



## Digital Literacy: Education for Safe Internet Usage

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**Abstract:** Digital literacy has an important role in preventing cybercrime. This Community Service Program (PKM) aims to increase public awareness of using the internet safely, positively and creatively. This PKM activities is a form of my participation as one of the speakers in the series of events "National Digital Literacy Movement" held by Ministry of Communication and Information of Republic of Indonesia (Kemkominfo) in collaboration with Siber Kreasi and Kemkominfo with House of Representative of Republic of Indonesia (DPR-RI). There are three Webinars discussed in this article. The target audience for the first meeting was the General Public in Pidie Regency, Aceh Province . The target audience for the second and third meetings was the General Public in Bandung and Cimahi of Indonesia. The technique of delivering training material used is lecture. The evaluation parameters in this Webinar are seen from the relevance of the Webinar participants' questions to the training material, feedback or responses to the training material, responses to the answers from the speaker and the enthusiasm of the Webinar participants. Based on my observations during the Webinar, the target audience seemed enthusiastic about participating in the training, understanding the training material and realizing that it is important to grow internet safely, positively and creatively from childhood.

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### Introduction

The increasing number of internet users shows that the internet is inseparable from lifestyle. Digital space has been utilized in socializing, working, improving

knowledge, improving skills, etc. <sup>1</sup>. However, many misuses of the internet lead to cybercrime. The National Cyber and Crypto Agency (BSSN) states that during 2022, three types of cyber-attacks dominate in Indonesia, namely attacks with the aim of data theft (*data breach*), data theft for sale (*ransomware*) and hacking to change *website* content (*web defacement*) <sup>2</sup>. Other cases include, (a) High cases of bullying in cyberspace. Asriani, et al found that 45.35% of students claimed to have been victims of cyberbullying, while students who claimed to have been perpetrators of cyberbullying amounted to 38.41%. The research results were obtained through interviews with Indonesian students aged 13-18 years, with a total of 3077 respondents <sup>3</sup>; (b) Increasing cases of spreading fake news or *hoaxes*. The AIS team of the Indonesian Ministry of Communication and Information (Kemkominfo) from August 2018 to the first quarter of 2023 has identified 11,357 hoax issues <sup>4</sup>; (c) Increasing cases of fraud that promises prizes, by impersonating a public figure or a company; (d) Increasing cases of fraud by sending APK files to steal the contents of the victim's savings account; (e) Increasing cases of fraudulent sales of singer concert tickets; (f) increasing cases of *online* shopping fraud; (g) increasing cases of sexual harassment on social media; etc.

Proactive and educative measures are needed to reduce cases of internet misuse. *ICT Watch* has initiated "Healthy Internet" since 2002 <sup>5</sup>. Likewise, Kemkominfo RI has initiated "Internet Sehat dan Aman (INSAN)" since 2013. INSAN is a program of Kemkominfo RI to socialize healthy and safe internet learning by providing lessons on healthy internet ethics to the public <sup>6</sup>. In 2021-2022, Kemkominfo collaborated with Siber Kreasi and Kemkominfo with DPR-RI organized the "National Movement for Digital Literacy" (GNLD). GNLD Siberkreasi offers four pillars namely digital skills, digital ethics, digital culture and digital security. GNLD is organized in the form of a Webinar. Kemkominfo released that GNLD has conducted 189 Webinars with more than 559

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<sup>1</sup> Nuning Kurniasih, "Internet Addiction, Lifestyle or Mental Disorder? A Phenomenological Study on Social Media Addiction in Indonesia," *KnE Social Sciences*, 2017, <https://doi.org/10.18502/kss.v2i4.879>.

<sup>2</sup> Rumondang Naibaho, "BSSN Ungkap Pencurian Data Jadi Serangan Siber Terbanyak Pada 2022," *detik.com*, 2023, <https://news.detik.com/berita/d-6578957/bssn-ungkap-pencurian-data-jadi-serangan-siber-terbanyak-pada-2022>.

<sup>3</sup> Desintha Dwi Asriani et al., "Teenager-Related Cyberbullying Case in Indonesia," *Center For Digital Society Fispol UGM* (Yogyakarta, 2021), <https://cfds.fisipol.ugm.ac.id/wp-content/uploads/sites/1423/2021/09/Digitimes-35-2.pdf>.

