

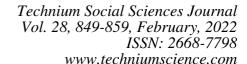
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The Importance of Digital Literacy for Society 5.0: A Phenomenological Approach

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Abstract. Every individual needs to understand that digital literacy is an important thing needed to be able to participate in today's modern world. Digital literacy is as important as reading, writing, arithmetic, and other disciplines. Everyone should be responsible for how to use technology to interact with the surrounding environment. This research is intended to answer the question of how Indonesian people understand the importance of digital literacy and what kinds of efforts must be taken to improve the digital literacy of the Indonesian people. Data collection was carried out by unstructured interviews with 21 informants consisting of secondary school students, college students, employees, housewives, and IT expert. The results of this study prove that from the 4 pillars of digital literacy, namely digital skills, digital culture, digital ethics and digital safety, there are two factors that really need to be improved by Indonesian people today, namely digital ethics and digital safety. Some efforts are needed to be implemented by involving relevant stakeholders in education, community organisations, government institutions as well as private sectors, not only in the form of socialisation but also other educational activities such as seminars and FGDs.

Keywords. Digital literacy, society 5.0, four pillars

Introduction

The digital transformation process in Indonesia is faster than previously planned due to the Covid-19 pandemic. But unfortunately, this is not balanced with public literacy. Low digital literacy also causes Indonesia's current digital competitiveness to be low which ultimately leads to vulnerability to digital problems such as hate speech, radicalism, cyber bullying, the spread of hoaxes, and pornographic content that is increasingly accessible in cyberspace.¹

In 2020, the number of internet users in Indonesia has reached 196.7 million, which is an increase of around 25.5 million (8.9%) from the previous year, the main reason being the Work From Home (WFH) policy during the pandemic. Covid-19. The development of the internet is a manifestation of the rise of digital literacy, namely the application of communication to access, process and convey information with technological devices.² The development of the internet is a manifestation of the rise of digital literacy, namely the application of communication to access, process and convey information with technological

¹ https://selular.id/2021/10/rendahnya-literasi-pengaruhi-pemanfaatan-ekonomi-digital-indonesia/

² https://www.republika.co.id/berita/qz46b1456/literasi-digital-dinilai-kian-penting-saat-ini



devices.³ Literacy itself is not only defined as skills in reading, writing, arithmetic, but also includes other disciplines. In the digital era, people's ability to think critically is highly demanded so that they can be more careful in filtering various incoming information whether it is a hoax or not. Meanwhile, the wider community, also known as 'internet citizens' or which is more familiar called 'netizen', still captures information circulating raw. This shows that the Indonesian people are still very low in their ability to communicate digitally.⁴

The low literacy culture of the Indonesian people is also evidenced by the results of a survey from the 2018 Program for International Student Assessment (PISA) which states that Indonesia is in the 10th lowest position in terms of literacy skills.⁵ There are many factors behind it, among others, because using digital will be influenced by the ability to read, write, analyse, process and distribute written messages. In addition, people's low digital literacy skills are also caused by a lack of education to think critically from an early age.

Although since 2016, the Indonesian government in this case the Ministry of Education and Culture has issued Regulation of the Minister of Education and Culture Number 3 of 2016 concerning the implementation of Information and Communication Technology learning, this is considered to be more focused on matters related to education in operating technology devices rather than educating the public to analyse and process information.

Data obtained from the results of the Microsoft Digital Civility Index 2021 survey which was only published in February stated that Indonesian people were considered the most disrespectful in Southeast Asia. The information and data released by this international organisation certainly makes us very sad. The factors causing it are suspected to be problems related to hoaxes and fraud which all lead to criminal acts. The survey reflects the bad behaviour of Indonesian people on the internet which shows the low level of digital literacy. Indonesians are generally more courageous and aggressive in cyberspace than in the real world, and feel free to express their feelings in cyberspace whereas when they are communicating in cyberspace, this is no different from communicating face-to-face directly where everyone still has to respect each other and pay attention to universal ethics and manners. (1) How Indonesian people understand the importance of digital literacy and (2) What kinds of efforts must be taken to improve the digital literacy of the Indonesian people.

