

Development of Digital Citizenship Model Based on Digital Literacy of Students in High School During the Covid-9 Pandemic in Bandung Indonesia

Endang Danial^{1,*}, Susan Fitriani², Dede Iswandi³, Thoriq Abdul Azis⁴, Hesty Khoirusnaini⁵

^{1,2,3,4,5} Universitas Pendidikan Indonesia, Bandung, Indonesia

*Corresponding author. Email: endangdanial@upi.edu

ABSTRACT

The dependence of students learning with digital technology media is strong to access various information, both at school and at home, alone or with friends. Students are young citizens who strategically determine their nation in the future. Their digital literacy degree is highly requested to access, process and communicate information, as well as a learning process with teachers, friends at school or parents at home. The problem is how the utilization of digital literacy is contribute to the level of citizenship awareness of students during the covid-19 pandemic. The researchers used the action research method as an effort to help civic education learning in schools. The research finding reveal the development of digital learning is highly dependent on the ability of teachers and students to master digital. The higher the mastery of digital technology, is good is in accessing, processing and using digital information for teachers and students citizen awareness in learning.

Keywords; *Digital Citizenship, Digital Literacy, Citizen Awareness*

1. INTRODUCTION

More than a year, the Covid -19 pandemic outbreak experienced by the world has seen impacts on socio-economics, politics, habits, including the education of children in schools. Children and adolescents on the sidelines of health threats that have not shown any symptoms to subside. Report from journalists in various regions shows symptoms of the negative impact of excessive use of gadgets, which overwhelms people and teachers [1]. Children study at home (students of SD / Mi, SMP / Mts, SMA / SMK / Ma) using learning applications; zoom meeting, google classroom, whatsapp, etc. All over the world, students have studied at home for a year to communicate with their teachers. They study with their parents, or with friends, alone or in groups. Cell phones, computers, other gadgets were originally used as a vehicle for learning, gradually turned into devices that cannot be separated from the lives of some children and adolescents. Addiction to online games, games on line, tiktok, giving its own fun sometimes forgetting all activities and caring for the surroundings. There are a number of creativity of children and adolescents with this technology, children are increasingly proficient and skilled at operating,

completing various tasks quickly, helping parents pay taxes, electricity, and shopping on-line and others. The existence of this technology is for adolescents in addition to being diligent in doing study assignments with their teachers, as well as a medium for freedom of expression, sound art, making music videos, and short films. This media is very free for a teenager, sometimes used as an arena to invite, provoke, bullying, hate speech among them, whether for fun, or on purpose. Unfortunately, often the identity of the sender can be hidden, and difficult to trace except by certain experts. Therefore, this study proposes a solution to assist teachers in fostering creative citizen awareness of students to become smart citizens (smart & good citizenship) through the digital citizenship model. Because this model is assumed according to experts to develop citizen awareness. According to Unesco's [2] digital literacy global digital framework means that a person's ability to access manage, understand, integrate, communicate, evaluate and create information safely and precisely through digital technology for learning, completing work, etc. OECD suggests in covid-19 era [3]. More attention has been given to ensuring the continuity of academic learning than to the socio

emotional development of students, and there is agreement that not all student have been able to engage consistently with their education as provided under these emergency strategies.

The digital citizenship model helps students as young citizens to make optimal use of their computers and smartphones. So as not to provide opportunities for things that are not important or redundant. [4] mention that ..digital citizenship can be described as the norm of appropriate, responsible behavior with regard to technology use, abuse, and misuse, we have identified nine elements that together make up digital citizenship.[4]

1. Digital access; full electronic participation in society
2. Digital commerce; the buying and selling of goods online
3. Digital communication; the electronic exchange of information
4. Digital literacy; the capability to use digital technology and knowing when and how to use it
5. Digital etiquette; the standards of conduct expected by other digital technology users
6. Digital law; the legal rights and and restrictions governing technology use
7. Digital Rights and responsibilities; the privileges and freedoms extended to all digital technology users, and the behavioral expectations that come with them
8. Digital Health and wellness; the elements of physical and psychological well-being related to digital technology use
9. Digital Security; the precautions that all technology users must take to guarantee their personal safety and the security of their network

