

Development of 21st Century Skills via a Social Service Program at the Tertiary Education Level in Indonesia

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Abstract

This case study examines the development of 21st century skills through Indonesia's Social Learning Service Program (KKN) and investigates factors supporting its implementation at UNTAG, Surabaya. Using a qualitative approach, data were collected through interviews with key informants including university administrators, lecturers, students, and community members, along with field observations and document analysis. The findings reveal that the KKN program, established in 1951, has evolved through four modifications to become a mandatory curriculum component in Indonesian universities. The program's success is attributed to effective leadership, stakeholder participation, strong teamwork, knowledge transfer, and autonomous program management. The learning process follows a project-based approach with four phases: Preparation, Action, After Action, and Evaluation, allowing students to apply theoretical knowledge in real-world situations. This study demonstrates how social service programs can effectively develop essential 21st century competencies in higher education students while contributing to community development. The findings provide valuable insights for higher education institutions seeking to integrate service learning with skills development for the 21st century workforce.

Keywords: 21st Century Skills, Higher education, Indonesia, Social Service Program, Tertiary Education.

Introduction

Higher educational institutions serve multiple roles encompassing teaching, research, cultural preservation, and social service delivery. These institutions are responsible for producing graduates who are well-equipped for societal needs. In pursuit of this goal, educational institutions develop comprehensive programs that provide students with both academic knowledge and essential life skills. Universities typically implement mandatory general education courses across all faculties, designed to equip students with practical skills and knowledge applicable to real-world situations post-graduation. While these programs aim to enhance students' capabilities and future prospects, Brooks (2017) argues that higher education institutions must extend their efforts further to help students navigate an increasingly uncertain future, particularly in countries where social structures provide limited guidance for young adults' career development and life direction.

Among the most challenging life skills for graduates to develop are '21st century skills' (Bellanca & Brandt, 2010; Care, Griffin, & Wilson, 2018; Griffin & Care, 2015; Trilling & Fadel, 2009). These competencies encompass technological proficiency, creativity, lifestyle management, and professional capabilities, with their measurement frameworks emerging as a significant focus of research (Dede, 2010; Lee & Hung, 2012; Reeves, 2010; Kaufman, 2013). Walser (2008) emphasizes that 21st century skills extend beyond technological proficiency to include fundamental capabilities such as learning ability, teamwork, collaboration, and self-directed learning. Specifically, these skills comprise critical thinking, problem-solving, written and oral communication, creativity, leadership, adaptability, responsibility, and global awareness. This perspective aligns with Saavedra and Opfer (2012) and Wagner (2008), who highlight the importance of critical thinking, problem-solving, collaboration, leadership, agility, adaptability, entrepreneurialism, effective communication, information analysis, curiosity, and imagination. The significance of developing 21st century skills lies in the evolving demands of contemporary society, which

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differ substantially from those of two decades ago. These skills are fundamental to national development and economic prosperity. As Leward and Hirata (2011) assert, today's world demands competencies in accessing, synthesizing, and communicating information; collaborating across diverse contexts; solving complex problems; and generating new knowledge through innovative technological applications.

The contemporary era demands diverse skill sets from the younger generation, particularly in learning, thinking, and innovation. According to Mansilla and Jackson (2011), 21st century students must develop four essential capabilities: investigating the world beyond their immediate environment, recognizing and comparing different perspectives, communicating ideas effectively to diverse audiences, and taking action to improve conditions. The development of these capabilities requires coordinated efforts among teachers, administrators, policy makers, community leaders, researchers, parents, students, and other stakeholders. The Asia-Pacific Economic Cooperation (2008) emphasizes that education systems must align with the development of students' 21st century competencies, specifically defining these as lifelong learning, problem solving, self-management, and teamwork. The Partnership for 21st Century Skills (2016) further elaborates these competencies to include information and media literacy, communication skills, critical thinking and problem solving, interpersonal collaboration, self-direction, economic and business literacy, entrepreneurship, and global awareness.

In response to the recognized importance of these skills, Darling-Hammond (2006) proposes an optimal approach for their development. This framework emphasizes addressing real-world problems and processes, supporting inquiry-based learning experiences, providing opportunities for collaborative project work, and focusing on learning methodologies rather than content. Specifically, Darling-Hammond advocates for integrating Information and Communication Technology (ICT) with inquiry and project-based learning as an effective instructional strategy.