<sup>4</sup> Kementerian Komunikasi dan Informasi RI, "Siaran Pers No. 50/HM/KOMINFO/04/2023 Kamis, 6 April 2023 Tentang Triwulan Pertama 2023, Kominfo Identifikasi 425 Isu Hoaks = Press Release No. 50/HM/KOMINFO/04/2023 Thursday, April 6, 2023 Regarding the First Quarter of 2023, Kominfo Identifies 425 Hoax" (Jakarta, 2023), [https://kominfo.go.id/index.php/content/detail/3415/Kominfo+%3A+Pengguna+Intern+et+di+Indonesia+63+Juta+Orang/0/berita\\_satker](https://kominfo.go.id/index.php/content/detail/3415/Kominfo+%3A+Pengguna+Intern+et+di+Indonesia+63+Juta+Orang/0/berita_satker).

<sup>5</sup> ICT Watch, "Catatan Sejarah – ICT Watch," *ictwatch.id*, 2022, <https://ictwatch.id/v2/catatan-sejarah/>.

<sup>6</sup> Kementerian Komunikasi dan Informasi RI, "Internet Sehat Dan Aman (INSAN)l = Healthy and Safe Internet (INSAN)L," *Internet Sehat*, 2013, [https://kominfo.go.id/index.php/content/detail/3415/Kominfo+%3A+Pengguna+Intern+et+di+Indonesia+63+Juta+Orang/0/berita\\_satker](https://kominfo.go.id/index.php/content/detail/3415/Kominfo+%3A+Pengguna+Intern+et+di+Indonesia+63+Juta+Orang/0/berita_satker).

thousand participants, with a total number of viewers reaching more than 600 thousand and the number of certified participants is more than 96 thousand <sup>7</sup>. I had the opportunity to participate in delivering training materials in several meetings at the GNLD event, one of which discussed how to use the internet positively, safely and creatively. In this article, I also adds two other meetings with the same theme but organized by Kemkominfo in collaboration with DPR-RI.

Digital literacy has an important role in preventing cybercrime, including (1) Digital literacy provides basic skills of digital citizenship, internet safety and media literacy <sup>8</sup>; (2) *e-Safety* education is a strategy to raise awareness and improve online safety <sup>9</sup>; (3) With digital literacy, children can prevent the negative impacts of internet use <sup>10</sup>; Digital literacy is needed to reduce the risk of the online teaching and learning process <sup>11</sup>. Meanwhile, education is an important part of preventing and changing behavior (Walsh et al., 2020) <sup>12</sup>. Therefore, organizing a digital literacy training program that focuses on digital security is necessary.

## Methods

This Community Service Program (PKM) was carried out at the Webinar "National Movement for Digital Literacy" organized by Kemkominfo in collaboration with Siber Kreasi and Kemkominfo in collaboration with the House of Representatives (DPR) RI, where I was one of the speakers at the event. The date, title of training material and target audience of the Webinar can be seen in Table 1.

Table 1. Community Services Program

No.	Date	Training Material Presented by the Author	Target Audience	Organizer
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<sup>7</sup> Kementerian Komunikasi dan Informasi RI, "Bangun Literasi Digital Dengan 4 Pilar, Menkominfo: Realisasikan Untuk Indonesia Digital Nation = Build Digital Literacy with 4 Pillars, Minister of Communication and Information: Realize for Indonesia Digital Nation," SIARAN PERS NO. 54/HM/KOMINFO/02/2021, 2021, [https://www.kominfo.go.id/content/detail/32927/siaran-pers-no-54hmkominfo022021-tentang-bangun-literasi-digital-dengan-4-pilar-menkominfo-realisasikan-untuk-indonesia-digital-nation/0/siaran\\_pers](https://www.kominfo.go.id/content/detail/32927/siaran-pers-no-54hmkominfo022021-tentang-bangun-literasi-digital-dengan-4-pilar-menkominfo-realisasikan-untuk-indonesia-digital-nation/0/siaran_pers).

<sup>8</sup> Connecticut State Department of Education, *Digital Citizenship, Internet Safety, and Media Literacy Guidelines and Recommended Actions* (Hartford: Connecticut State Department of Education, 2020).

<sup>9</sup> K Walsh et al., *Best Practice Framework for Online Safety Education (Stage 1)* (Victoria Park Road: Queensland University of Technology, 2020), <https://eprints.qut.edu.au/202958/>.