Based on the problems as mentioned above, the research is aimed at answering the questions: The results of this study will make a major contribution to the government and interested stakeholders to immediately conduct education related to digital literacy to the wider community. In addition, the results of this study will also provide benefits for observers of digital communication issues in particular and the wider community in general.

Literature Review

Definition of Society 5.0

Society 5.0 came from Japanese civilization in early January 2019, which was presented at the 2019 World Economic Forum in Davos, Switzerland. Revolution 4.0 is the basis for the emergence of Society 5.0 where people must live in a balance between technological progress and human awakening so that a balance will be achieved between economic progress and solving social problems through a system that is very connected through

³ https://www.detik.com/edu/detikpedia/d-5822740/apa-itu-literasi-digital-ini-penjelasan-serta-manfaatnya

⁴ https://www.kompasiana.com/ighfirrijal/614b060d4f2b0609e06c6cc2/ekuivalensi-literasi-digital-dengan-perilaku-masyarakat-di-era-society-5-0

⁵ https://respons.id/budaya-literasi-digital-di-indonesia-masih-rendah-inilah-penyebabnya/



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the virtual world and the real world. Prime Minister of Japan, Shinzo Abe at the World Economic Forum (WEF) explained that in the era of Society 5.0, what is needed is no longer a problem, but data that will later become a liaison and mover of all lines of activity.

Fukuyama (2019) stated that the Society 5.0 concept was designed to realize one of the 17 Sustainable Development Goals, namely Communication or Media Technology. Such is the importance of the media's role in establishing agenda setting related to SDG's issues and being the main tool in educating the public and also providing space for public discussion (Irwansyah 2018). In the SDGs concept it is stated that inclusivity must be owned by the media in order to realize equality for the community in accessing information (UNESCO 2019).

In building the Society 5.0 ecosystem, the digital content industry has a very important role. The economic aspect must be developed by the industrial sector, including in the digital content industry that is relevant to the concept of Society 5.0 which states that the use of technology must be able to have a positive impact on human life. The industrial sector is required to continue to innovate in order to balance it with advances in information technology or digitalization (Fukuyama, 2018). Creativity is also needed by content creators to create innovation (Preston, Kerr, and Cawley 2009). In addition, the digital content industry needs to be supported by national policies based on an innovation system (Holroyd 2019).

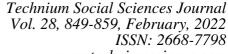
Definition of Digital Literacy

The term digital literacy was first proposed by Paul Gilster (1997) which means a person's ability to understand and use information from various sources (Kemendikbud, 2017: 7). What is meant by understanding literacy is not only a matter of reading or writing, but is much more complex than that, which includes various things and is known as multiliteracy. Law No. 3 of 2017 concerning the Literacy Book System states the notion of literacy as the ability to interpret information critically so that everyone can access science and technology as an effort to improve their quality of life (Kemendikbud, 2017: 7).

A country's economy will improve through the development of the digital content industry (Holroyd, 2019). In order to continue to develop on an international scale, the digital content industry must be integrated into the national innovation system, so that each country can market the products it sells without being hindered by national boundaries. The Society 5.0 concept is also supported by various technologies, such as Artificial Intelligence (AI) (Ksose and Sert 2016). From the arguments described above, we can see that a digital content industry ecosystem must be a priority because it will encourage economic growth in the midst of Society 5.0.

According to Jung (2007) the digital content industry ecosystem is built on three components, namely production, distribution and consumption. However, Pereira, Lima, and Charrua-santos (2020) expressed another opinion, namely the need to review these three components considering that the industry's business model has also changed due to the development of digital technology. This will allow collaboration because the three components can be run by everyone (Earnshaw, 2017). This illustrates that in the era of Society 5.0, cyberspace has become an inseparable element (Fukuyama, 2018).

Digital literacy must be owned by every individual in order to participate in the modern world (Sutrisna, 2020). According to Harvey J. Graff (2006), literacy is an ability in a person to write and read whose benefits can be felt by everyone, namely: (a). Adding "vocabulary". (b). Optimizing brain performance. (c). Broadening your horizons by getting new information. (d). Improving interpersonal communication skills. (e). Understanding an information will increase. (f). Improving verbal communication. (g). Increasing analytical and thinking skills.





