ENHANCING DIGITAL LITERACY THROUGH CULTURAL VALUE INTEGRATION IN KRENDANG COMMUNITY

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ABSTRACT

The rapid advancement of information technology (IT) has transformed how communities interact and access information. This paper focuses on a digital literacy program conducted at RPTRA Krendang, West Jakarta, aimed at integrating cultural values into community-based digital literacy training. The program addresses the challenges of unequal access to technology and the widespread misinformation found in marginalized communities. The method involved location observation, community engagement, practical training, and post-program evaluation. Results indicate significant improvements in participants' digital skills and awareness, although technical issues and time constraints were noted as challenges. The program's success was driven by strong stakeholder support and active community participation, highlighting the importance of culturally responsive digital literacy initiatives. Future efforts should focus on enhancing coordination, expanding resources, and sustaining the positive momentum created by the training. This study contributes to the understanding of how community-focused digital literacy programs can bridge the digital divide and foster responsible technology use.

Keywords: community engagement, cultural integration, digital literacy, information technology.

INTRODUCTION

The rapid advancement of information technology (IT) continues to reshape multiple aspects of modern life, from education to social interactions. This paper explores the integration of cultural values into digital literacy initiatives within the Krendang community, highlighting the importance of such an approach in promoting a more inclusive and culturally responsive digital society.

Kelurahan Krendang is a sub-district located in the Tambora District, West Jakarta, Special Capital Region of Jakarta, Indonesia (Jakbarkota.bps.go.id, 2017). In 2016, this area was home to 23,403 residents, consisting of 12,216 males and 11,174 females, with a sex ratio of 109 and 7,947 households. A slightly different figure of 23,433 residents was reported in a subsequent government document (Kementerian Dalam Negeri, 2018). RPTRA Krendang, a designated location for community service activities serves as a key community space.

RPTRA Krendang, or the Integrated Child-Friendly Public Space, spans an area of 2,692 square meters in Tambora, West Jakarta. The indoor facilities include a lactation room, a library, a PKK Mart, a multipurpose hall, public restrooms, disabled-accessible toilets, and an administrative office. Outdoor facilities feature a futsal field, a basketball court, outdoor fitness equipment, a nutrition pond, medicinal plants, a children's playground, and an amphitheatre, RPTRA Krendang is a popular spot for local residents of Krendang and Jembatan Besi to engage in sports, community activities, and educational or recreational activities for children. Officially inaugurated by the Governor of Jakarta, Basuki Tjahaja Purnama, on February 3, 2016, RPTRA Krendang is also located near Duri Station.



Figure 1. Environmental conditions of RPTRA Krendang, Tambora, West Jakarta

Over the past few years, the pace of IT development has been exponential, with innovations such as artificial intelligence, cloud computing, and social media platforms transforming how people communicate, access information, and participate in the global economy. According to research, these advancements have accelerated the digital transformation across sectors, enabling greater connectivity and access to information worldwide (Nambisan et al., 2017). IT is not only a driver of economic growth but also a critical tool for improving education, health, and social inclusion (World Bank, 2020).

The societal impact of IT goes beyond economic benefits, significantly influencing social interactions and relationships. Social networks and digital communication tools have redefined interpersonal connections, allowing individuals to maintain relationships over long distances. However, research also shows that excessive reliance on digital communication can disrupt traditional social structures, sometimes leading to issues such as isolation and superficial relationships despite increased connectivity (Turkle, 2017). The challenge lies in balancing the benefits of IT with its potential to alter the fabric of social life.

For younger generations, IT has become integral to socializing, particularly through social media, online gaming, and virtual communities. While these platforms offer opportunities for global connections and cultural exchange, they also introduce challenges, including the reduction of face-to-face communication and the risk of forming less meaningful relationships (Kuss & Griffiths, 2017). The digital landscape continues to evolve, requiring individuals to adapt not only to new technologies but also to the shifting norms of digital interaction.

One of the most profound impacts of IT is the democratization of information. The internet provides vast amounts of knowledge, accessible to anyone with a connection. This availability has transformed learning, enabling self-education and expanding access to education beyond traditional classrooms. Digital literacy, therefore, becomes crucial for individuals to navigate, evaluate, and critically engage with this flood of information (Martin et al., 2019).

However, despite the benefits of IT, there are significant drawbacks that accompany rapid digitalization. The digital divide—unequal access to digital resources—remains a critical issue, especially in marginalized communities. This gap exacerbates existing social inequalities, limiting opportunities for those without sufficient access to digital technologies (Robinson et al., 2020). Additionally, problems such as cyberbullying, misinformation, and privacy concerns have become pervasive, further underscoring the need for enhanced digital literacy skills (Livingstone et al., 2020).