2. METHODS

The research is action research method development of digital citizenship based on digital literacy of students in high school during the covid-19 pandemic in Bandung Indonesia. Begin with research and evaluation of the digital abilities of teachers and students in schools in their learning process. The objects are learning civics in schools, especially regarding knowledge, attitudes, and communication skills with friends, parents, teachers, community members, and the state. such as accessing, processing, and communicating properly, ethically and social responsibly. The respondents of this study were purposive, namely 20 high school teachers and 200 high school students (Bandung City, Bandung Regency and West Bandung). After knowing the description of the respondent's digital learning ability, the digital citizenship model was tried to help their awareness in entering a new era of life. The trials were carried out in two schools, one in Kota and one in the Bandung district. After the trial was carried out, it was evaluated and revised jointly by researchers, experts and teachers. Based on version of the plan in McNiff et al.2003 [5]

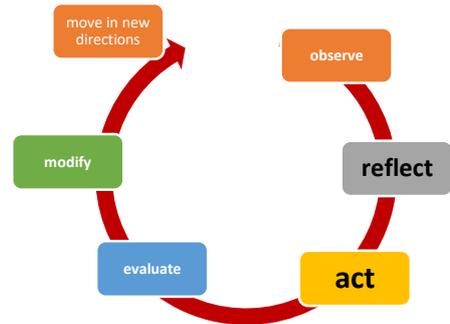


Figure. 1 Action-Reflection Cycle

Action research aim to be a disciplined, systematic process. A notional action plan is ;

- 1) Take stock of what is going on
- 2) Identify a concern
- 3) Think of a possible way forward
- 4) Try it out
- 5) Monitor the action by gathering data to show what is happening
- 6) Evaluate progress by establishing procedures for making judgements about what is happening [6]

3. RESULTS AND DISCUSSION

The results showed that high school teachers in Bandung have used digital electronic devices in their daily lives to communicate with students, family, friends and the community, both at work and in their daily interactions. For the continuity of civic education (CE) during the pandemic, teachers mostly used google classroom

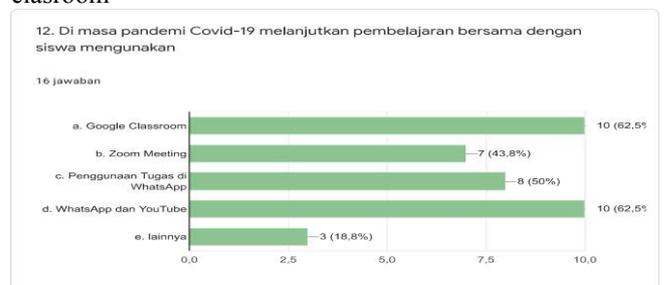


Figure. 2 Digital Media

(60,25%) Whatsapp and youtube (62,53) Zoom meeting (43%), and giving assignments (50%) learning evaluation was carried out online. Likewise,



Figure. 3 Media Social

communication with parents of students is done online WhatsApp (87,60%) and another (31,3%). CE teacher learning resources to enrich the sought-after materials of jurnal,article and youtube (100%) book (50%) e-book (25%)



Figure. 4 Information Source

When teachers communicate with other teachers with good ethics such as responding to negative things, they behave that; correcting and checking not posting (75%) and let alone (25%). When a friend taunts and insults on social media the CE teacher argues... let (62.6%) correcting (37.6%), checking (15.6%) and reply (6.3%)

