly through the use of iPad devices (Apple, n.d.). These schools include Maktab Rendah Sains MARA Taiping, Kolej Tunku Kurshiah, Sekolah Seri Puteri Cyberjaya, Garden International School Kuala Lumpur, HELP International School Subang Bestari, Nexus International School Malaysia Putrajaya, and The International School @ Park City Desa ParkCity. Their learning today is more focused on the use of technology (Jukes et al., 2010).

At these schools, teachers play a crucial role in integrating technology into their teaching. They are not only skilled in using iPads but also know how to utilize the applications available on them to enhance students' learning experiences. This includes designing and organizing innovative learning activities with the help of technology.

To earn the Apple Teacher recognition, each teacher at ADS must take a self-assessment test to evaluate their skills in using basic iPad applications. This recognition serves as evidence that the teachers are proficient in using technology and can effectively incorporate it into their teaching. This benefit both the teachers and the students, providing a more interactive and relevant learning experience in line with current technological advancements.

Problem Statement

A study by the International Telecommunication Union in 2013 showed that Malaysia recorded the fourth-highest number of digital citizens in the world, with almost 75% of the youth in Malaysia being digital citizens (Nahar et al., 2018). Furthermore, it was reported that, on average, children spend eight hours a day on social media technology, with 65% of them having a television in their own bedroom (Nahar et al., 2018). This phenomenon has impacted students' lives as many of their activities are influenced by technology. Modern technology, especially media, has a significant impact on students' education, behavior, and personality (Rosli et al., 2019). The study discusses how the attitudes and morals of today's youth are increasingly influenced by information technology-based software in line with the development of the modern world (Abdullah et al., 2009).

Research on digital citizenship in Malaysia is still not widespread. According to Mohamad Sahari (2015), Malaysia has conducted many studies related to the psychometrics of digital citizenship survey content, which focuses more on etiquette, responsibility, health and wellbeing, business, and security (Sahari, 2015). The researcher found that studies related to knowledge, skills, and values should be conducted with school students. The knowledge and skills of

technology and social media users can enhance awareness values, making them more sensitive to all the elements of digital citizenship introduced by Ribble. There is still a lack of research on digital citizenship, despite the increasing development of the internet and the involvement of online community members over time. Understanding of digital citizenship needs to be conveyed to all users, especially among students, as they use social media more frequently in their daily activities. Hazari and Brown (2013) found that the use of social media is one of the aspects considered in employee selection (Shane, 2016).

Method

The researcher aims to examine and study how technology can assist teachers in shaping good digital citizenship behavior in students at three Apple Distinguished Schools (ADS) that implement teaching and learning entirely through technology. The focus elements are how digital communication, digital safety, and digital etiquette are practiced among students in these schools. The researcher uses qualitative study in this research because of the alignment between the topic, the elements of digital citizenship, and the use of technology among teachers and students at the Apple Distinguished Schools. The choice of the qualitative approach is also because this method can explain the conditions that occur (Lebar, 2018). The researcher also agrees with Merriam and Tisdell (2016) that using a qualitative approach, even in a single aspect, can provide an insight into the social reality that takes place in society. This reflects the engaging and challenging nature of qualitative research. Choosing the appropriate methodology is a difficult and important task, as it will help the researcher achieve the study's objectives.

Definition

Digital Citizenship

Digital citizenship has various definitions that refer to technology users. Digital citizenship may be defined in a variety of ways (Ribble, 2015). It can also be defined as the appropriate rules and responsible attitudes towards using technology correctly (Kingsmill, 2018).

According to Gereluk (2017), digital citizenship denotes suitable and accountable conduct in cyberspace (A1f & Chou, 2018). Meanwhile, according to Ohler (2010), digital citizenship is behaving appropriately and responsibly within the social context of the virtual world (Kingsmill, 2018). Gibbs (2010) states that it is a citizenry of engagement and membership accompanied by ethical, moral, and legal obligations (Kingsmill, 2018).

