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Digital literacy outreach: Wise use of digital media in Sumberjaya Village, Sumur, Pandeglang

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ABSTRACT

The advancement of digital technology has reached various regions in Indonesia, including Sumberjaya Village, where internet access—particularly through smartphones—is widely available. While digital media offers numerous benefits, it also presents potential risks. Therefore, understanding appropriate usage guidelines, communication ethics, and information filtering is essential to minimize negative impacts. This community outreach program employed a participatory group method consisting of four main stages: observation, presentation, focus group discussion (FGD), and evaluation. The results of the program indicate that participants have significantly improved their digital literacy across three core dimensions: technological proficiency, cognitive awareness, and ethical behavior. These enhancements are expected to contribute positively to the community's overall quality of life and resilience in navigating digital environments.

ABSTRAK

Kemajuan teknologi digital telah merambah berbagai daerah di Indonesia, termasuk Desa Sumberjaya, yang akses internetnya sudah sangat luas, khususnya melalui telepon pintar. Media digital menawarkan banyak manfaat, tetapi juga berpotensi menimbulkan risiko. Oleh karena itu, pemahaman tentang pedoman penggunaan, etika komunikasi, dan penyaringan informasi yang tepat sangat penting untuk meminimalkan dampak negatif. Program pengabdian masyarakat ini menggunakan metode kelompok partisipatif yang terdiri dari empat tahap utama: observasi, presentasi, diskusi kelompok terfokus (FGD), dan evaluasi. Hasil program menunjukkan bahwa peserta telah meningkatkan literasi digital secara signifikan dalam tiga dimensi inti: kemahiran teknologi, kesadaran kognitif, dan perilaku etis. Peningkatan ini diharapkan dapat memberikan kontribusi positif terhadap kualitas hidup masyarakat secara keseluruhan dan ketahanan dalam mengarungi lingkungan digital.

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1. Introduction

The concept of literacy has evolved significantly over time. In the contemporary context, its scope has expanded beyond traditional reading and writing to encompass digital environments—giving rise to what is now known as digital literacy. Digital literacy refers to the ability to access, understand, evaluate, and utilize information and communication technologies effectively, ethically, and responsibly in everyday life [1]. It includes competencies not only in operating digital devices but also in critically assessing information, collaborating online, and navigating the complexities of digital interaction [2-3].

In practical terms, digital literacy equips individuals with essential skills to interact with digital media and networks in ways that are safe, productive, and legally compliant. These skills are crucial in enabling people to use digital tools for learning, working, communicating, and problem-solving while remaining mindful of ethical and social responsibilities in the digital space [4]. Digital literacy is not merely a technical skillset; it represents a combination of cognitive, social, and ethical dimensions. Competent digital citizens must be able to distinguish accurate from misleading content, think critically, express creativity, collaborate meaningfully, and manage personal data securely. The absence of digital literacy is often correlated with rising concerns such as cyberbullying, misinformation, hate speech, and digital fraud—problems amplified by unrestricted internet access via social media and online platforms [5].



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1.1. The Role of Parents and Digital Literacy

Parents hold a pivotal role in preparing children to navigate the digital age. As the primary social environment for children, families must develop awareness and adaptive capacity to evolving digital ecosystems. Although parents are expected to introduce and supervise the use of technology, their overreliance or inadequate understanding of digital tools may hinder rather than facilitate healthy digital development [6]. To raise a generation capable of facing the challenges of the digital era—especially in line with the vision of the 2045 Golden Generation—parents must not only become digitally literate themselves but also act as responsible facilitators in their children's technology use. This includes understanding risks such as exposure to inappropriate content and ensuring proper online behavior. Parental control and involvement are essential, especially considering that children often lack the emotional maturity and cognitive tools necessary to navigate digital spaces safely [7].