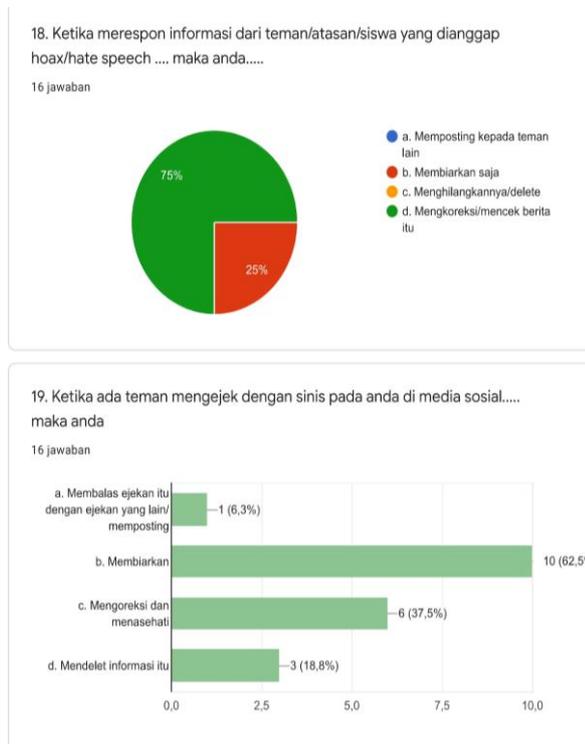
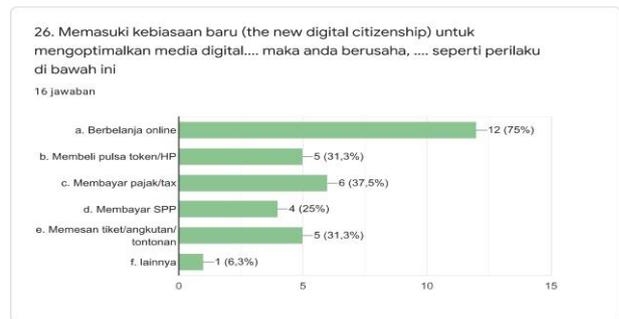


Figure. 5 Behaviour Scale

When entering the digital society the behavior that teachers do everyday like as below;



lainnya (silahkan tulis)
1 jawaban
menjaga protokoler kesehatan

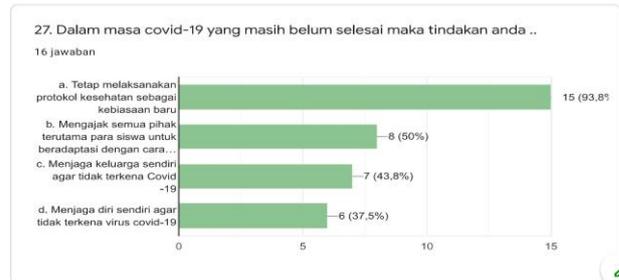


Figure. 6 Behaviour Scale

online shopping (75%) pay taxes (37,6%)/electricity 31,3%),ticketing (31,3%) school fees (25%). The actions of teachers during the covid-19 pandemic include implement health protocols 93,85%), invite all parties to adapt to new habits (50%), take care of their own families 43,8%), and take care of themselves (37,5%).

Student communication tools are owned, handphone (98,3%) laptop/personal computer(23,1%) and landline (2,5%).

when students receive information from family, school, teachers, friends, ordinary relatives

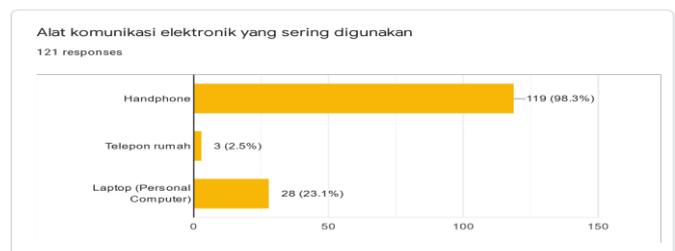


Figure. 7 Students Communication Tools

using WhatsApp (100%) instgram(10,7%) telegram (7,4%) facebook (2,5%)

When students have conversations the application used is WhatsApp (98,3%)instgram(26,4%) telegram (11,6%)facebook(8,3%) SMS (4,1%) and expresses their own feelings of appreciation freely ; instgram (76,5%)twitter (14,9%) facebook(11,6%) other (38%).

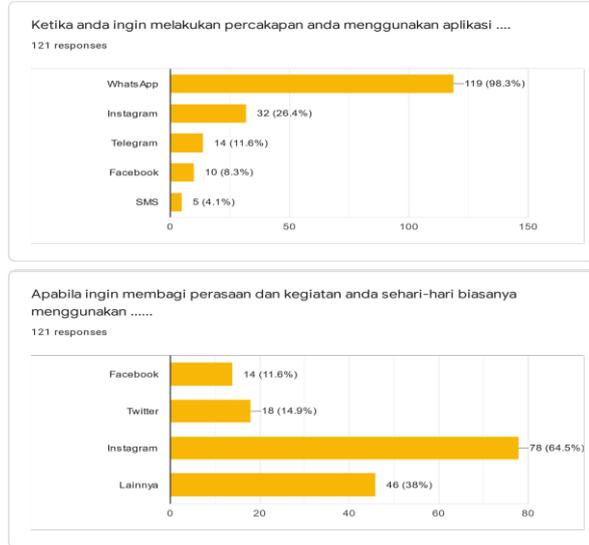


Figure. 8 Students Communication Tools

When the pandemic period of learning interaction with teachers is done through WhatsApp (69,4%) Zoom Meeting(52,9%) other; google meeting, goolge classroom youtube, facebook (50,4%)