Given the essential role IT plays in contemporary life; it is imperative to foster digital literacy across all demographics. Digital literacy encompasses not only technical skills but also the ability to think critically about the information encountered online, as well as the ethical implications of digital interactions (Cohen et al., 2021). A comprehensive approach to digital literacy must address these aspects, incorporating them into formal education systems and community programs alike.

Recent studies emphasize the importance of incorporating cultural values into digital literacy efforts to create more relevant and sustainable initiatives. Research suggests that culturally responsive digital literacy programs are more effective in engaging communities and addressing their unique needs (Walton & Pallitt, 2021). By integrating cultural context into digital literacy training, marginalized communities can be better equipped to engage in the digital world, fostering a more inclusive and diverse digital society.

This paper argues that integrating cultural values into digital literacy programs can significantly improve the digital competence of the Krendang community. Through a multifaceted approach that includes technical skills, critical thinking, and cultural relevance, digital literacy initiatives can empower individuals to navigate and thrive in an increasingly digital world.

METHOD

The community service activities at RPTRA Krendang were designed to bridge theoretical knowledge with practical application while ensuring active engagement from the local community. The program's implementation is grounded in relevant theories and reinforced through practical applications, with support from experts in relevant fields. This approach ensures that community members not only receive theoretical instruction but also gain a deep understanding

of how this knowledge applies to their daily lives. The method employed by the service team involves several stages, as illustrated in Figure 1 and explained as follows:

a. Location Observation

The first stage involves observing the location to evaluate its suitability for community service activities. This process includes demographic analysis, which examines factors such as age distribution and the number of permanent residents, helping to design activities that align with the specific needs of the local population (Santini et al., 2020). Recent studies emphasize the importance of location analysis in community-based programs, as tailoring activities to local conditions significantly increases community participation and program relevance (Heeks & Ospina, 2019). A site survey was conducted on October 28, 2023, to assess the conditions of the RPTRA environment. The team conducted a follow-up survey on November 4, 2023, during which discussions took place with the management of RPTRA Krendang regarding the planning and execution of the community service activities.

b. Preparation

Following the initial observation, the preparation phase begins with fieldwork, including consultations with RPTRA Krendang management. These discussions are essential for aligning the program with the community's specific needs and potential. Research shows that community-driven development is most successful when there is active collaboration between program implementers and local stakeholders (McLennan & Moyle, 2020). The proposed programs are then presented to RPTRA management, and revisions are made to ensure that the activities are both relevant and beneficial to the community (Schleicher, 2019).

c. Source Gathering

In this phase, interviews are conducted with key resource persons, including the coordinator and management of RPTRA Krendang, to gather further insights into the community's needs and potential challenges. Recent research highlights the value of qualitative data gathering, such as interviews and focus groups, to gain a deeper understanding of the local context (Braun & Clarke, 2021). Additionally, the team collects supporting materials, including both written and physical documentation, to inform the program design. This step ensures that the program is data-driven and context-specific, increasing its chances of success (Roberts et al., 2019).

d. Implementation

The implementation phase is where the planned activities are put into action. This phase is crucial, as it measures the success of the program through active community participation. Recent studies emphasize the importance of adaptive management during program implementation to ensure flexibility in addressing unforeseen challenges (Smith & Williams, 2020). The success of this stage is evaluated during a closing event, held with the participation of the local community and RPTRA management, providing an opportunity for feedback and future planning (Henderson et al., 2021). As noted by Witarti & Windarto (2022), participants will also be trained to differentiate between misinformation, dis-information, and mal-information through various examples. Misinformation refers to false information spread by individuals who believe it to be true, while dis-information is false information deliberately disseminated.

e. Evaluation

The evaluation stage is a critical component in assessing the effectiveness of the community service program. This step aims to measure the impact of the implemented programs on the participants and to identify areas for improvement in future activities. Evaluation allows the service team to collect feedback, both qualitative and quantitative, from the community and other stakeholders involved in the initiative (Reeves et al., 2020).

During this stage, various activities were carried out by the team, including distributing post-program surveys to participants, conducting interviews with RPTRA Krendang management, and holding focus group discussions with community members. These activities were designed to capture the participants' satisfaction with the digital literacy training, their increased knowledge and skills, and any challenges they encountered during the sessions. The feedback gathered is analysed to refine the curriculum and ensure that future digital literacy initiatives are better tailored to the community's needs. Furthermore, continuous evaluation ensures that the programs remain responsive to the evolving technological landscape and the community's changing needs (Tawfik et al., 2020).

Location Observation	Preparation	Source Gathering	Implementation	Evaluation		
Assess the community's needs and potential areas for service.	Plan and organize the service activities. Gather necessary resources and materials.	Identify potential partners or collaborators. Secure funding or donations if needed.	Carry out the community service activities. Interact with community members.	Assess the effectiveness of the service. Collect feedback from participants.		

