STRENGTHENING DIGITAL LITERACY AND DISSEMINATION SKILLS OF INDONESIAN STUDENTS IN THAILAND

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Abstract

Keywords: community service, digital literacy, dessemination strategies, Indonesian students	This community service program aimed to strengthen digital literacy and enhance effective information dissemination skills among Indonesian students in Thailand. The program was implemented as part of the Tri Dharma Perguruan Tinggi by lecturers from the Information Technology Education Study Program, Universitas Negeri Surabaya. The results indicate that the participants demonstrated a generally good level of digital literacy prior to the program. Through the activities conducted, participants developed a more comprehensive understanding of the critical, ethical, and collaborative application of digital literacy. They also became more aware of their role as information intermediaries between the Indonesian academic community abroad and society in Indonesia. Furthermore, participants showed a commitment to disseminating information responsibly and with integrity. Overall, this program contributed to the strengthening of digital literacy practices, the development of cross-national academic networks, and the reinforcement of the role of Indonesian students abroad as responsible agents of knowledge dissemination.

Abstrak

Kata kunci: pengabdian kepada masyarakat, literasi digital, strategi diseminasi, mahasiswa Indonesia	Program pengabdian kepada masyarakat ini bertujuan untuk memperkuat literasi digital serta meningkatkan keterampilan diseminasi informasi yang efektif di kalangan mahasiswa Indonesia di Thailand. Program ini dilaksanakan sebagai bagian dari Tri Dharma Perguruan Tinggi oleh dosen-dosen Program Studi Pendidikan Teknologi Informasi, Universitas Negeri Surabaya. Hasil kegiatan menunjukkan bahwa para peserta telah memiliki tingkat literasi digital yang secara umum cukup baik sebelum program dilaksanakan. Melalui berbagai kegiatan yang dilakukan, peserta mengembangkan pemahaman yang lebih komprehensif mengenai penerapan literasi digital secara kritis, etis, dan kolaboratif. Mereka juga menjadi lebih sadar akan peran mereka sebagai perantara informasi antara komunitas akademik Indonesia di luar negeri dan masyarakat di Indonesia. Selain itu, para peserta menunjukkan komitmen untuk menyebarluaskan informasi secara bertanggung jawab dan berintegritas. Secara keseluruhan, program ini berkontribusi pada penguatan praktik literasi digital, pengembangan jejaring akademik lintas negara, serta penguatan peran mahasiswa Indonesia di luar negeri sebagai agen diseminasi pengetahuan yang bertanggung jawab.

INTRODUCTION

Improving the quality of Indonesian human resources abroad is an important aspect of supporting nationally competitive development in a global context. Indonesian students pursuing higher education overseas, including in Thailand, have significant potential to act as agents of change and cultural ambassadors. However, several challenges remain in strengthening academic literacy, scientific communication, and the ability to disseminate knowledge effectively to both academic communities and the wider public. These conditions highlight the need for systematic, contextual, and sustainable strategies to enhance literacy and knowledge dissemination.

Meanwhile, developments in information and communication technology over the past two decades have transformed patterns of human life (Kuncoro et al., 2022). The digital environment has become a primary space for learning, working, interacting, and sharing information (Karunanayaka, 2023). Easy access to information across various platforms has accelerated the flow of knowledge and expanded the reach of global communication (Bilan et al., 2023). However, alongside these benefits, complex challenges have emerged, particularly the increasing difficulty for individuals to distinguish accurate information from misleading content amid an overwhelming volume of data.

The main issue in contemporary digital media use lies not only in technological aspects but also in human capacity to understand and verify information (Isnaini et al., 2025). Many individuals, especially younger generations, rely on social media as a primary source of information without critically assessing its credibility (Engel et al., 2024). As a result, misinformation, hate speech, and unethical information dissemination can spread rapidly and generate widespread social impacts (Lim et al., 2022). This phenomenon indicates that information literacy competencies remain insufficient and require further strengthening to support critical and responsible engagement in digital environments (Pérez-Escoda et al., 2021).