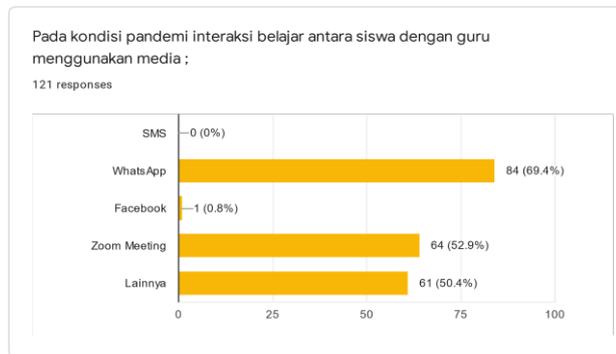


Figure. 9 Learning Interaction with Teacher

When students complete an assignment and report it they use the media as below;

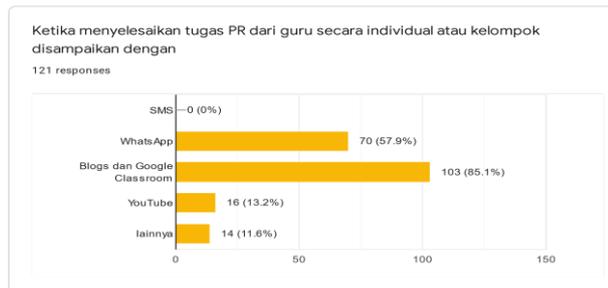


Figure. 10 Learning Interaction Teacher

Blogs and google classroom (85,1%) WhattsApp (57,9%) youtube (13,2%) others (11,6%) SMS, facebook, photo.

The resources to help students learn are;



Figure. 11 Students Learn Source

Youtube (75,2%)wikipedia (61,2%) blogs (36,4%)jurnal (16,5%) e-books(16,5%) and other (26,4%) books, newspaper, magezine. The social media is often used to express opinions, ideas and feelings freely and other as below

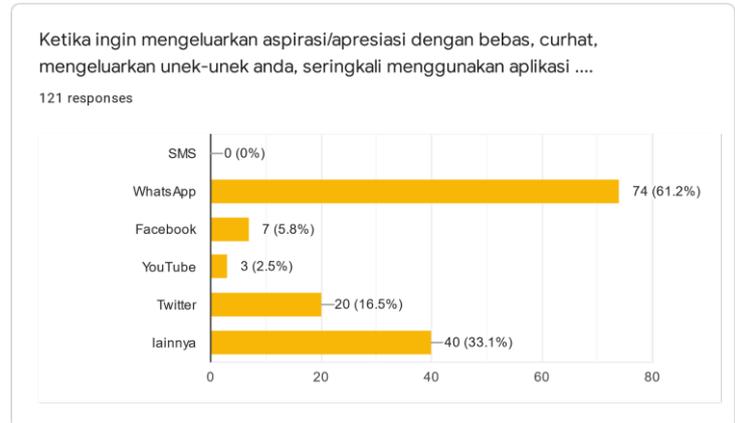


Figure. 12 Media Social

WhattsApp (61,2%) twitter (16,5%) facebook(5,8%) youtube(2,5%) and others ; googlebrainly, googlechroom (33,1%).

Students' attitudes toward specific invitations and information look like this.