The concept of citizenship is generally viewed from the social, legal, political, and geographical aspects. According to Abowitz & Harnish (2006), the idea of citizenship is not a natural concept but is created based on economic, political, and social changes (Mahadir Naidu Noor Banu, 2017). Digital citizenship refers to digital residents who have used technology (Isman Aytekin & Canan Gungoren Ozlem, 2014).

From the definitions presented, digital citizenship can be understood as the norm of appropriate, responsible behavior with regard to technology use (Ribble, 2015), or the ability of an individual to use technology safely, responsibly, productively, and with full awareness.

The elements used in digital citizenship are derived from the description of the Ribble & Bailey (2007) model and were updated by Ribble (2011).

Digital Communication

Digital communication refers to the change in communication using electronic means (M. Ribble, 2015c). Digital communication has created a new social environment in the digital society. The focus of digital communication is on understanding the proper and polite ways to interact. The development of digital communication has transformed the daily activities of the digital community because they can connect in any situation, as the foundation of electronic communication is to deliver information quickly and efficiently. The responsible use of communication on social media allows the younger generation to exchange information through image posts and share perspectives (Pepler & Solomou, 2011). However, users are not taught how to make wise and accurate decisions when faced with various choices in digital communication.

Digital Ethics

Ethics are principles and beliefs that involve character and morality (*Dewan Bahasa Dan Pustaka*, n.d.). Digital ethics refers to the ethics of using or managing technology (M. Ribble, 2015). This element shows how digital users use and manage technology. Digital ethics involves being aware of and respecting other digital users, whether individuals or groups. The purpose of digital etiquette is to maintain the feelings and comfort of other users (Aslamiah, 2015). Students in school will observe how others use technology and assume that if others can use it in that way. According to Waters (2012), teaching students about plagiarism, copyright, and privacy are among the issues that need to be focused on in digital ethics (Holland, 2017).

Digital Security

Digital security is an electronic precautionary measure to ensure safety (M. Ribble, 2015). Digital security focuses on how to protect one's own data and that of others, as well as ensuring the safety of the internet connection being used. All users need to know and understand that protecting personal data is not just an individual responsibility, but also a part of ensuring public safety is maintained.

Results

Digital Communication

Based on the interviews, the researcher found that the respondents among the teachers did not have a clear understanding of the definition of digital communication. In fact, respondent teacher two had never even heard of digital communication.

“Apa tu. Pernah dengar tapi tak ambil berat sangatkan. Komunikasi biasa tahulah”.

(Respondent Teacher Two)

Translated by researcher

However, they are aware of the use of digital communication platforms such as WhatsApp, Telegram, and email. They also frequently use WhatsApp and Telegram to convey information. Respondent teacher one prefers to use WhatsApp as the main communication medium. This is because WhatsApp is easier to manage, and the environment around the respondent sees many people using WhatsApp. Meanwhile, respondent teacher two chooses telegram as their digital communication medium because students at school use telegram. In addition to being easy to manage via an iPad, Telegram can also gather a large number of users at once, making it easier for discussions between teachers and students.

“Whatsapp. Kenapa ye. Sebab dia mudah kot. Whatsapp dia lebih lama dari telegram, dan dia lebih simple, lebih mudah, dan rasa dia tak complicated sangat. Cuma telegram ni dia lebih menarik sekarang. Boleh buat group yang ramai dengan pelajar jadi lebih mudah untuk berbincang. Kemudian boleh hantar video dengan lebih mudah berbanding whatsapp sebab whatsapp kalau video ada had. Kemudian telegram ni boleh buat video directkan. So nak buat kelas senang”.