Figure 2. Method Stages

RESULTS AND DISCUSSION

This community service activity was carried out at RPTRA Krendang, Tambora, West Jakarta, from November 26, 2023, to January 28, 2024. The main focus of the program was to enhance digital literacy among the local community. Digital literacy is an essential skill in the use of technology, especially in today's information and communication era. Through digital literacy, individuals can use technology wisely and effectively to create positive interaction and communication.

The digital literacy program aimed to educate the community on how to access and utilize technology more judiciously. The benefits of digital literacy are multifaceted, ranging from improving critical, creative, and innovative thinking skills to facilitating smoother and broader communication and collaboration. Digital literacy also enables individuals to acquire information quickly, up-to-date, and accurately. This is essential in daily life, particularly as technology increasingly dominates almost every aspect of social and economic life.

However, the results of this program indicate that many individuals still face challenges in understanding and utilizing technology effectively. Some identified challenges include a lack of awareness regarding digital security, unwise use of technology, and the rampant spread of false information (hoaxes) and hate speech on social media. To address these issues, several outreach and training activities were organized as part of the community service program. Figure 3 shown the implementation of digital literacy activities at RPTRA Krendang.



Figure 3. The implementation of digital literacy activities at RPTRA Krendang

a. Cyber Crime Awareness Campaign

On December 10, 2023, the community service team conducted a "Cyber Crime Awareness" campaign targeting various demographic groups at RPTRA Krendang. The session utilized PowerPoint presentations and video clips from films illustrating digital crime, especially affecting teens and adults. Following the presentation, a Q&A session was held, with door prizes given to active participants. This campaign aimed to raise community awareness of digital fraud risks, such as phishing links and harmful comments on social media, encouraging safer and more responsible use of technology.

b. Online Loan Application Awareness

On December 17, 2024, a session was held to educate the community on how to responsibly manage online loan applications. The session focused on selecting loan apps registered with the Financial Services Authority (OJK) and

the importance of borrowing only within one's financial means. This training aimed to raise financial literacy and help the community avoid falling into debt traps posed by unregulated loan providers.

c. Microsoft Excel Training

The training session, conducted on 7 January 2024, equipped participants with basic Excel skills, including creating tables, calculating data, and using formulas. The goal was to enhance their technical abilities and demonstrate the advantages of utilizing technology for administrative and day-to-day tasks, ultimately improving their overall efficiency.

d. Basic Microsoft Word Training

Held on January 14, 2024, this session taught participants the fundamentals of Microsoft Word through a practical approach. Participants learned document creation, editing, and formatting, supported by both PowerPoint presentations and hands-on practice with laptops. This training aimed to enhance participants' productivity and equip them with essential skills for professional and academic tasks.

e. Simple Design with Canva Training

The training session, held on 21 January 2024, introduced participants to Canva, a user-friendly design tool accessible via mobile devices. The session aimed to foster creativity among both children and adults by teaching them how to utilize Canva for various purposes, such as school assignments, personal projects, or business promotion. Canva's versatility and ease of use were emphasized as essential tools in the digital era, especially for homemakers managing small businesses.

	Cyber Crime Awareness Campaign			Online Loan Application Awareness		Basic Microsoft Excel Training		Basic Microsoft Word Training			Simple Design with Canva Training				
Participants	Pre Test	Post Test	Improvement	Pre Test	Post Test	Improvement	Pre Test	Post Test	Improvement	Pre Test	Post Test	Improvement	Pre Test	Post Test	Improvement
Participant 1	82	93	11	79	95	16	83	93	10	75	85	10	84	91	7
Participant 2	76	88	12	82	90	8	82	93	11	81	93	12	85	92	7
Participant 3	78	93	15	75	90	15	85	85	0	80	90	10	81	90	9
Participant 4	79	93	14	80	85	5	82	93	11	77	92	15	82	95	13
Participant 5	83	89	6	83	91	8	77	86	9	78	92	14	79	87	8
Participant 6	84	91	7	75	91	16	80	88	8	77	94	17	84	94	10
Participant 7	83	94	11	83	88	5	83	86	3	78	93	15	75	90	15
Participant 8	82	87	5	75	86	11	79	89	10	85	90	5	78	92	14
Participant 9	83	86	3	77	90	13	83	91	8	85	85	0	76	95	19
Participant 10	76	91	15	78	88	10	77	85	8	85	95	10	81	95	14
Participant 11	85	90	5	78	87	9	82	94	12	82	88	6	84	88	4
Participant 12	77	86	9	82	93	11	80	93	13	76	86	10	78	91	13
Participant 13	80	91	11	76	94	18	76	94	18	78	92	14	77	91	14
Participant 14	81	90	9	82	95	13	82	94	12	83	88	5	76	89	13
Participant 15	75	85	10	76	87	11	84	91	7	85	89	4	84	93	9
Participant 16	76	89	13	83	92	9	80	86	6	83	89	6	82	94	12
Participant 17	82	94	12	75	94	19	78	90	12	82	86	4	80	89	9
Participant 18	78	86	8	83	91	8	79	85	6	78	92	14	79	93	14
Participant 19	77	88	11	79	85	6	75	89	14	83	88	5	81	88	7
Participant 20	78	85	7	81	85	4	79	89	10	82	94	12	79	91	12
Average	79,75	89,45	9.7	79.1	89.85	10.75	80.3	89.7	9.4	80,65	90,05	9.4	80.25	91.4	11.15