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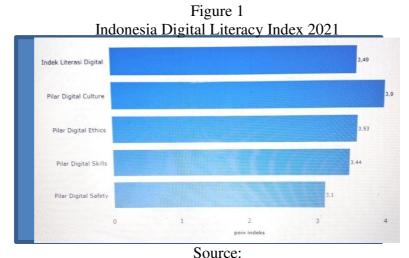
(h). Increasing concentration ability. i. Improving one's ability to string meaningful words and write.

Meanwhile, Brian (2015) in a journal written by Maulana (2015) explains the benefits of digital literacy which consists of 10 items, namely: (a). With technology can help people to save time and (b) save money, (c) Technology also helps everyone to learn faster (d). Technology also helps us to always be connected with others, (e) We always get the latest information, (f) Technology also helps us to make better decisions, (g) Makes you work, (h) By communicating digitally through programs -diverse programs, technology makes people happy, (i) can make things safer, (j) can affect the world.

Meanwhile, another researcher, namely Douglas A.J. Belshaw in his thesis entitled "What is Digital Literacy?" (2012) said that to develop digital literacy, 8 elements are needed, namely: (a). Understanding of the context of users of the digital world (Cultural), (b). Thinking power in assessing content (Cognitive), (c). The result of the creation of something that is expert and actual (Constructive), (d). Understanding the performance of networks and communications in the digital world (Communicative). (e). Having a responsible selfconfidence (Self Confidence). (f). Doing new things in a new way (Creative), (g). Responding to content and digital literacy critically (Critical Thinking) and (h). Have social responsibility (Social Responsibility).

The terminology of digital literacy developed by UNESCO (2018) confirms that digital literacy is not only an activity of writing, reading and mathematics and everything related to education, but digital literacy is a life skill that does not only involve the ability to use technology tools, information, and communication, but also social skills, learning abilities, and having attitudes, critical thinking, creative, and inspirational as digital competencies.

The Katadata Insight Center (KIC) and the Ministry of Communication and Information (Kominfo) conducted a survey on Indonesia's digital literacy in 2021. As a result, Indonesia's digital literacy index was at the level of 3.49 in 2021. This figure puts Indonesia's digital literacy index in the medium category with an index score scale of 0-5. There are four pillars that are components in calculating the digital literacy index. Digital Culture got the highest score, which was 3.9, followed by Digital Ethics with a score of 3.55, then Digital Skills with a score of 3.44, and the lowest, Digital Safety with a score of 3.1.



Katadata Insight Center (KIC) and Ministry of Communication and Informatics (Kominfo) 2021



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Kominfo also stated the need for the public to understand the 4 pillars of digital literacy, namely: (a) Digital Ethics, (b) Digital Culture, (c) Digital Skills, (d) Cyber Security, as shown in the following figure.

Figure 2
4 Pillars of Digital Literacy

Digital Skills

Digital Culture

Digital Ethics

Digital Safety / Cyber Safety

Source:

Ministry of Communication and Informatics (Kominfo) 2021

(a) Digital Skill

A skill to create information, evaluate and navigate information using digital technology effectively and critically, such as the ability to use social media, create spread sheets, prepare presentation materials, and others.

(b) Digital Culture

This is the result of human work based on internet technology. As a result of changes caused by the development of technology, people's lives have changed. Currently, people's lifestyles are very close to digital culture such as online shopping, digital payments, online ticket bookings, including distance learning (PJJ) in the world of education and Work From Home (WFH) in the world of work.

(c) Digital Ethics

This is a person's ability to judge whether digital governance is good or bad. If we understand the importance of being ethical in digital communication, we will not be trapped in useless content such as hoaxes, pornography or verbal bullying. Siberkreasi & Deloitte (2020) formulate digital ethics (digital ethics) as the individual's ability to realize, model, adapt, rationalize, consider and develop digital ethical governance in everyday life. That using digital media should be directed at an ethical intention, attitude, and behaviour for the common good to improve the quality of humanity.

(d) Digital Safety

Digital security (cyber security) is an activity to protect information from the occurrence of criminal acts (cyber crime) against digital resources. Usually cyber crime occurs because someone wants to interfere with the confidentiality, integrity, and availability of an information system.