Beyond academic concerns, Thailand is recognized as one of the transit countries in human trafficking cases in Southeast Asia. Although not all regions are directly affected, this issue has implications for the safety and vulnerability of foreign nationals, including Indonesian students residing in the country. Cross-border mobility, illegal employment opportunities, and exploitation networks represent risks that require awareness, particularly for students actively engaging with international communities. Strengthening digital and information literacy also plays an important role in enabling students to recognize potential fraud, illegal recruitment, and other criminal practices that utilize digital platforms as operational tools. At the same time, such literacy equips students to disseminate accurate, educational, and responsible information to communities in Indonesia in ethical and accessible ways.

Information literacy has become a core competency required of individuals in the digital era (Sari et al., 2023). It encompasses not only technical skills in accessing data but also the ability to understand, analyze, and use information appropriately and ethically (Sinnamon et al., 2024). Individuals with strong digital literacy are not only capable of consuming information but also of acting as responsible disseminators of valid and beneficial knowledge within their social environments (Salimi et al., 2025). Information literacy, therefore, extends beyond an academic skill and represents an essential life competence for building informed and competitive societies in the digital age.

In addition to strengthening literacy, effective knowledge dissemination strategies play a crucial role in ensuring that students' learning outcomes, experiences, and innovations generate broader societal benefits. Effective dissemination not only increases the visibility of students' work but also strengthens academic networks and cross-national collaboration. Accordingly, this community service program was designed to enhance the academic literacy

of Indonesian students in Thailand while equipping them with relevant and effective scientific dissemination strategies in the digital era.

Higher education institutions hold a strategic role in promoting digital literacy within society (Bolong & Ahmad Ghazali, 2023). Through community service activities, lecturers and academics can directly convey knowledge and ethical values related to digital media use to broader communities. Such programs do not merely transfer technical skills but also foster critical awareness of social responsibility in the use of technology (Morgan et al., 2022). Well-designed community service initiatives can serve as a bridge between academic knowledge and real societal needs (Vodă et al., 2022).

As part of its commitment to supporting global digital literacy development, the Information Technology Education Study Program at Universitas Negeri Surabaya (PTI Unesa) implemented an international community service program entitled *"Analysis of Information Literacy and Effective Dissemination Strategies in the Digital Era."* This activity was conducted in Thailand and involved Indonesian students and academics working abroad. Through this program, Unesa sought to strengthen participants' understanding of the importance of information literacy while fostering awareness of ethical and responsible knowledge dissemination practices in digital environments. Thailand was selected as the program location due to similarities in digital media challenges faced by both Indonesia and Thailand. Despite high levels of technology penetration in both countries, awareness of ethical practices and information verification remains relatively limited (Zwilling et al., 2022). Therefore, this cross-national initiative was intended not only as a platform for knowledge sharing but also as a means of fostering collaboration among Southeast Asian academics in building information-literate and ethically aware societies.

The collaboration between PTI Unesa and the Association of Indonesian Students in Thailand (PERMITHA) represents a form of synergy between higher education institutions and Indonesian student communities abroad. This program aimed to enhance students' capacity to manage information, produce scientific writing, and disseminate knowledge effectively and ethically. It is also expected to strengthen the positive image of Indonesian students at the international level while contributing to the development of a global literacy ecosystem. By adopting an educational, interactive, and practical approach, this program represents an important step toward fostering a digitally literate society that is critical, responsible, and ethical in the use of information technology.

METHOD

This community service program employed a participatory approach by actively involving participants throughout all stages of the activity. The method combined theoretical presentations with interactive discussions. This approach was selected to ensure that participants did not merely receive knowledge passively, but were also able to apply it through experience-based activities and collective reflection.