(Respondent Teacher One)

“Sebab dekat sekolah budak dah daftar dengan telegram. Budak kata diorang kalau ada handphone, diorang guna whatapps, sebab dekat maktab kita tiada handphone tu, so diorang ada ipad, so diorang prefer telegram lah. Telegram bagi akak mudah sebenarnya, boleh masuk ramai, takde limit kan telegram kan. Nak bagi bahan ke video ke boleh dekat telegram. Sampai hari ni pun guna telegram jugak”.

(Respondent Teacher Two)

The student respondents are not aware of digital communication. They have never been informed or taught about digital communication despite using it frequently.

“Saya tahu sikit-sikit je. Dia macam cara kita share sesuatu tentang apa-apa di sosial media, insta, dan semua-semua tu. Apa yang kita kongsi kanlah”.

(Respondent Student Three)

“Saya tak pernah dengar sangat. Maybe berkaitan cara kita bercakap dengan orang semua tu kot”.

(Respondent Student Four)

The knowledge of digital communication among teachers and students does not align with their digital communication skills. The researcher found that the understanding of digital communication among both teachers and students is very limited. This issue needs to be addressed so that students are aware of and understand the actions they take when conveying messages, emails, or other forms of communication in the digital space. Digital communication is crucial because it is the primary medium for conveying information today.

Digital Etiquette

Based on the interview conducted with respondent teacher one, they do not know and have never heard of digital ethics. The same applies to the student respondents. They have never been informed about digital ethics, and it has never been taught at school, either.

“Alaaa. Apa tu. Tak pernah dengar. Tak tahu pun pasal etika digital”.

(Respondent Teacher One)

“Erm tak. Kalau etika biasa pernahlah. Etika takaful ke.

(Respondent Student Five)

“Tak pernah. Apa tu ustaz”.

“Seingat saya tak pernah ustaz. Tak tahulah kalau ada sebab saya tak tahu pasal tu”.

(Respondent Student Three)

“Tak”.

“Saya tak tahu dan saya rasa kat sekolah cikgu tak pernah cakap pun pasal tu”.

(Respondent Student Four)

Teaching digital ethics to students can help reduce misconduct in the use of technology. It also can foster a more responsible and positive community in the use of technology. School only enforces laws and regulations to control the use of iPads among students. These laws and regulations can be enforced after education has been provided. Teaching digital ethics to students can help reduce misconduct in the use of technology. It can also help form a more responsible and positive community in the use of technology. When students are not taught or informed about digital ethics, issues such as losing an iPad due to their carelessness are bound to occur. Respondent student three acknowledged that cases of carelessness leading to the loss of iPads have occurred at the school.

“Ada. Memang ada. Tapi itu pun atas kecuaiian jugalah. Bila letak iPad tu dekat tempat yang salah, pak guard akan ambil. Tapi pak guard akan pulangkan dekat guru HEM. Ada sekali itu kawan saya tertinggal dekat makmal, jadi cikgu pembantu makmal itu yang ambil dan simpan tak buat apa-apa pun. Dia bagi pada cikgu tu sendiri”.

(Respondent Student Three)

Respondent teacher two mentions that as a teacher, they need to set a good example for students. This is very important because what teachers do will be followed by students. Respondent teacher two does not answer calls while teaching in the classroom. She will ask for permission from the students first before answering a call. Based on the statements from respondent teacher one and two, it shows that they possess good ethical values and skills in using technology in the classroom.

“Haaa. Okay. Tu kadang-kadang memang ada. Memang selalu pun kan. Kenkadang mak ayah semua call, semua-semualah. Kenkadang kawan pun, ketua jabatan semua, benda apa nak cepatkan. Akak biar dululah. Kalau urgent, selalunya kalau urgent dia akan call berkali-kali. Haa, so baru akak angkat. Bagitahu kat budak cikgu minta maaf kejap ye cikgu nak kena angkat sebab ada *emergency call*. Cikgu kena angkat *call* sekejap. Duduklah luar kelas kejap, tepi koridor ke belakang ke, lepastu baru cakap. Haaa macam tulah”.