<sup>10</sup> Nathalie Sonck and Jos de Haan, "Safety by Literacy? Rethinking the Role of Digital Skills in Improving Online Safety," in *MindingMinorsWanderingtheWeb:RegulatingOnline Child Safety* (The Hague: T.M.C. Asser Press, 2014), 89–104.

<sup>11</sup> Sigit Purnama et al., "Does Digital Literacy Influence Students' Online Risk? Evidence from Covid-19," *Heliyon* 7, no. 6 (2021): e07406, <https://doi.org/10.1016/j.heliyon.2021.e07406>.

<sup>12</sup> Walsh et al., *Best Practice Framework for Online Safety Education (Stage 1)*.

1	September 3, 2021	"Surfing Positively Creatively"	Safely, and	General Public in Pidie District, Aceh Province	Kemkominfo & Siber Kreasi
2	September 18, 2021	"Safe Transactions"	Online	General Public in Bandung and Cimahi	Kemkominfo & DPR-RI
3	March 11, 2022	"Surfing Positively Creatively"	Safely, and	General Public in Bandung and Cimahi	MOCI & DPR-RI

This PKM program began with a request from Webinar organizers (hereinafter referred to as partners) for me to become a speaker and deliver training materials as shown in Table 1. Then, I analyzed what training materials would be delivered to Webinar participants. I looked at phenomena, and issues and conducted a literature review related to the themes and sub-themes given by the partners. In the next stage, I compiled training/ presentation materials, starting with compiling learning objectives and outcomes per meeting then designing *storyboards* per *slide*, presenting training materials during webinars through the Zoom Application, answering questions and discussing with participants, evaluating activities, making reports and disseminating the results of activities. The process of these PKM activities can be seen in Figure 1.