Social Service Learning

The traditional approach to student development through service learning is commonly known as Work-Integrated Learning, a model widely implemented across various countries. A critical aspect of this approach is creating an environment that effectively integrates theoretical knowledge with practical application (Ferrandez-Berruenco et al., 2014). Orrell (2004) identifies five key focus areas for ensuring the quality of Work-Integrated Programs: management, teaching and supervision, assessment, legal and ethical considerations, and partnerships with host organizations. Additionally, three primary factors contribute to the program's success: support from senior personnel across both faculty and central administration, adequate funding resources, and institutional commitment to program coordinators and instructors. In response to the growing demand for developing students' 21st century competencies, educational curricula have evolved to address these emerging requirements. The Social Learning Service Program, sharing similar objectives with Work-Integrated Learning, has been introduced as a mechanism for preparing students to engage meaningfully with society and contribute to national development.

Work-Integrated Learning (WIL) represents a traditional approach to student development that has been widely adopted across various countries. A fundamental challenge in WIL implementation lies in creating an environment that effectively integrates theoretical knowledge with practical application (Ferrandez-Berruenco et al., 2014). According to Orrell (2004), ensuring the quality of WIL programs requires focus on five critical aspects: management, teaching and supervision, assessment, legal and ethical considerations, and partnerships with host organizations. The success of these programs is further supported by three key factors: leadership support from both faculty and central administration, adequate funding resources, and institutional commitment to program coordinators and instructors. In response to the growing demand for developing students' 21st-century competencies, educational institutions have evolved their curricula accordingly. The Social Learning Service Program emerges as a complementary approach to WIL, specifically designed to prepare students for societal engagement and national service.

Social service learning extends student learning beyond traditional classroom boundaries. Simons and Beverly (2006) conducted explanatory research examining how service learning influences students' personal and social development. Their study identified major processes within academic social service

learning that develop social, interpersonal, emotional, and cognitive skills through distinct themes and patterns. The framework encompasses four primary themes that operate through social interpersonal processes. The first theme, academic learning, focuses on developing enhanced understanding and practical application abilities. The second theme, career development, emphasizes hands-on experience to expand career opportunities and professional competencies. The third theme addresses community connections through cultivating beliefs in social good and relationship building. The fourth theme concentrates on problem-solving through practical knowledge application. These themes operate across multiple dimensions. In the emotional dimension, academic learning fosters empathy, compassion, and gratitude for opportunities and resources, while career development builds self-confidence. In the cognitive dimension, academic learning promotes innovation and evaluation skills, while career development cultivates respect for team members and community stakeholders.

Weigert (1998) conceptualized Academic Service Learning (ASL) as an instructional approach enabling students to gain direct experience through social service activities based on community needs and problems while aligning with course objectives. This interactive approach evaluates students on both academic achievement and social service performance. Butin (2010) further supported this perspective, arguing that service learning optimally facilitates students' understanding of human nature and knowledge application in their lives, while enabling them to adapt their roles across academic, professional, and human relationships. This approach fosters the development of democratic values, collaboration skills, problem-solving abilities, and social responsibility. Traditional social service-learning activities primarily focused on citizen involvement through community participation. However, contemporary public service management has evolved toward a co-creation model in the development and design of public services (Voorberg et al., 2017). This co-creation approach emphasizes dynamic interactions that generate value through engagement, with public service users serving dual roles as both service recipients and invested citizens in service outcomes. The co-creation concept has subsequently been integrated into teaching and learning programs. Cook-Sather (2019) demonstrates how co-creation facilitates pedagogical partnerships by enabling staff members to develop their voice through dialogue with diverse student perspectives, particularly in addressing inequality. This approach to teaching and learning promotes respect for both staff and student voices, potentially advancing more equitable educational practices in higher education.

Levesque-Bristol et al. (2011) emphasize that meaningful learning experience constitutes the core principle of social service learning, wherein learners assess community needs and engage in collaborative problem-solving with community members. This creative approach involves educational institutions, learners, stakeholders, and community members in a mutual exchange of experiences and benefits. The process encompasses four key procedures: learners planning activities based on their capabilities with instructor facilitation, conducting community needs assessments before implementation, collaborative outcome assessment by instructors and stakeholders, and institutional evaluation of the completed program.