We must bring the norms and values of decency that we have to the digital world, because basically everything good that we do in the real world we must also do in cyberspace. Don't let the Indonesian nation, which was once known as a friendly and polite nation, turn into an uncivilized nation just because of the actions of a handful of people who are not wise in social media.

Research Method

Phenomenology is an approach started by Edmund Husserl and developed by Martin Heidegger to understand or study the experience of human life. This approach evolved a mature and mature qualitative research method over the decades of the twentieth century. The general focus of this research is to examine/examine the essence or structure of experience into human consciousness (Tuffour: 2017). According to Alase (2017) phenomenology is a qualitative methodology that allows researchers to apply and apply their subjectivity and interpersonal skills in the exploratory research process.

In Husserl's phenomenology, there are several aspects that need to be considered, including efforts to describe the essence of the structure of experience, asking and answering transcendental questions, and efforts to achieve epistemological certainty. According to Soelaeman (1985:135) the steps of the phenomenological approach consists of two steps, namely: Epoche and Ideation. The first step is epoche, which is to suspend or refrain from all positive decisions. Refraining in the sense of suspending important decision-making, means that what is found can be revealed its essence meaning. The second step is ideation, to find the essence of reality which is the object of observation of the reduction of the individual object, the item of the object of observation. Therefore, Soelaeman (1985:137) stated his opinion: The essence of this step includes: (a) general characteristics that have all objects or similar things, (b) universal, which includes a number of objects or similar things, (c) conditions that certain objects or things must have in order to be classified in the same type.

Data collection from this study was obtained by observation and interviews, including by using semi structured interviews. This types of interview is used to obtain details about the phenomenon or education being studied and also aims to get "something" from the unseen.

In this study, researchers interviewed 21 informants classified by age and occupation, namely: 5 secondary school students (13-17 years), 5 college students (18-23 years), 5 employees, manager position, last education S1 (24-40 years), 5 housewives, the last education is high school (30-40 years), and 1 IT expert to get views on how we should conduct education related to digital literacy. This classification is intended so that researchers can see the differences in the results of interviews and the opinions of each informant, according to their background. In connection with ethical issues and objections from the informants, the names of the informants in this paper are written in the form of initials.

The data obtained from this in-depth interview were then analysed using Interpretative Phenomenological Analysis (IPA). According to Smith quoted by Bayir and Lomas (2016) there are several stages in science, namely: (1) reading and re-reading, (2) initial noting, (3) developing emergent themes, (4) searching for connections across emergent themes, (5) moving the next cases, and (6) looking for patterns across cases.

Results and Discussion

1) Digital Skills

The results of interviews with 5 students showed that they had no difficulties in operating their digital devices, in fact they were used to using them to study online, do



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assignments, and consult with their teachers. In addition, digital devices are also used to communicate with friends, play games, listen to music and watch movies. Likewise with students, they use digital devices not only for online lectures and preparing presentation materials and assignments from campus but also for various purposes such as running an online business, looking for job vacancies, as well as reading news and entertainment outside of hours, learning by watching movies or listening to music. This is also done by those who work as employees because they need digital devices to speed up communication with work partners, as well as to prepare materials for meetings and reports. Similarly, several housewives interviewed. Of the five interviewed informants, all of them said that they could easily operate their digital devices for communication with their friends as well as to run their online business.

"For the last ten years I have used social media to develop my business in the fashion sector. Previously I only sold it at my kiosk in West Jakarta and it was very difficult to rent another kiosk because the rental price was quite expensive. But the development of technology has made it easier for me to expand my business. I don't need to rent a place. I simply use the online sales system. Besides being cheaper, the sales range is much wider." (WA- Housewife and Business woman)

This is in accordance with the statement from Brian (2015) in a journal written by Maulana (2015) that digital literacy in technology must be able to help people to save time and save money, it also helps everyone to learn faster and helps us to always be connected with others. Others. The industrial sector is also required to continue to innovate in order to balance it with advances in information technology or digitalization (Fukuyama, 2018). In realizing society 5.0, creative content creators are needed so that innovation can be created (Preston, Kerr, and Cawley 2009).