(Respondent Teacher Two)

Digital Security

Digital safety refers to the policies and procedures users should follow when using technology and the internet to prevent negative impacts on their lives (Gail Walters et al., 2019). According

to Nor Aslamiah (2015), the digital world installs antivirus, firewalls, backups and protects sensitive data such as usernames, passwords, credit card numbers, and so on which need to be instilled in digital technology users. According to Ribble (2011), digital safety refers to electronic precautions taken to ensure security.

The knowledge of respondents' teachers one and two regarding digital safety is very limited. The respondents are unaware of what is meant by digital safety. Furthermore, the respondents also have an inaccurate interpretation of digital safety.

“Tak tahu. Dia berkaitan keselamatan peranti kita ke?”

(Respondent Teacher Two)

Sharing security passwords can lead to cybercrimes. This behavior needs to be reassessed, as sharing passwords with anyone always carries a risk. The concept of trust is broader than security (Supriya et al., 2007). Those who share important information such as phone passwords, Wi-Fi passwords, ATM cards, and so on with others do so because they place high trust in them. However, excessive trust can be harmful if left unchecked. This attitude can trap individuals when crimes occur in the digital world.

“Setakat ini yang tahu beberapa orang kawan baik saya”.

“Tak, sebab saya percaya mereka. Mereka memang selalu dengan saya”.

(Respondent Student Three)

“kalau *family* saya semua tahu sebab semua tahu saya tiada *boyfriend* saya tiada macam privasi, tiada benda yang saya perlu sembunyikan daripada keluarga saya. bagitahu sahajalah apa *password*. Dia bukan boleh buat apa pun pada iPad saya ni”.

(Respondent Student Four)

“Untuk *siblings* saya, empat orang kami memang bagitahu *password* dengan *passcode* untuk empat orang ini, maksudnya iPad saya *password* dia dengan *phone* saya *sync*, sama *and then my brothers* semua tahu *password* itu, so mereka boleh akses *anytime but they have to inform me* yang mereka akan guna *my device*. *Same goes to me* yang saya tahu mereka punya *password and* saya kena *inform* mereka kalau saya nak guna. So kalau saya nak cakap, empat orang yang tahu saya punya *password*, saya dan tiga orang abang atas saya”

(Respondent Student Five)

Discussion

Based on the researcher's observation, the use of iPads among teachers is at a good level. Teachers use the iPad for writing, sketching, or displaying digital textbooks. This usage is similar to that of regular users of iPads, even though the teachers are teaching at an Apple Distinguished School. The teachers do not make careful plans to integrate the use of iPads into the classroom during teaching and learning sessions. However, the researcher found that respondent teachers one and two frequently remind students not to misuse the iPads at the end of the lesson. This act indirectly informs and reminds students to be responsible when using iPads, even when using them individually.

The researcher found that students prefer to play video games and browse social media on the iPad when they have free time. They play video games during break time and when the teacher is not in the classroom. Based on the researcher's observation, this happens because teachers do not provide tasks that students need to complete using the iPad. As a result, students use the iPad solely for entertainment purposes. Students only use the iPad when there is a task that needs to be completed.

Conclusion

In conclusion, to meet the requirements of being a digital citizen, an individual must have knowledge, skills, and good values when using the internet on computers, mobile phones, or other information technology devices. Digital citizenship is a necessary skill for prospective teachers, particularly considering the growing demand for schools to develop character education programs that address the topic of student technology use (Wibawo Heru Prasetyo et al., 2024). However, a question arises that will be the focus of this study: Can users, particularly teachers and students in schools using digital technology today be classified as good digital citizens? If issues such as digital abuse, spreading fake news, cyberbullying, and others still occur, it is clear that effective digital citizenship has not yet been achieved. Therefore, a study focusing on teachers and students in Apple Distinguished Schools needs to be conducted to assess how positive and responsible digital citizenship has been applied among them.

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