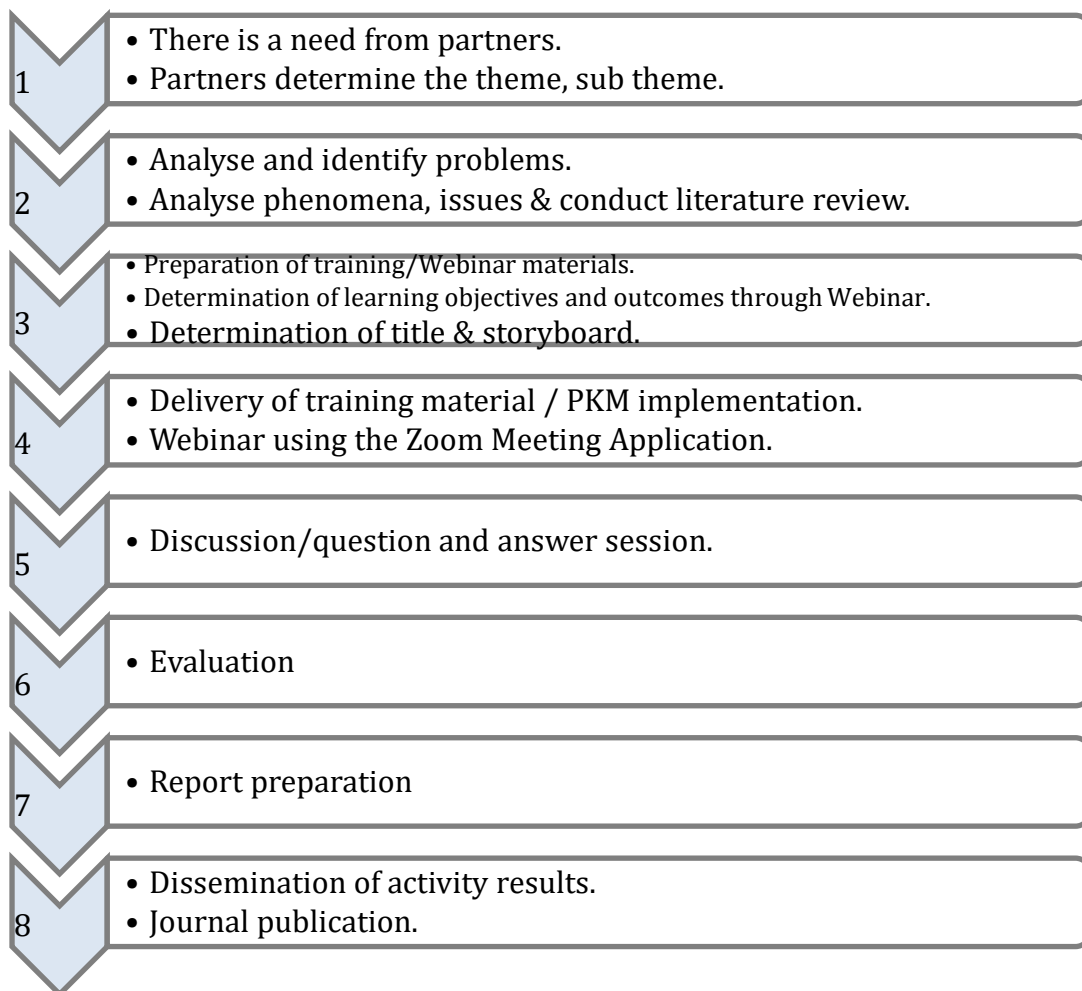


Figure 1: The stages of Community Development Activities

The training materials were delivered using the andragogy method. Andragogy describes adult education techniques focusing on self-actualization, experience and problem-solving<sup>13</sup>. The material delivery technique used is a lecture. Understanding of the target audience on training material can be seen in discussion sessions or question and answer sessions. The parameters of participants' understanding in this Webinar are seen from the suitability of questions to the training material, feedback or responses to the training material, responses to answers from the speaker, and the enthusiasm of Webinar participants.

## Results

As shown in Table 1, I delivered the training materials in three sessions: September 3 and 18, 2021 and March 11, 2022. On September 3, 2011 and March 11,

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<sup>13</sup> Shri Kant Dwivedi, "Andragogy - The Teaching Strategies Developed for Adult Learners," *Journal of Emerging Technologies and Innovative Research* 5, no. 4 (2018): 880–83, [www.jetir.org](http://www.jetir.org).

2022, I delivered training materials on "Safe, Positive and Creative Internet", while on March 18, 2022 I delivered training materials on "Safe Online Transactions". The scope of the training materials can be seen in Table 2.

Table 2. Coverage of Training Materials "Internet Safely, Positively and Creatively" and "Safe *Online* Transactions"

<b>Subject matter</b>	<b>Details</b>
Internet Characteristics	<ol style="list-style-type: none"> <li>1. Internet Characteristics</li> <li>2. Differences in Internet Characteristics in Cyberspace vs. the Real World</li> </ol>
Impact of the Internet	<ol style="list-style-type: none"> <li>1. Positive Impact</li> <li>2. Negative Impact</li> </ol>
Internet Guide	<ol style="list-style-type: none"> <li>1. What's Appropriate to do on the Internet.</li> <li>2. What's Inappropriate to do on the Internet</li> </ol>
Creative on the Internet	Opportunities for Creatives in Cyberspace
Digital Competency	
<i>Online</i> Shopping	<ol style="list-style-type: none"> <li>1. Types of <i>E-Commerce</i></li> <li>2. Tips for Safe <i>Online</i> Shopping</li> </ol>
<i>Fintech</i>	<ol style="list-style-type: none"> <li>1. Types of <i>Fintech</i></li> <li>2. Recognizing Legal and Illegal <i>Online</i> Loans</li> <li>3. Tips for Avoiding Illegal <i>Online</i> Loans</li> </ol>

I started by describing the characteristics of the world. I explained that cyberspace or the digital world or *online* environment describes a world connected by information and communication technology and network technology that can cross the boundaries of space and time. In the digital world, there are digital activities carried out by humans through human digitization. Human digitization expands the ways, rules, space and time of human activities in the *online* environment. The *online* environment creates characteristics of *online* communities that are different from those in the real world. In the *online* environment, we can join various *online* forums or *online* communities and follow other user accounts on social media.

Differences in the characteristics of cyberspace and the real world create differences in how to interact, how to communicate and how to do activities in cyberspace and the real world. These differences include (a) The way of expression, disclosure of status or identity, as well as the space, way and time of interaction; (b) The ability to carry out many jobs at one time (*multitasking*); (c) The impact on digital traces left behind; (d) The speed of information flow where we cannot resist the spread of information; and (e) The use of technology such as internet networks that sometimes experience interference.