2) Digital Culture

From the results of interviews with informants, it can be seen that there is a change in the culture or behaviour of either students, employees or housewives. Male students currently spend more time playing online games outside of school hours. Some even sacrifice their school time to be able to play games. This has exceeded the limit, and it is not surprising that they are often reprimanded by parents and teachers for unaccomplished tasks or always being late to submit them. Currently there is research from psychologists in the US stating that the range of gadget use for children has been set for ages 10-12 which is ideally only 2 hours a day.

In addition, they also use their gadgets to watch movies, including films that are not appropriate for their age because there is no supervision and sanctions. Even if there is a ban, it is only an appeal from the government as well as an attempt to block certain sites so that they can no longer be accessed. However, this effort is less effective because students can still easily access any site they are looking for. Different from male students, female students prefer to use their gadgets to make new friends, and communicate through social media, they also like to read viral news and then comment as they please.

Technology is considered to be able to give them everything they want to do. For students and employees, technology is considered to greatly facilitate their work and tasks, such as preparing presentation materials, finding materials for writing, looking for potential customers to sell products, as well as being able to establish more intense communication with friends or business partners.

"Nowadays technology has developed so rapidly and this makes it easier for us to do things. If before, I had to struggle to promote my fashion products, and couldn't afford to advertise because of the high cost, now I can simply promote it through my personal Instagram



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and other social media. No charge, but the response was very positive. Technology makes my job a lot easier." (LI – student entrepreneur)

This illustrates that in the era of Society 5.0, cyberspace has become an inseparable element. (Fukuyama, 2018). This also proves that there has been a change in human lifestyle in the current technological era, all of which are digital, starting from students, students, employees and housewives.

3) Digital Ethics

From the results of interviews obtained data that students still have difficulty distinguishing true news and hoax news. They also said that they were often provoked by the news circulating and without thinking twice immediately gave comments according to what they felt at that time. Besides being easy to believe the news on social media, students are also very easy to distribute news or information without first checking the truth. This also happens to housewives who like to communicate through social media, read news on social media, give responses or comments easily, use inappropriate language, and don't think about the consequences.

"Initially I was always provoked to write and give a response if there was news that was viral on social media. For me the important thing is that I have given my opinion. Social media is public property, so anyone can express their opinion. I often hear appeals from the government not to easily believe the news and not to be easily provoked, but it is only an appeal, socialisation is also very rare. When it comes to education for digital literacy, I have never heard of it. I think there must be someone who guides our society, because housewives have different education levels. Those who already understand the ethics of social media may be wiser if they speak on social media, but those who don't understand will express their opinions without thinking about the impact it will have." (UY – housewife)

This is in line with the statement of Douglas Belshaw (2012) which says that every individual must have social responsibility in communicating digitally, as emphasised by UNESCO (2011) that digital literacy is not only an activity of writing, reading and mathematics but also social skills, critical thinking and ethics.

4) Digital Safety/Cyber Safety

Regarding security in digital communication, students and housewives are informants who at least understand that many criminal events occur from digital technology. They don't even know that the data written on the digital devices that we use can be easily hijacked or manipulated by irresponsible people. Therefore, knowledge of digital safety is very necessary. When compared to students and housewives, students and employees are relatively more aware of the security issues of communicating digitally.

"More than 90% of countries pay little attention to the importance of cyber security, including Indonesia. Digital Security is all efforts to protect digital assets and information owned by individuals and groups. We should improve our ability to understand cyber risk management, namely Identification, Protection, Detection, Response and Recovery. Actually it is not difficult to detect security on our digital devices. From the URL, we'll see that it's credible, but if it's from *blogspot* or *wordpress* it tends to be a scam. If it starts with *https* it is usually safe. Indeed, we need to educate the public about digital literacy as soon as possible. Of the 4 pillars of digital literacy, the weakness of the Indonesian people in general lies in digital ethics and digital safety, so it is not surprising that Indonesian 'internet citizens get the title of the most disrespectful ones in Southeast Asia. Education related to digital literacy must be implemented



by involving relevant stakeholders, namely the world of education in this case schools and universities, community organisations, professional organisations, and government agencies. Given the importance of digital literacy, socialisation alone is not enough, but programs that are more involved with the community must be made such as seminars, FGDs, etc." (PI – IT Specialist)