Levesque-Bristol, Knapp, and Fisher (2011) further delineate this process into three primary phases. The pre-service phase involves familiarizing learners with social learning concepts, collaborative planning with communities, outcome specification, co-assessment for self-development, and learning experience consolidation. The service phase focuses on project implementation and skill development. The post-service phase includes self-evaluation and experience sharing, knowledge acquisition from practical experiences, and future project planning when needed.

As higher education institutions, universities pursue three major goals: teaching, research, and social services. The social service mission specifically aims to serve communities while developing students' capacities for societal contribution and development (Darling-Hammond, 2006). Contemporary educational institutions emphasize cultivating 21st century skills to prepare students for global engagement. Within this context, this study examines two primary objectives: investigating the development of 21st century skills through Indonesia's Social Learning Service Program and analyzing factors that support effective program management.

Methodology

This research employs a case study approach with narrative analysis to examine the development of 21st century skills through social learning service programs. Following Yin's (2014) methodology, the case study design enables researchers to maintain a holistic real-world perspective while focusing on students' developmental trajectories and performance outcomes. The investigation centered on staff-student interactions, analyzing transcribed dialogues and examining participants' sense of empowerment and confidence throughout their involvement in the Social Learning process. Data collection incorporated multiple sources, including informal feedback from students and staff, along with reflective and evaluation reports from students, staff members, and community participants.

Key Informants

This study collected data from ten purposively selected key informants, comprising one university administrator, two program supervising lecturers, four KKN program participating students, and three community members, representing diverse stakeholder perspectives in the program implementation.

Data Collection

The study employed multiple data collection methods incorporating both primary and secondary sources. Secondary data were systematically gathered from documents pertaining to 21st century skills development and social service-learning practices. Primary data collection involved in-depth interviews with key informants, conducted through interpreters due to language barriers, with the interpreters being KKN program participants who possessed contextual understanding of the program. This interpretive approach served as a validation mechanism for secondary data analysis. Additionally, participant observation was conducted to comprehend the complete KKN program process, with data systematically recorded through observation protocols and research logs.

Research Instruments

A set of semi-structured interview questionnaires was used. The semi-structured interview questionnaires were reviewed by the instructors of UNTAG Surabaya university for content validity. A framework for non-participant observation based on the KKN program objectives was also developed and reviewed by instructors who were responsible for the program, then implemented as a research instrument.

Data Analysis

The data analysis of this study is based on content analysis. The data obtained from the document review were employed to determine the major themes of co-creation for 21st century skill development. The data obtained from in-depth interview and non-participant observation were analyzed based on the concept of 21st century skills. The data collected were categorized and managed using the content analysis.

Results

The development of 21st Century Skills through the Social Learning Service Program in Indonesia

The Social Service Program in Indonesia formally began in 1951. The program, which is now known as *Kuliah Kerja Nyata* (KKN, Student Learning Service Program), has been revised several times. In 1949, the nascent scheme began as a policy for the tertiary education level in Indonesia. Then, in 1951, the program was named the "Student Power Mobilization" program, and it was pioneered by Koesnadi Hardjosoemantri, the President of Gadjah Mada University (GMU), a public university founded on 19 December 1949 and one of the oldest and most prestigious Indonesian universities (Suwarni & Santoso, 2009). The program's students were sent to teach children at schools in the countryside, with the objective being to provide or improve education in disadvantaged areas.

This was then later adapted from being training only for Faculty of Education students and transformed into a compulsory course for every faculty. Moreover, the program also requires students to work in the community, not just in schools. Then, on the occasion the third time the program was modified, in 1962, more than 1,400 students participated in the program, covering 161 schools and communities in 98 regions outside Java. Then, the program was transformed into the “Student Community Service” program. Next, in 1971, the Director General for the Department of Higher Education evaluated the Student Community Service program and then transformed it into the KKN program. The nature of the program provided an opportunity for students to learn through hands-on experience, via an opportunity to understand real problems in the countryside. The program aims to help raise student awareness of social issues and develop compassion for others. All these experiences lead to students who are well-equipped with a sense of public awareness as well as a sense of responsibility as good citizens (Krisnawati, 2009).

Finally, in 1973, the KKN was included on the national agenda. This program was added to the curriculum and made a compulsory course at all Indonesian universities. The program is under the supervision of the Institute of Research and Community Service.