Next, I reminded the Webinar participants of the positive and negative impacts of the internet. I conveyed some of the positive impacts of the internet, namely (a) The internet is a very fast information delivery media; (b) The internet facilitates access to information and communication; (c) The internet is a medium for improving self-quality and educational media by utilizing electronic learning/e-learning; (d) The internet makes

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business transactions easier and faster through *e-commerce*, *internet banking*, etc. (e) The internet provides unlimited creativity opportunities; (f) The internet opens the world with global openness. Some of the negative impacts of the internet are (a) For some people, the internet has an impact on internet addiction; (b) Increased cases of spreading hoaxes, hate speech and *cyberbullying*; (c) *Cybercrime* is getting more sophisticated, there are always new methods in *cybercrime*; (d) A lot of illegal and inappropriate content. Therefore, the author provides a safe internet guide that includes what is appropriate to do and not in cyberspace.

Guidelines to be safe in cyberspace, including (a) Accessing and posting appropriate and relevant content; (b) considering the impact that will be caused by what we display on the internet / public space; (c) Do not easily believe in information and always double-check the truth of the information received, (d) Maintain the privacy of yourself and others; (d) Respect others as in the real world; (e) Use appropriate language so as not to cause wrong perceptions and cause uproar; (f) Be careful when opening links or downloading files from unclear or suspicious sources; (g) Use layered security features such as using account verification via email, telephone number and PIN; (h) Setting social media account privacy wisely; (i) Conducting an audit of personal data on the internet. Meanwhile, things that should be avoided in cyberspace are (a) Providing personal information; (b) giving passwords to others; (c) Meeting new people in cyberspace and not previously known in the real world; (d) Copying and distributing information or content that is not permitted by laws and regulations; (e) Spreading hoaxes, bullying in cyberspace and spewing hate speech; (f) Impersonating or falsifying other people's identities; (g) accessing and using other people's accounts; (g) committing cybercrime such as phishing, hacking, carding, etc; (h) Opening links or downloading *files* from unknown or suspicious people; (i) Filling out surveys that collect personal information inappropriately.

Furthermore, I explained that the virtual world provides opportunities to be creative. These opportunities include (a) Becoming a *content creator: blogger, vlogger*, making *podcasts*, etc.; (b) Opening an *online* store, providing buying/selling services, becoming a *dropshipper*; (c) Opening design services, making or developing applications and *websites* (d) Opening *online* training or courses (e) becoming a celebgram or *influencer*; (f) Conducting social activities using *fundraising platforms*; (g) Providing services as admin or social media content design. I also said that to be able to utilize the internet optimally, digital literacy is needed. Unesco <sup>14</sup> mentions 5 areas of digital competence, namely (a) Data and information literacy, including how to search, filter, evaluate and manage digital content; (b) Communication and collaboration, including interaction, sharing, handling citizenship and collaboration through digital technology, ethics in cyberspace (*netiquette*) and digital identity management; (c) Digital content


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<sup>14</sup> Nancy Law et al., "A Global Framework of Reference on Digital Literacy Skills for Indicator 4.4.2.," *Information Paper No. 51*, 2018, <http://uis.unesco.org/sites/default/files/documents/ip51-global-framework-reference-digital-literacy-skills-2018-en.pdf>. Consultado em 05fev2023, 17:45.

creation by developing, integrating and elaborating digital content, copyright and licensing and programming; (d) Security, including digital device protection, personal data protection and privacy, health and welfare protection and environmental protection; (e) Problem solving on technical issues, identification of needs and responses using technology, creativity using digital technology and identification of digital competency gaps.

On September 18, 2021, I delivered material on "Safe *Online* Transactions". I focused on online shopping transactions and financial services using technology (fintech) at this meeting. I explained the types of *e-commerce* and provided tips on *safe online shopping* as shown in Table 3.

Table 3 Tips for Safe *Online* Shopping

What to do	What to Avoid
1. To make payment transactions or fill in personal data, use a private internet connection. This is done to protect personal data.	1. When conducting <i>online</i> transactions, avoid using public internet networks or public wifi.
2. Before making a transaction, check the seller's reputation, read reviews or testimonials from other consumers, pay attention to how the seller responds to buyers, and know the after-sales service policy such as returning goods if the goods received are damaged, or incomplete or not as ordered, the seller's account is an account with a public <i>setting</i> , not private, research the history of account names, if an account changes names frequently, then be more careful.	2. Avoid dealing in suspicious seller accounts: private account <i>settings</i> , poor customer reviews, no after-sales service and frequent account name changes.
3. For secure transactions, use sites that use https ( <i>Hypertext Transfer Protocol Secure</i> ).	3. Avoid sites without using https or without a padlock. 
4. Use secure payment methods such as transferring to a joint account, using a credit card, PayPal or <i>Google Wallet</i> . Check the account number provided if it is verified or a fraudulent account number. To check and report fraudulent account numbers and to register verified transaction accounts, access <a href="https://cekrekening.id/home">https://cekrekening.id/home</a>	4. Avoid payments through personal accounts.
5. Keeping proof of transactions.	5. Discarding transaction evidence.