Indeed, we need to educate the public about digital literacy as soon as possible. Of the 4 pillars of digital literacy, the weakness of the Indonesian people in general lies in digital ethics and digital safety, so it is not surprising that Indonesian 'internet citizens' are considered as the most disrespectful ones in Southeast Asia. Education related to digital literacy must be implemented by involving relevant stakeholders, namely the world of education in this case schools and universities, community organisations, professional organisations, government agencies, and private sectors. Given the importance of digital literacy, socialisation alone is not enough, but programs that are more involved with the community must be made such as seminars, FGDs, and other educational activities.

Conclusion

The result of this research shows that the level of digital literacy of the Indonesian people is still low, especially in terms of digital ethics and digital safety. This can be seen from how the Indonesian people use their digital devices unwisely, so that they are called the most disrespectful 'internet citizens' in Southeast Asia. Apart from Digital Ethics, Indonesian people are also still low on knowledge in Digital Safety, as can be seen from the increasing number of criminal-related cases such as easily believing hoax news and distributing news that is currently viral without checking the truth first. To improve the ability of the Indonesian people in digital literacy, efforts are needed that are not only in the form of socialisation but also other educational activities such as seminars and FGDs, which involve relevant stakeholders in education, community organisations, government institutions and also private sectors. For further research, the researchers suggest that research related to digital literacy for the community be carried out with a different approach.

References

- [1] Alase, A. (2017). The Interpretative Phenomenological Analysis (IPA): A Guide to a Good Qualitative Reseach Approach. *International Journal of Education and Literacy Studies*, 5(2). doi: 10.7575/aiac.ijels.v.5n.2p.9
- [2] Bayir, Aidan dan Tim Lomas. (2016). Difficulties Generating Self-compassion: An Interpretative Phenomenological Analysis. *The Journal of Happiness & Well-Being*, Vol. 4 No. 1. Hlm. 15-33.
- [3] Belshaw, D. (2012). What is' digital literacy'? A Pragmatic investigation. *Doctoral Dissertation, Durham University*. http://etheses.dur.ac.uk/3446/1/Ed. *D._Thesis*.pdf.
- [4] Earnshaw, Rae. (2017). State of the Art in Digital Media and Applications. *Springer International Publishing*. https://doi.org/10.1007/978-3-319-61409-0.
- [5] Fukuyama, Mayumi. (2018). "Society 5.0: Aiming for a New Human-Centered Society." *Japan Spotlight* 27 (August) 47-50.
- [6] http://www8.cao.go.jp/cstp/%0Ahttp://search.ebscohost.com/login.aspx?direct=true &db=bth& AN=108487927&site=ehost-live.
- [7] Gilster, Paul. (1997). *Digital Literacy*. New York: Wiley
- [8] Graff, Harvey J. (2006). *Literacy*. Microsoft® Encarta® [DVD]. Redmond, WA: Microsoft Corporation 2005.