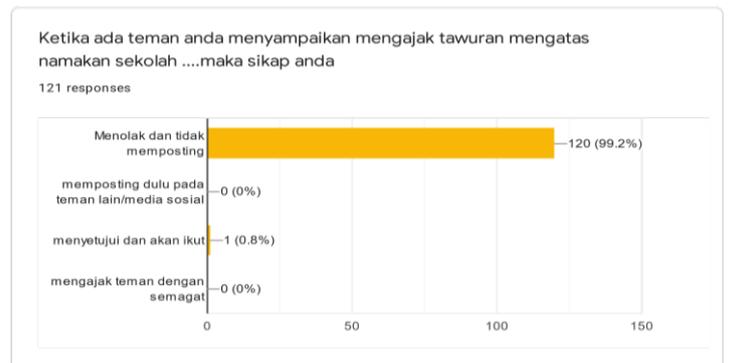


Figure. 13 Students Attitude

Refused and did not post (99,2%), although there was a small minority who were provoked. When there is negative information about the school, their respond check the news (87,6%), do not believe(11,6%, let (5%) and refuse (9,9%)

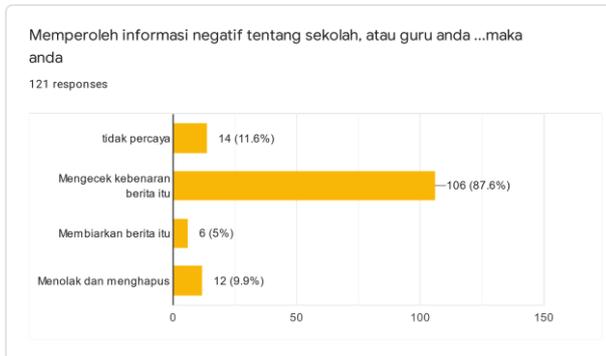


Figure. 14 Students Opinion

Students' opinions when entering the new digital citizenship behavior done like this as below ; communication and collaboration online (76%) shopping online (51%) help to parent tax payment/electricity (30,6%) game online 26,4%) and others; competition online, ruang guru learning online, ticketing.

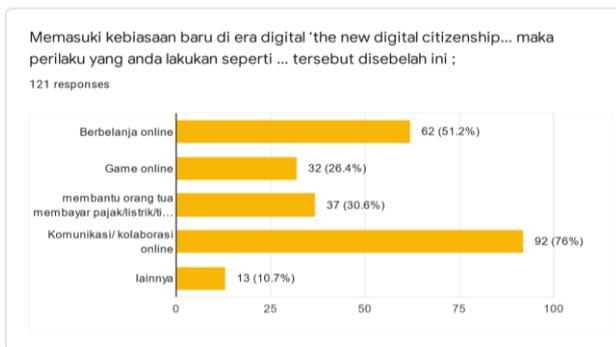


Figure. 15 Students Opinion about Digital Literacy

Based on the opinion of teachers and students in Bandung shows digital literacy that is sufficient for the sustainability of their teaching and learning. Nevertheless, it needs to be improved again, especially facing the new era of digital citizenship. Furthermore, the research team discussed with teachers to raise awareness of teachers and students, especially addressing various issues nasional, regional and global. Violence, discrimination, trafficking, human rights, security, security and legal certainty. The digital citizenship model is welcomed, as they ask questions, and provide opinions to align with the conditions of digital communication facilities in schools and at home. Reflect.. based on the results of the agreement with teachers submitted solutions to overcome the problem of

hoaxes, bullying, heat speech, with a digital citizenship model. Especially with regard to ethics, maintaining values, tolerance and social responsibility in communicating. This model provides alternatives in enlightenment and provision for teachers and students, in communicating, especially ethics, norms, guarantees and legal certainty. Trials were conducted in high school cities and districts of Bandung, and the results showed significant correlation between digital literasi with the development of citizen awareness, especially in communicating, ethical, the development of rights and responsibilities, as well as legal certainty. Student communication tools are owned, when students receive information from family, school teachers, friends, ordinary relatives using ...more, it was developed implicitly in every subject of PPKn (civic education) learning materials in schools. More interesting, interactive, values-based learning interaction process, problem solving, cases, so that children have high learning motivation to respond to the new digital citizenship era. So it can be applied not only in school but in the life of the nation and society in daily life.

4. CONCLUSION

Entering a new life after the Covid 19 pandemic requires a more prudent and responsible order. Based on the result of try-out the *digital citizenship model* is welcomed strategic learning vehicle for PPKn teachers and students is to develop value learning, norms that can help and ensure the legal certainty of all citizens. The certainty of rules and norms ensures the establishment of good digital communication awareness not only in schools but in a new life of national and state cooperation. The presence of relevant institutions and governments to guarantee a sense of security, and democracy for all so that the awareness of citizens will be well maintained.

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