The program was conducted offline at the Islamic Center, Soi 7, Phayathai, Bangkok, with the support of the Association of Indonesian Students in Thailand (PERMITHA). The participants consisted of Indonesian students enrolled at various universities in Thailand, with a total of 26 participants. The overall stages of the community service program are presented in Figure 1.
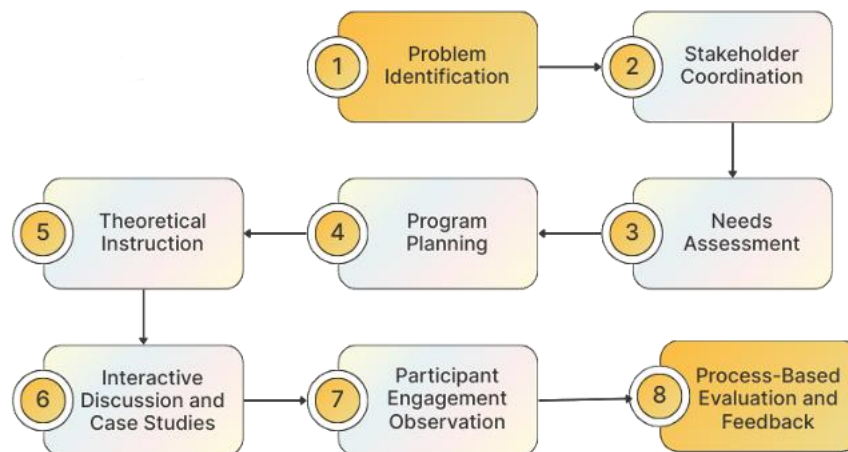
Figure 1. The community service program stages

This community service program was implemented through a structured, multi-stage approach consisting of eight main phases. The first stage involved problem identification, in which the implementation team examined challenges related to information literacy and digital dissemination faced by Indonesian students studying abroad. This stage was conducted through preliminary observations and informal communication with student representatives to obtain an initial understanding of the existing conditions and key issues.

The second stage focused on stakeholder coordination, involving collaboration between the PTI Unesa implementation team and partner institutions, particularly the Association of Indonesian Students in Thailand (PERMITHA). This coordination aimed to align program objectives, determine roles and responsibilities, and ensure that the planned activities were relevant to the participants' academic and social contexts. Following this, a needs assessment stage was carried out to identify participants' specific needs related to information literacy competencies and digital dissemination strategies. The findings from this stage served as the foundation for designing appropriate learning materials and activity formats.

Based on the results of the needs assessment, the program proceeded to the program planning stage. This phase included the development of training materials, the selection of resource persons, the preparation of learning modules and instructional media, and the scheduling of program activities. Particular attention was given to the use of interactive and participatory methods to ensure that the learning process was contextualized and responsive to the experiences of Indonesian students studying abroad.

The implementation phase consisted of two interconnected stages. The theoretical instruction stage provided participants with conceptual foundations related to information literacy, ethics in digital media use, and effective scientific dissemination in the digital era. This was followed by interactive discussions and case study analyses, in which participants examined real examples of misinformation, plagiarism, and unethical dissemination practices. These activities encouraged participants to apply critical thinking skills and to discuss preventive measures and practical solutions applicable in both academic and social contexts.

The evaluation of the community service program employed a descriptive quantitative approach by administering a post-activity questionnaire to the participants. The instrument used was a structured questionnaire with a five-point Likert scale (1–5), designed to capture participants' perceptions of the implementation and outcomes of the program.

The questionnaire assessed five main aspects: (1) the suitability of the training materials to participants' needs, (2) the clarity and comprehensibility of the speakers' delivery, (3) participants' understanding of digital literacy, (4) participants' information dissemination skills, and (5) the overall benefits and relevance of the program to participants' academic

needs. These aspects were selected to represent both the quality of program implementation and the perceived learning outcomes.