Table 1. Assessment of participants' knowledge

Table 1 presents an assessment of participants' knowledge, based on pre-tests and post-tests conducted to evaluate their understanding. The pre-test was administered before the activities began to gauge the participants' initial knowledge, while the post-test was taken after the activities to measure any improvements. The purpose of these assessments was to determine how much participants had learned and how their understanding had developed as a result of the training sessions. This method helps to track progress and assess the overall effectiveness of the program.

The supporting factors in the implementation of this community service program were significantly influenced by the active participation of the surrounding community. The warm reception from the RPTRA management, the Head of the Sub district, and his staff, along with the residents, was one of the key factors that ensured the smooth execution of the activities. The community service team also received full support from the participants, who were very enthusiastic about attending the events. Children and mothers, as the primary participants, were highly engaged and actively participated in every training session. The enthusiasm of the participants was evident throughout the learning process, which facilitated the effective and orderly delivery of the material. Additionally, the availability of adequate facilities and infrastructure, such as comfortable learning spaces and supporting equipment like projectors, played a significant role in the smooth conduct of the activities. The materials presented were also easy to comprehend, especially in the Canva training session, where most participants were already familiar with the application. This familiarity greatly aided the teaching process and allowed the participants to follow the training effectively.

On the other hand, several challenges were encountered during the program implementation. One of the main inhibiting factors was technical issues, such as the slow connection of the Infocus projector due to its deteriorated condition, which disrupted the flow of material delivery in some sessions. Furthermore, on the first day of activities, some participants arrived late, causing delays in the schedule and pushing the event to finish later than planned. The

number of participants exceeding the initial target also presented a challenge, as the team had to adjust by accepting additional attendees, bringing the total number beyond the anticipated range. During the closing event on the third day, the number of attendees was lower than expected, which slightly affected the effectiveness of the evaluation activities. Time constraints also posed a limitation, preventing the team from providing more in-depth explanations of the material. Lastly, the lack of sufficient laptops for participants was a challenge, particularly in training sessions that required hands-on practice using the devices.



Figure 4. Mean improvement in participants' knowledge

In conclusion, the digital literacy program at RPTRA Krendang, Tambora, West Jakarta, successfully enhanced the community's understanding and digital skills, largely due to the strong support from various stakeholders and the enthusiasm of the participants. Based on the data, it can be observed that participants' understanding improved with each subsequent activity, with an average increase of 10.08% as shown in figure 4. While some challenges, such as technical issues and time constraints, were encountered, these did not hinder the overall success of the program. The active participation of the community, combined with the effective delivery of training materials, contributed to the program's positive impact. Moving forward, the continuation of similar programs will be essential to further develop the community's ability to use technology wisely and responsibly.

CONCLUSION

Based on the results of the community service activities conducted at RPTRA Krendang, the community service team successfully designed and implemented a program aimed at enhancing digital literacy among local residents. The process, which included location observation, preparation, source gathering, and implementation, demonstrated that combining theoretical knowledge with practical training effectively raised awareness and improved the community's ability to utilize digital technology. Through these trainings, the local residents not only gained theoretical insights but also developed practical skills in applying technology in their daily lives, thus empowering them to compete in the digital age.

The programs developed by the community service team were well-executed and achieved the intended outcomes, despite some challenges during implementation. Overall, the initiative positively impacted the community, particularly in improving digital literacy among residents living around RPTRA Krendang. This success was due not only to the competence of the service team but also to the active participation of the local community and the support provided by RPTRA management, who ensured adequate facilities for the activities.

Looking forward, all parties involved hope for the continuation of both formal and informal training programs to maintain the relationship between the community and Universitas Budi Luhur and to ensure the sustainability of the initiatives that have been implemented.

Several suggestions were proposed for future improvements, including enhancing coordination, particularly in communication between the service team and RPTRA management, and better aligning schedules to ensure smoother operations. Financial management should be more realistic, with provisions for emergency funds. Strengthening interactions with the local community is also essential for improving the effectiveness of future activities.

For the community around RPTRA Krendang, greater active participation in future community service programs is strongly encouraged. Increased involvement from the local residents will help ensure that the planned programs are

successfully implemented and that the intended goals are fully achieved, contributing to a broader impact on enhancing digital literacy and technological skills within the community.

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