1.2. Benefits and Challenges of Digital Literacy

The application of digital literacy spans education, business, and social interaction. In the educational context, it provides access to a broad range of technology-enhanced learning materials, fosters innovation, and improves the quality of education. In the business domain, particularly among Micro, Small, and Medium Enterprises (MSMEs), digital literacy has been found to enhance operational efficiency and competitiveness [8]. Despite its vast potential, digital literacy remains unevenly distributed across regions. This digital divide is particularly apparent in rural and coastal areas, where access to digital literacy programs is limited and digital media is used predominantly for entertainment and communication without a clear understanding of its broader implications.

1.3. Case Context: Sumberjaya Village

Sumberjaya Village, located in the Sumur District of Pandeglang Regency, Banten Province, is a coastal community with a land area of approximately 323 hectares. The local economy relies heavily on the marine fisheries and agriculture sectors. As of 2021, the population is predominantly of school and productive age, with 1,152 individuals working as fishermen and 620 as farmers. The adoption of digital technology has grown steadily in the village, particularly through the widespread use of smartphones. However, despite increased connectivity, digital literacy among residents remains limited. Most community members use digital platforms for basic communication, entertainment, and information-seeking, without a comprehensive understanding of safe, ethical, and effective digital practices.

1.4. Digital Literacy Outreach Program

In response to these gaps, a Digital Literacy Outreach Program was initiated in Sumberjaya Village as part of a thematic Student Community Service (KKM) program organized by Sultan Ageng Tirtayasa University (Untirta), in collaboration with the Ministry of Communication and Information. The program aimed to introduce the community to the three key dimensions of digital literacy: technology, cognition, and ethics. The outreach program employed a participatory approach, involving observation, interactive presentations, focus group discussions, and evaluations. Participants were introduced to the importance of digital literacy in daily life, its relevance to children's education, household safety, and economic potential. Particular emphasis was placed on building awareness of digital ethics, critical information assessment, and the role of digital media in shaping public opinion and behavior.

1.5. Strategic Implications

Promoting digital literacy is a crucial step toward realizing the broader vision of "smart villages"—rural communities equipped with the knowledge and capacity to utilize digital tools for development and social transformation. The digital literacy program in Sumberjaya also aligns with the United Nations Sustainable Development Goals (SDGs), particularly SDG 1 (No Poverty), SDG 5 (Gender Equality), and SDG 10 (Reduced Inequalities) [9].

2. Method

The implementation of the digital literacy outreach program in Sumberjaya Village employed a participatory group method. This method consisted of five main stages: observation, material preparation, presentation, focus group discussion (FGD), and evaluation. Each stage was designed to maximize community engagement and ensure the content was relevant and accessible to the participants. In the observation stage, the team conducted a preliminary survey to assess the current level of digital literacy among residents. This included evaluating their familiarity with digital devices, patterns of digital media usage, and their ability to access and filter online information. The findings from this stage served as the foundation for tailoring the educational materials and delivery methods to the specific needs of the community.



Figure 2. Observation.



Figure 3. Discussing material of outreach.

The material preparation stage involved designing content in simple, everyday language complemented by relatable, real-life examples. The topics covered included responsible use of digital tools, internet safety, strategies for searching and verifying online information, and the critical role of parents in guiding children's digital habits. These materials were developed to ensure both comprehension and practical application. The next phase was the presentation stage, where a representative from the KKM team delivered the prepared material. The session was intentionally interactive—featuring discussion prompts, Q&A segments, and personal story-sharing—to encourage active participation. This was followed by the focus group discussion stage, which allowed for more in-depth dialogue among participants. In small groups, residents shared their digital experiences, concerns, and best practices, fostering mutual learning and a stronger sense of community awareness.



Figure 4. Material of presentation.

Lastly, the evaluation stage involved distributing an online questionnaire to all participants. This questionnaire assessed their understanding of the presented material, the clarity of delivery, and the perceived benefits gained from the outreach activity. The results also served as a self-assessment tool for the service team to improve future outreach programs.