Each aspect was measured based on participants' level of agreement with the statements provided in the questionnaire. The collected data were analyzed using descriptive statistical techniques by calculating the mean scores for each assessed aspect. The results were then categorized to describe participants' satisfaction levels and to evaluate the effectiveness of the community service program.

RESULTS AND DISCUSSION

The community service program conducted in collaboration with the Association of Indonesian Students in Thailand aimed to strengthen participants' understanding of digital literacy and to develop effective information dissemination strategies among Indonesian students studying abroad. The program involved 26 participants. The results indicated that most participants already demonstrated a good level of digital literacy, particularly in their ability to access, select, and utilize information from various online sources. Participants were generally familiar with the use of digital platforms to support academic activities and cross-national social communication.

These findings suggest that Indonesian students studying abroad are largely positioned at the level of functional digital literacy, characterized by their ability to use digital technologies for academic, organizational, and personal development purposes. However, the program emphasized the importance of advancing beyond functional literacy toward critical and collaborative digital literacy. This includes the ability to evaluate the credibility and validity of information, understand its social context, and disseminate information in accordance with ethical principles and social responsibility.

One key issue that emerged during the discussions was the role of Indonesian students abroad as information intermediaries between the international academic environment and society in Indonesia. Students studying overseas are often perceived as having broader access to global information sources and are trusted by communities in Indonesia due to their proximity to academic institutions and credible knowledge resources. Therefore, strengthening students' capacities in digital literacy not only benefits them individually but also has the potential to generate broader social impacts.

Figure 2. Material delivery session

In this context, Indonesian students in Thailand have the potential to act as agents of knowledge dissemination who can share accurate, up-to-date, and socially relevant

information. They may play an important role in addressing misinformation and hoaxes, particularly those related to education, culture, and global developments. Furthermore, students abroad can serve as reference points and sources of inspiration for peers in Indonesia by facilitating access to academic information, scholarship opportunities, research activities, and international programs. This role is consistent with study by Yanti et al. (2021), which indicates that Indonesian university students generally demonstrate a high level of digital literacy, enabling them to access, evaluate, and disseminate information effectively in academic contexts. Such competencies provide a strong foundation for students abroad to contribute to the development of a credible and responsible information ecosystem across national and international academic communities.

The program also demonstrated that effective information dissemination depends not only on technical skills but also on communication strategies and social networking capacities. Discussions during the activities emphasized the importance of building sustainable information-sharing communities through digital platforms such as social media, academic forums, and cross-campus collaborative initiatives. Through these channels, students can strengthen their role as connectors between international academic communities and educational stakeholders in Indonesia. This is consistent with Singh (2025), who highlights that social media significantly influences how individuals interact and exchange information within educational practices. In academic contexts, social media serves as an essential component of digital literacy by enabling students to share knowledge, collaborate, and access learning resources more effectively.

In addition, the activities fostered increased awareness among participants regarding the importance of digital ethics and social responsibility in information dissemination. In the current era of information abundance, individuals play a crucial role in ensuring that the knowledge they share is accurate, ethical, and socially beneficial. This emphasis aligns with previous studies on digital literacy, which highlight ethical awareness and responsible information behavior as essential components of digital literacy competence in higher education (Ahsan et al., 2025). Furthermore, research in the Asian context demonstrates that strong digital literacy skills contribute not only to academic success but also to responsible engagement in digital learning environments (Rahman et al., 2024). Supported by their digital literacy competencies and international academic networks, Indonesian students abroad therefore possess significant potential to contribute to the development of a healthy and responsible information literacy culture within academic communities and broader society.

Through this community service program, a contribution was made toward strengthening the digital literacy of Indonesian students in Thailand while also fostering collective awareness of their strategic role within the global information ecosystem. By enhancing literacy competencies and applying effective dissemination strategies, Indonesian students abroad are expected to function not only as information consumers but also as ethical, knowledgeable, and resonsible producers and distributors of information.