Factors Supporting the Management of the Student Learning Service Program

Based on our document analysis, interviews with key informants, and field observation, it can be concluded that the factors supporting the effectiveness of the program management of the KKN program at UNTAG, in Surabaya include the following: good leadership, participation, good management, and the autonomous nature of the program. A good leader possesses the attributes of good leadership, such as an exemplary character, persuasiveness, a vision, enthusiasm for their work and for their role as a leader, confidence, and effectiveness in meeting all the targets to serve the public. The leader of the program during the investigation of this study was the President of Universitas 17 Agustus 1945, Surabaya.

All the key informants agree that the president was a good leader and high performer with leadership skills and a far-sighted vision. In addition, she expressed herself seriously, was a hard worker, and was sociable. As university staff member opined:

She develops a close relationship with students and gets along well with community people in the countryside. (Respondent A)

The involved parties feel that they can share information with her, and students are confident to talk to her about their problems. They can get information they need, get to discuss the gist of the problem, and get to solve the problem in the right way. (Respondent B)

The president can persuade people in the villages to change their attitudes and behavior. The strongest point is she's never afraid to roll up her sleeves and get dirty... (Respondent C)

Members of the community expressed similar sentiments. Interviews with key informants revealed that the KKN program in UNTAG, Surabaya, cannot succeed without participation from all the stakeholders. Multiple respondents affirmed that participation is at the heart of this program. Participation involves collaboration with the districts; the villages; the Institute of Nation and Politics agency, which is a government organization; and UNTAG itself. All these organizations work together, such as in choosing the village for program implantation, deciding on the development project by having students plan the project with the people in the villages, or sometimes, asking for cooperation from the local government and private companies to support the project.

The KKN of UNTAG also demonstrates good management, consisting of seven aspects. These comprise policy, authority and functions, planning, administration, staff, evaluation report, and budget. These UNTAG-generated functions are similar to Luther Gulick's POSDCORB: Planning, Organizing, Staffing, Directing, Coordinating, Reporting and Budgeting, which reflects the classic view of key responsibilities of the senior executive (Gulick, 1987). The functions of each aspect were analyzed, with the following summary findings.

First, the policy was clearly defined in terms of both the goals and policy of the KKN program. Second, the president assigned authority to the Institute of Research and Community Service to administer this program. Also, the program was implemented according to government rules and regulations. All the stakeholders share the goal of greatly improving the potential of the community. The University assigns supervisors both at the level of the faculty and in the field. Third, the University does not solely plan the project by itself; it is open for all stakeholders to participate in the plan. This starts with selected areas of activity. The student activities are carried out to understand the problems and real needs of the target area. Fourth, based on document analysis, it was evident that the administration was well structured. The work required by the organization's mission was clearly defined. The scope of powers and duties of each position were divided into different sections. Fifth, the lecturers who served as key informants confirmed that the number of staff allocated is sufficient. All of them possessed the knowledge, ability and motivation to participate in volunteer activities. Moreover, there was also a standard evaluation process for staff performance. Sixth, the program also paid attention to final reports. These consist of student performance reports (group and individual reports), the DPL's report (Field Supervisor's Report), and Institute of Research and Community Service's reports. All these reports are related to what tasks the project achieved and what community problems they worked on, whom in the local government they worked with, and what the outcomes of the project were. Seventh, it was also found that the management of the budgeting was transparent. It is audited using a financial report. This university is a private university. They have to rely on funding from tuition fees paid by students' enrollment. So, the budget has to be spent sparingly, in a worthwhile and efficient manner.

As for the field work management, this program not only instills teamwork in students, who learn how to work with others, but also provides an opportunity for students to manage their work in a harmonious manner in a spirit of reconciliation, compassion and generosity. The program also creates a major network of university professors and other involved parties that works collaboratively. Students who participated in the program stated,

We have a great opportunity to work with people who have more experience than us. We learned from them and are able to work collaboratively with them... (Student A)

Working in a team motivated us to work and constructive suggestions and supports from the field supervisor gave us a confidence to exchange the ideas and work with community people [...] (Student B)

Also, the lecturer who supervised the program noted,

This working approach strengthened the foundations of the community, unity, participation, and teamwork, and operated smoothly, with no conflicts, which led to successful and effective work performance. The students and community form a strong team because they have the same goal, which is devotion to the public [...] (Lecturer A)

The students learn communication skills, transferring knowledge and innovation to community people. It was revealed that the innovations introduced as part of the projects can solve community problems easily, quickly and efficiently, such as by providing value added for the community's products. This situation was confirmed by the interview with community people:

The community learned value added techniques such as the design of packaging and food processing, as well as learning how to use the Internet in the community. The program also contributed to the development of varieties of rice that are suited for the area. There is also a project that distributed and transferred knowledge about agricultural development, such as planting mangosteen trees to prevent soil erosion during flash floods [...] (Respondent D)

The students also learn new skills when they work collaboratively with their peers. They brainstorm new ideas and generate new knowledge without limits. They can apply theories in practice, learn leadership skills, and learn to be good followers as well as assertive characters. In addition, communities are free to express their opinions, needs and problems. The students stated:

We had a meeting with community people. We both shared information and consulted them. We also took their needs into consideration for the implementation of any new projects [...] (Student C)

We exchanged our ideas and help each other solving the problems. We learn to adjust ourselves to listen to others and coordinate work with the team. The field work provided opportunities for us to solve problems and evaluate the effectiveness of the solutions [...] (Student D)

The strategy provides activities which are appropriate and relevant to the community. Even the more innovative projects were well accepted. This reflects a good approach for developing the potential of the community.

The learning process according to the Student Learning Service Program

In order to understand the contribution of the KKN to the development of 21st century skills, the President of UNTAG was interviewed on the activities of the KKN program. She stated,

The activities are conducted in response to a community's needs. The management approach starts with coordination with Bareng sub-district, in Jombang Regency, and Wiyung, sub-district in Surabaya Province. The students are required to attend the special training program for 12 weeks.

The types of the program, which can be summarised as follows: 1) Regular program: For all of the present bachelor degree students who have enrolled in the regular course. Students have to work in the field for not less than 12 days in a row. 2) Irregular program: For all of the present bachelor degree students who have enrolled in the special course (evening class). They have to work in the field only on Saturdays and Sundays, for about six weeks, equivalent to 12 days. Students need to get permission from their work because most of the students are employed. 3) Special program: This program aims at benefiting the community by helping, improving and developing a community under the university's responsibility when there is a disaster, or local communities need assistance, or in emergency situations.

The requirements for the students who are qualified for registration include:

Students who are presently enrolled in the university who have accumulated at least 110 credits; 2) as for students who are not regular students, they must obtain permission from their employers in order to work in the KKN (Lembaga Penelitiandan Pengabdian Kepada Masyarakat, 2014a).

When analyzing the process of the student project and 21st century skills development, it was found that: i) the activities of both regular and irregular students are divided into four phases, namely preparation, action, post-action and evaluation; ii) in the preparation phase, students who are qualified and desire to register for the program have to enroll in this subject, and then they have to attend at least 80% of a training program. They will learn basic research, how to work with communities, action research and problem solving. After the training session, the students have to produce a training report; iii) in the action phase, students form a work group which consists of participants who come from more than one faculty. They spend the first two weeks investigating the problems, conducting a needs assessment survey, and observing various aspects of the community, such as healthcare, village-based needs, education for children, agricultural consultation, nutrition, infrastructure development and other community problems. Then they develop a work plan or project that corresponds to the target and community culture.

When conducting activities, students apply their knowledge to real situations. They learn to communicate with diverse audiences and develop their communication skills. At the same time, they have to cultivate teamwork because they have to work in a group with members of different faculties. Next, the team has to adjust the plan with the supervisor and leader or people in the community. In the fieldwork, the group of students has to stay in the community for 12 days and work as planned. After the action phase, the students have to prepare samples/models/results and work on a report in order to present their project to the public; iv) the evaluation phase is conducted by the community and the supervisor. The project assessment and grading are designed properly and based on collaborative work between community members and the staff

who are the supervisors of the program.

This means that the project is evaluated by external agencies as well. The evaluators use a standard measurement developed by the National Assessment Team. This measurement tool is used by every university. The process of evaluation covers the university, the community, the activities and the instructors' performances. The criteria for assessment consist of 20% for attending the training program, 50% for field work activities, and 30% for the presentation and report. The university-assigned supervisors work both at the faculty and in the field. Importantly, input for the program evaluation also comes from the community and the stakeholders in the field (Lembaga Penelitiandan Pengabdian Kepada Masyarakat, 2014b).

To sum up, the contribution of the KKN Social Service program to the development of 21st century skills as required by higher education institutions is presented in Table 1.