Furthermore, according to the partner's request to me as a speaker, to explain

about *fintech* so that people are literate and avoid the snares of illegal *online* loans (pinjol). As we know, *fintech* services are now widely used by the public. In this section I refer to the ojk website as the main source of training material. In this section, by my field of digital literacy, the explanation of *fintech* is to provide understanding to the general public so that they know the characteristics of safe *fintech* and I do not discuss technical aspects. *Fintech* makes it easier for people to access financial products, simplify transactions and speed up the transaction process. Here I explain several types of *fintech* according to the information on the OJK website <sup>15</sup>. One of the popular *fintechs* and currently a hot issue in society is *online* lending (Pinjol). Having debt, however, should be avoided. However, if people are forced to borrow through Pinjol, I advise people to use it wisely. I provide education regarding legal and illegal Pinjol characteristics based on information on the OJK website <sup>16 17</sup>. Furthermore, I conveyed how to avoid illegal Pinjol based on information from the OJK website <sup>18</sup>. Finally, I conveyed what to do if you are caught in illegal Pinjol based on OJK <sup>19</sup>.

## Discussion

John Dewey states that education is an effort to develop the capacity of the self to control the environment and its responsibilities <sup>20</sup>. Education is a means to use technology positively and minimize its negative potential <sup>21</sup>. In this PKM Program, education is provided through training / Webinars. From the three meetings on safe internet education, I saw that the target audience seemed enthusiastic about participating in the Webinar, they could understand the training material and they realized the importance of safe internet. This can be seen from the attendance of Webinar participants while I delivered the training material and questions relevant to digital security aspects.

One of the participants' questions that showed further understanding and curiosity about the material they received was "How to provide digital literacy education from an early age so that children know how important digital skills are, know the limits of courtesy and responsibility in using the internet or surfing in cyberspace?", "What digital skills are recommended especially for children?". My answer to this question is

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<sup>15</sup> OJK, "Financial Technology," 2023, <https://ojk.go.id/id/kanal/iknb/financial-technology/default.aspx>.

<sup>16</sup> OJK, "Siaran Pers: Berantas Pinjol Ilegal, Satgas Waspada Investasi Tutup 116 Pinjol Ilegal = Press Release: Eradicating Illegal Lending, Investment Alert Task Force Shuts Down 116 Illegal Lending Centers," Otoritas Jasa Keuangan, 2021, <https://www.ojk.go.id/id/berita-dan-kegiatan/siaran-pers/Pages/Berantas-Pinjol-Ilegal,-Satgas-Waspada-Investasi-Tutup-116-Pinjol-Ilegal.aspx>.

<sup>17</sup> OJK, "Waspada ! Pinjaman Online Ilegal = Beware! Illegal Online Loans," Otoritas Jasa Keuangan ; satgas Waspada Investasi, 2021, [https://www.ojk.go.id/id/berita-dan-kegiatan/infoterkini/Documents/Pages/Waspada!-Pinjaman-Online-Ilegal/Waspada! Pinjaman Online Ilegal.pdf](https://www.ojk.go.id/id/berita-dan-kegiatan/infoterkini/Documents/Pages/Waspada!-Pinjaman-Online-Ilegal/Waspada!%20Pinjaman%20Online%20Ilegal.pdf).

<sup>18</sup> OJK.

<sup>19</sup> OJK.

<sup>20</sup> Aliya Sikandar, "John Dewey and His Philosophy of Education," *Journal of Education and Educational Development* 2, no. 2 (2016): 191–201, <https://doi.org/10.1080/00131725309341597>.

<sup>21</sup> (Yamamoto & Ananou, 2015).