Figure 3. Group photo with participants

As a closing activity, a group photo session and the signing of a Memorandum of Agreement (MoA) between the implementation team and the Association of Indonesian Students in Thailand were conducted. This activity symbolized a shared commitment to continued collaboration in the areas of literacy development, knowledge exchange, and future community service initiatives. The signing of the MoA marked not only the conclusion of the program but also the beginning of a more sustainable partnership between Indonesian higher education institutions and Indonesian student communities abroad.

Questionnaire Results

Table 1. Results of the Community Service Implementation Questionnaire

No	Assessed Aspect	Average Score (1–5)	Category
1	Training materials met participants' needs	4.09	Satisfied
2	The delivery by the speakers was clear and easy to understand	4.13	Satisfied
3	The program improved participants' understanding of digital literacy	4.04	Satisfied
4	The program enhanced participants' information dissemination skills	4.22	Satisfied
5	Overall, the program was beneficial and relevant to participants' academic needs	4.17	Satisfied

Based on the questionnaire responses, the community service program was perceived as well implemented and successful in achieving its primary objectives of strengthening participants' understanding and basic skills related to digital literacy and information dissemination strategies. Participants indicated that the training materials were aligned with their academic needs, particularly within the context of being Indonesian students studying in Thailand. The topics addressed were considered relevant and responsive to real challenges encountered in the digital information environment.

The delivery of the materials by the resource persons received positive feedback, as participants found the presentations to be clear, communicative, and easy to understand, supported by examples closely related to their academic experiences. The program also

reinforced participants' awareness of the importance of critical thinking, digital ethics, and the ability to evaluate information validity amid the rapid circulation of digital content.

Participants reported improvements in their understanding of information dissemination practices, particularly in applying appropriate, ethical, and responsible strategies across various digital platforms. Overall, the program was considered relevant to participants' academic needs and supportive of their roles as Indonesian students abroad. Beyond providing new insights, the activities encouraged participants to actively engage in promoting healthy digital literacy practices and positive information dissemination within academic environments and the wider community.

CONCLUSIONS

The community service program focusing on strengthening digital literacy and information dissemination strategies among Indonesian students in Thailand demonstrated measurable improvements in participants' competencies. Based on post-program evaluation, participants showed clearer understanding of critical thinking in digital contexts, ethical use of digital media, and systematic approaches to evaluating and disseminating information. The highest perceived development was observed in participants' ability to apply appropriate and responsible information dissemination strategies, indicating a shift from passive information consumption toward more reflective and accountable digital practices. These outcomes support previous findings by Yanti et al. (2021), which suggest that Indonesian students generally possess a strong foundation in digital literacy that can be further optimized through targeted academic interventions.

In terms of success indicators, the program outcomes were reflected in participants' positive evaluations of material relevance, clarity of delivery, and perceived usefulness for academic activities. Qualitative feedback also indicated changes in digital behavior, particularly in participants' increased awareness of information verification, ethical considerations in content sharing, and their role in countering misinformation. Beyond individual competency development, the program contributed to strengthening academic networking between Indonesian higher education institutions and Indonesian student communities abroad. This reinforces the strategic role of Indonesian students in Thailand not only as learners, but also as credible intermediaries who can disseminate accurate academic information, promote international academic opportunities, and support knowledge exchange between global academic environments and educational stakeholders in Indonesia.

From a practical perspective, these findings imply that structured digital literacy programs can effectively support Indonesian students abroad in fulfilling their dual roles as academic participants and agents of knowledge dissemination. For higher education institutions, such programs provide a scalable model for integrating digital literacy, ethical communication, and international academic engagement within community service initiatives. To ensure sustainability, future programs are recommended to incorporate pre- and post-assessment instruments to more explicitly measure competency changes, include follow-up mentoring sessions to observe longer-term behavioral impacts, and expand collaboration with international partners to strengthen cross-border academic networks. Further research and community service initiatives may also explore longitudinal designs to assess how sustained digital literacy interventions influence students' information practices and contributions over time.

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