3. Results and Discussion

The community service activity began with a preliminary survey conducted among prospective participants to assess their level of digital literacy, particularly in relation to internet use for accessing information. The survey revealed that all participants had previously used the internet, primarily for communication, entertainment, searching for information, online shopping, and supporting their children's education. Commonly used applications among participants included WhatsApp, Google, TikTok, Facebook, Instagram, YouTube, and various mobile games. Meanwhile, their children frequently accessed TikTok, YouTube, and games. Alarming, 80% of parents reported that they did not accompany their children while using smartphones, and 60% admitted to receiving and believing information without prior verification.



Figure 5. Presentation session.

In response to these findings, the materials presented during the program were tailored to address four key areas: the wise use of digital devices, internet security, information literacy, and parental guidance in digital media use. The first module, focusing on the wise use of digital devices, emphasized the importance of developing healthy digital habits amid the widespread use of social media. It covered topics such as ethical communication, responsibility in digital interactions, and the potential mental and physical health risks of excessive gadget use. Participants were encouraged to critically reflect on their screen time and adopt more balanced digital behaviors.

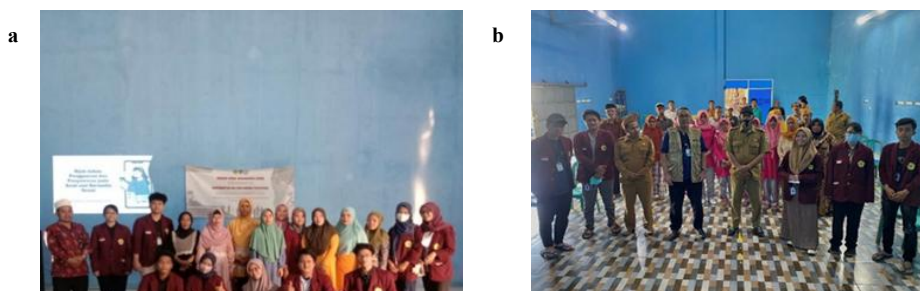


Figure 6. (a) Group photo after presentation session; (b) Group photo after focus discussion session.

The second module addressed the issue of internet security. Participants were introduced to the concept of digital footprints and the risks associated with data breaches and online threats. They were informed about common internet dangers such as scams, malware, and cyberbullying. Practical strategies were shared, including the use of strong passwords, enabling two-factor authentication, and safeguarding personal information to maintain online safety.

The third topic centered on information literacy, equipping participants with essential skills for navigating today's information-rich environment. The material provided guidance on how to search for information effectively using search engines, assess the credibility and reliability of digital sources, and apply gathered information for personal or educational purposes. Participants learned to evaluate content based on source authority, consistency, and contextual accuracy.

The fourth session focused on parental guidance, highlighting the critical role of parents in accompanying children's digital journeys. The discussion emphasized the importance of parental supervision, open communication about digital experiences, and the setting of healthy boundaries related to screen time and online content. Participants were encouraged to serve as positive digital role models and to nurture an environment that promotes ethical and safe internet practices at home. During the Focus Group Discussion (FGD) session, participants worked in small groups to analyze media content. They were asked to assess various news samples by examining elements such as source credibility, consistency, and the alignment between headlines and images. This activity was designed to raise awareness about the dangers of misinformation and the importance of critical thinking in consuming digital media.

At the conclusion of the program, an evaluation was conducted to measure the impact of the activities. The results indicated that 85% of participants felt more confident in using digital tools wisely. Furthermore, 90% of parents acknowledged a better understanding of their role in guiding children's use of digital media. Participants also demonstrated significant improvements in their ability to search for and assess online information effectively. These outcomes reflect strong community engagement and suggest that the digital literacy program succeeded in providing practical knowledge and skills applicable to participants' everyday lives.

4. Conclusion

This community service initiative effectively enhanced public awareness regarding the responsible use of digital devices and the importance of internet safety. It is expected that, through the knowledge and skills acquired during the program, community members will be better equipped to utilize digital technologies in a safe, informed, and constructive manner—ultimately contributing to an improved quality of life.

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