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that digital literacy for children starts with (a) Introducing the characteristics of the internet such as what the internet is, what is appropriate and inappropriate to do on the internet, what are the positive and negative impacts of the internet; (b) Introducing regulations and legislation relating to the internet. If the child is still too young to understand the laws and regulations, then explain in simple language what consequences will be received if doing bad things on the internet; (c) Introducing internet security, explaining the importance of maintaining personal accounts, keeping passwords confidential; (d) Understanding digital ethics. That even though in cyberspace, ethics in the world are still used; (e) Using the internet to channel creativity; (f) Having a *critical thinking* pattern, always being careful when getting information from the internet, not accepting raw information, views, attitudes and behaviors seen on the internet, double-checking the truth of news, etc; (g) Understanding that on the internet will meet a variety of people so that they must understand someone's background when communicating via the internet (h) Building a strong character (*character building*) both as a person and a human being who socializes, religion and state; (i) Communicating by sticking to the principles of politeness (j) Understanding what is appropriate and inappropriate to share on the internet because every thing done on the internet will spread quickly and leave a digital footprint. It is important to realize that we can limit who can access our accounts by using privacy settings on social media accounts. Privacy *settings* can help internet users maintain security by limiting who can access our accounts. However, when information is uploaded to the internet, we cannot stop others from spreading our content, because we cannot stop others from spreading it. This question shows that Webinar participants realize that safe, positive and creative internet needs to be given since childhood.

## Conclusion

Education is a continuous process in an effort to increase one's capacity and capability. Digital literacy in the aspect of *online* safety is aimed at fostering public understanding and awareness in using digital media safely, positively and creatively. Based on the author's observations during the Webinar, the target audience seemed enthusiastic about participating in the training, understanding the training material and realizing that using the internet safely, positively and creatively is important to grow from childhood.

## Acknowledgments

This PKM program is a form of my participation as one of the speakers at the "National Movement for Digital Literacy" event held by Kemkominfo in collaboration with Siber Kreasi and Kemkominfo in collaboration with DPR-RI as shown in Table 1.

## References

- Asriani, Desintha Dwi, Kurnia Yohana Yulianti, Acintya Ratna Priwati, Anisa Pratita Kirana, Paska Darmawan, and Amelinda Pandu Kusumaningtyas. "Teenager-Related Cyberbullying Case in Indonesia." *Center For Digital Society Fispol UGM*. Yogyakarta, 2021. <https://cfds.fisipol.ugm.ac.id/wp-content/uploads/sites/1423/2021/09/Digitimes-35-2.pdf>.
- Connecticut State Department of Education. *Digital Citizenship, Internet Safety, and Media Literacy Guidelines and Recommended Actions*. Hartford: Connecticut State Department of Education, 2020.
- Dwivedi, Shri Kant. "Andragogy - The Teaching Strategies Developed for Adult Learners." *Journal of Emerging Technologies and Innovative Research* 5, no. 4 (2018): 880–83. [www.jetir.org](http://www.jetir.org).
- ICT Watch. "Catatan Sejarah - ICT Watch." [ictwatch.id](http://ictwatch.id), 2022. <https://ictwatch.id/v2/catatan-sejarah/>.
- Kementerian Komunikasi dan Informasi RI. "Internet Sehat Dan Aman (INSAN)l = Healthy and Safe Internet (INSAN)L." *Internet Sehat*, 2013. [https://kominfo.go.id/index.php/content/detail/3415/Kominfo+%3A+Pengguna+Intern+et+di+Indonesia+63+Juta+Orang/0/berita\\_satker](https://kominfo.go.id/index.php/content/detail/3415/Kominfo+%3A+Pengguna+Intern+et+di+Indonesia+63+Juta+Orang/0/berita_satker).
- . "Siaran Pers No. 50/HM/KOMINFO/04/2023 Kamis, 6 April 2023 Tentang Triwulan Pertama 2023, Kominfo Identifikasi 425 Isu Hoaks = Press Release No. 50/HM/KOMINFO/04/2023 Thursday, April 6, 2023 Regarding the First Quarter of 2023, Kominfo Identifies 425 Hoax." Jakarta, 2023. [https://kominfo.go.id/index.php/content/detail/3415/Kominfo+%3A+Pengguna+Intern+et+di+Indonesia+63+Juta+Orang/0/berita\\_satker](https://kominfo.go.id/index.php/content/detail/3415/Kominfo+%3A+Pengguna+Intern+et+di+Indonesia+63+Juta+Orang/0/berita_satker).
- Kementrian Komunikasi dan Informasi RI. "Bangun Literasi Digital Dengan 4 Pilar, Menkominfo: Realisasikan Untuk Indonesia Digital Nation = Build Digital Literacy with 4 Pillars, Minister of Communication and Information: Realize for Indonesia Digital Nation." SIARAN PERS NO. 54/HM/KOMINFO/02/2021, 2021. [https://www.kominfo.go.id/content/detail/32927/siaran-pers-no-54hmkominfo022021-tentang-bangun-literasi-digital-dengan-4-pilar-menkominfo-realisasikan-untuk-indonesia-digital-nation/0/siaran\\_pers](https://www.kominfo.go.id/content/detail/32927/siaran-pers-no-54hmkominfo022021-tentang-bangun-literasi-digital-dengan-4-pilar-menkominfo-realisasikan-untuk-indonesia-digital-nation/0/siaran_pers).
- Kurniasih, Nuning. "Internet Addiction, Lifestyle or Mental Disorder? A Phenomenological Study on Social Media Addiction in Indonesia." *KnE Social Sciences*, 2017. <https://doi.org/10.18502/kss.v2i4.879>.
- Law, Nancy, David Woo, Jimmy de la Torre, and Gary Wong. "A Global Framework of Reference on Digital Literacy Skills for Indicator 4.4.2." *Information Paper No. 51*, 2018. <http://uis.unesco.org/sites/default/files/documents/ip51-global-framework-reference-digital-literacy-skills-2018-en.pdf>. Consultado em 05fev2023, 17:45.
- Naibaho, Rumondang. "BSSN Ungkap Pencurian Data Jadi Serangan Siber Terbanyak Pada 2022." [detik.com](https://news.detik.com/berita/d-6578957/bssn-ungkap), 2023. <https://news.detik.com/berita/d-6578957/bssn-ungkap>