- [9] Holroyd, Carin. (2019). "Digital Content Promotion in Japan and South Korea: Government Strategies for an Emerging Economic Sector." *Asia and the Pacific Policy Studies* 6 (3): 290–307. https://doi.org/10.1002/app5.277.
- [10] Irwansyah. (2018). "How Indonesia Media Deal with Sustainable Development Goals." E3S Web of Conferences 74: 1–6. https://doi.org/10.1051/e3sconf/20187408014.
- [11] Jung, Nanji. (2007). "Sources of Creativity and Strength in the Digital Content Industry in Seoul: Place, Social Organisation and Public Policy." Cornell University.
- [12] Katadata Insight Center & Kominfo. (2020). *Status literasi digital Indonesia 2020: Hasil survei di 34 provinsi*. Jakarta: Katadata Insight Center & Kominfo.
- [13] Kemendikbud. (2017). *Materi Pendukung Literasi Digital*. Jakarta: Kemendikbud. Hal.7.
- [14] Kominfo, Siberkreasi, & Deloitte. (2020). *Roadmap literasi digital 2021-2024*. Jakarta: Kominfo, Siberkreasi, & Deloitte.
- [15] Kose, Utku, and Selcuk Sert. (2016). "Intelligent Content Marketing with Artificial Intelligence." *International Conference of Scientific Cooperation for Future*, No. September: 837–43.
- [16] Microsoft TRG. (2021) Civility, Safety & Interaction Online . February 2020 [PowerPoint slides].
- [17] Maulana, M. (2015). *Definisi, Manfaat dan Elemen Penting Literasi Digital*. Seorang Pustakawan Blogger, 1–12. https://www.muradmaulana.com/2015/12/definisi-manfaat-dan-elemen-penting-literasi-digital.html
- [18] Peraturan Menteri Pendidikan dan kebudayaan Nomor 3 Tahun 2016 tentang Implementasi Pembelajaran Teknologi Informasi Komunikasi. Jakarta: Kementerian Pendidikan dan kebudayaan Republik Indonesia.
- [19] Pereira, Andreia G, Tânia M Lima, and Fernando Charrua-santos. (2020). "Industry 4.0 and Society 5.0: Opportunities and Threats." *International Journal of Recent Technology and Engineering* 8 (5): 3305–8. https://doi.org/10.35940/ijrte.d8764.018520.
- [20] Preston, Paschal, Aphra Kerr, and Anthony Cawley. (2009). "Innovation and Knowledge in the Digital Media Sector." *Information, Communication & Society* 12 (7): 994–1014. https://doi.org/10.1080/13691180802578150
- [21] Sutrisna, I. P. G. (2020). Gerakan Literasi Digital Pada Masa Pandemi Covid-19. *Stilistika : Jurnal Pendidikan Bahasa dan Seni*. Vol.8 No. 2.

https://ojs.ikippgribali.ac.id/index.php/ stilistika/article/view/773

- [22] Soelaeman, M.I (1985). Suatu Upaya Pendekatan Fenomenologis Terhadap Situasi Kehidupan dan Pendidikan dalam Keluarga dan Sekolah. Bandung: FPS, IKIP-Bandung. hal 135.
- [23] Soelaeman, M.I (1985). Suatu Upaya Pendekatan Fenomenologis Terhadap Situasi Kehidupan dan Pendidikan dalam Keluarga dan Sekolah. Bandung: FPS, IKIP-Bandung. hal 135.
- [24] Tuffour, J. K., & Boateng, J. A. (2017). Is Working Capital Management Important? Empirical Evidence from Manufacturing Companies in Ghana. *Review of Innovation and Competitiveness*, 3(1), 5–20.
- [25] UNESCO. (2019). "Sustainable Development Goals for Communication and Information." 2019.
- https://en.unesco.org/sustainabledevelopmentgoalsforcommunicationinformation.
- [26] UNESCO Institute for Statistics. (2018). A global framework of reference on digital literacy skills for indicator 4.4.2. *Information Paper* No. 51.



http://uis.unesco.org/sites/default/files/documents/ip51-global-framework-reference digital-literacy-skills-2018-en.pdf

- [27] Wright, Brian. (2015). Top 10 Benefits of Digital Skills.
- [28] http://webpercent.com/top-10- benefits-of-digital-skills/ (accessed 5 October 2018).

Websites:

- [1] https://selular.id/2021/10/rendahnya-literasi-pengaruhi-pemanfaatan-ekonomidigital-indonesia/
- [2] https://www.republika.co.id/berita/qz46b1456/literasi-digital-dinilai-kian-penting-saat-ini
- [3] https://www.detik.com/edu/detikpedia/d-5822740/apa-itu-literasi-digital-ini-penjelasan-serta-manfaatnya
- [4] https://www.republika.co.id/berita/qz46b1456/literasi-digital-dinilai-kian-penting-saat-ini
- [5] https://www.kompasiana.com/ighfirrijal/614b060d4f2b0609e06c6cc2/ekuivalensi-literasi-digital-dengan-perilaku-masyarakat-di-era-society-5-0
- [6] https://respons.id/budaya-literasi-digital-di-indonesia-masih-rendah-inilah-penyebabnya/