Table 1. The KKN Social Service Program to the Development of 21st Century Skills as Required by Higher Education Institutions.

| Skills required | Activities | Students Performances |
|---------------------------------|---|--|
| Critical thinking | Develop projects to meet community's needs . | Be able to employ their knowledge and ability evaluate and explore issue, solve problem and develop one own opinions. |
| Leadership | Teamwork Management. | Be able to communicate ideas effectively to a diverse audience, management teamwork, undertake responsibilities, interacting effectively with others to accomplish shared goals. |
| Technological Literacy | Search information to solve problems. | Be able to understand, use and evaluate technology, access and analyse information |
| Collaboration and communication | Work and share information with team member community people. | Be able to collaborate, written and oral communication across different situations |
| Information Literacy | Collecting data from various sources, analysing information and implementing the gain knowledge in the project as well as producing final report. | Be able to evaluate and use appropriate information from multiple sources to respond to a variety of needs |
| Global Awareness | Share the opinion with team member, meeting with community people and evaluate for appropriate conclusion. | Be able to understand and value their own and other culture |

Conclusion and Discussion

The investigation of UNTAG Surabaya's social service program and literature review on 21st century skills development reveals several critical success factors in program implementation. The primary element centers on students providing meaningful community services, particularly evidenced through their

effective work in agricultural settings that directly addresses community-identified needs through participatory needs assessment. Faculty members must strategically build community trust while balancing program operations with both community needs and student backgrounds, as emphasized by Weigert (1998), though this requires well-structured planning given university personnel's multiple responsibilities. The second factor focuses on developing a learning environment that prepares students for real-world engagement through comprehensive coursework incorporating critical thinking, innovation, life and career skills, problem-solving, teamwork, and information, media, and technology competencies, necessitating curriculum adaptation to align with 21st century skills development principles. The third factor involves university personnel preparation for program administration and community collaboration, with Kennedy et al. (2016) highlighting the importance of developing staff members' educational skills through targeted training programs.

UNTAG's success in establishing community networks and implementing the KKN program aligns with Levesque-Bristol, Knapp, and Fisher's (2011) recommendations, treating communities as extension units that serve as learning environments for developing true partnerships in graduate education. This approach emphasizes collaborative university-community relationships and shared stakeholder participation in program assessment and evaluation. The implementation of 21st century skills development assessment presents significant challenges, as the evaluation structure, while clearly addressing both student and program outcomes through standardized measurement tools, lacks clearly defined evaluative instruments. This suggests the need for stakeholders to modify and enhance these tools before program implementation, incorporating both formative and summative evaluation approaches to ensure continuous feedback to program administrators and staff.

While the KKN implementation guidelines provide comprehensive steps for developing 21st century skills, several critical considerations emerge for program execution. The program's participatory nature necessitates diverse evaluative approaches, including Participatory Action Research and case study analysis, to enhance program evaluation effectiveness. The assessment phase presents significant challenges, as the national standard evaluation framework contains measurement processes that program implementation teams find unclear, suggesting the need for locally adapted evaluation tools. The program structure requires clear mechanisms for student performance reflection through varied assignments, with feedback integrated into program assessment alongside supervisor and partner input. The community-based approach demands that UNTAG's faculty establish robust community networks, addressing practical considerations such as transportation, supervision assignments, and placement site identification, while a dedicated administrative unit should oversee program management, ensuring close supervision for both collaboration and monitoring, incorporating both formative and summative evaluation approaches. As a comprehensive approach to 21st century skills development, the KKN program presents multiple challenges and rewards, requiring stakeholder understanding of both the obstacles and satisfactions inherent in program management, including community appreciation and program benefits.

The evidence demonstrates that students successfully developed 21st century skills through their Social Learning Services experiences, with the program facilitating unique collaborative partnerships among faculty, students, and community members for mutual development. The program's effectiveness is supported by comprehensive supervisor support and systematic stakeholder-based evaluations monitoring learning outcomes through reflections and debriefings. As Orrell (2004) suggests regarding Work-Based Learning implementation, institutional leadership support and commitment to program coordinators and instructors represents a crucial program strength. The dialogue-based communication approach among staff, students, and community members has fostered dynamic relationships, generating effective co-creation among all participants (Voorberg et al., 2017; Cook-Sather, 2023). Future research directions should focus on two key areas: conducting comparative analyses of social learning service programs across ASEAN universities to evaluate regional program management strengths and weaknesses, and developing quantitative indices for assessing KKN program effectiveness across diverse contexts and management approaches.

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