pencurian-data-jadi-serangan-siber-terbanyak-pada-2022.

- OJK. "Financial Technology," 2023. <https://ojk.go.id/id/kanal/iknb/financial-technology/default.aspx>.
- . "Siaran Pers: Berantas Pinjol Ilegal, Satgas Waspada Investasi Tutup 116 Pinjol Ilegal = Press Release: Eradicating Illegal Lending, Investment Alert Task Force Shuts Down 116 Illegal Lending Centers." Otoritas Jasa Keuangan, 2021. <https://www.ojk.go.id/id/berita-dan-kegiatan/siaran-pers/Pages/Berantas-Pinjol-Ilegal,-Satgas-Waspada-Investasi-Tutup-116-Pinjol-Ilegal.aspx>.
- . "Waspada ! Pinjaman Online Ilegal = Beware! Illegal Online Loans." Otoritas Jasa Keuangan ; satgas Waspada Investasi, 2021. [https://www.ojk.go.id/id/berita-dan-kegiatan/info-terkini/Documents/Pages/Waspada!-Pinjaman-Online-Ilegal/Waspada! Pinjaman Online Ilegal.pdf](https://www.ojk.go.id/id/berita-dan-kegiatan/info-terkini/Documents/Pages/Waspada!-Pinjaman-Online-Ilegal/Waspada!%20Pinjaman%20Online%20Ilegal.pdf).
- Purnama, Sigit, Maulidya Ulfah, Imam Machali, Agus Wibowo, and Bagus Shandy Narmaditya. "Does Digital Literacy Influence Students' Online Risk? Evidence from Covid-19." *Heliyon* 7, no. 6 (2021): e07406. <https://doi.org/10.1016/j.heliyon.2021.e07406>.
- Sikandar, Aliya. "John Dewey and His Philosophy of Education." *Journal of Education and Educational Development* 2, no. 2 (2016): 191-201. <https://doi.org/10.1080/00131725309341597>.
- Sonck, Nathalie, and Jos de Haan. "Safety by Literacy? Rethinking the Role of Digital Skills in Improving Online Safety." In *Minding Minors Wandering the Web: Regulating Online Child Safety*, 89-104. The Hague: T.M.C. Asser Press, 2014.
- Walsh, K, L Wallace, N Ayling, and A Sondergeld. *Best Practice Framework for Online Safety Education (Stage 1)*. Victoria Park Road: Queensland University of Technology, 2020. <https://eprints.qut.edu.au/202958/>.
- Yamamoto, Junko, and Simeon Ananou. "Humanity in the Digital Age Cognitive Social Emotional And." *Contemporary Educational Technology* 6, no. 1 (2015): 1-18. <https://doi.org/10.3389/fpubh.2016.00260>.