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COMMUNITY ENGAGEMENT AND STUDENT LEARNING THROUGH INTERNATIONAL SULAM PROJECTS: INSIGHTS FROM THE 1ST INTERNATIONAL SYMPOSIUM ON SUSTAINABLE COMMUNITIES

Nur Izzati Ab Rani¹, Siti Hamidah Abdull Rahman², Che Maznah Mat Isa^{3*}

¹ School of Civil Engineering, College of Engineering, Universiti Teknologi MARA, Shah Alam 40450, Selangor, Malaysia

Email: izzati.rani@uitm.edu.my

² School of Civil Engineering, College of Engineering, Universiti Teknologi MARA, Shah Alam 40450, Selangor, Malaysia

Email: hamidahar@uitm.edu.my

³ Civil Engineering Studies, College of Engineering Universiti Teknologi MARA Cawangan Pulau Pinang Permatang Pauh Campus, 13500 Pulau Pinang, Malaysia

Email: chema982@uitm.edu.my

* Corresponding Author

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Abstract:

Service-learning has emerged as an innovative pedagogical approach that combines academic coursework with meaningful community engagement. The SULAM (Service-Learning Malaysia-University for Society) initiative, supported by the Malaysian Ministry of Higher Education, aims to address the students' educational experiences and the feedbacks from the symposium. The 1st International Symposium on Sustainable Communities Through SULAM Projects 2023 highlighted the transformative impact of integrating academic learning with community service. This paper analyses quantitative study on the entry-exit survey and the qualitative study through symposium's activities, focusing on the effectiveness of the SULAM projects in fostering sustainable communities. Using the survey and document analysis, the key findings indicate the SULAM projects enhanced community engagement, improved student skills, and significant contributions to sustainability goals. The study also identifies challenges through the discussion through the symposium in scalability and evaluation, offering recommendations for future initiatives.

Keywords:

International Symposium, Community Engagement, Student Learning, SULAM Projects, Sustainable Communities,



Introduction

Service-Learning Malaysia-University for Society or SULAM has emerged as an educational approach that combines academic coursework with community service. The 1st International Symposium on Sustainable Communities Through SULAM Projects 2023 served as a platform to showcase the impact of these initiatives. SULAM projects aim to address real-world challenges while providing students with practical experience and fostering a sense of social responsibility. Studies have demonstrated that such approaches can significantly enhance student engagement and community impact (González-Sánchez et al., 2022; Paul et al., 2023). Additionally, the integration of service-learning into university curricula has shown to foster critical thinking and social responsibility among students, contributing to sustainable community development (Bilous et al., 2022; Hurd & Stanton, 2022). Despite the recognized benefits of service-learning, challenges remain in effectively measuring the impact of these projects and scaling them to achieve broader societal benefits.

This paper aims to analyze the activities and outcomes of the 1st International Symposium on Sustainable Communities Through SULAM Projects 2023. Specifically, it seeks to evaluate the effectiveness of SULAM projects in enhancing community engagement and student learning.

Literature Review

Service-learning is an innovative pedagogical approach that combines academic coursework with meaningful community engagement, aiming to address societal challenges while enriching students' educational experiences. The SULAM (Service-Learning Malaysia-University for Society) initiative, supported by the Malaysian Ministry of Higher Education, exemplifies this approach by integrating service projects with academic learning (Salam et al., 2019).

Impact on Community Engagement and Student Skills

Previous study has demonstrated that community service programs significantly enhance student engagement by linking academic concepts to real-world applications. Students can report what they gain in teamwork, communication, and problem-solving skills through collaboration on projects that address community needs. A study by Ahmad and Ismail (2023) examines how service-learning activities in Malaysia enhance students' personal growth, civic responsibility, and academic learning. It highlights that students engaged in community voluntary work develop a strong commitment without expecting rewards, aligning with the core elements of service learning. Furthermore, these experiences cultivate a sense of responsibility and commitment among students and encourage them to become more active members of their communities (Ahmad & Ismail, 2023; Eyler & Giles, 1999; Bringle & Hatcher, 2002).

Contributions to Sustainability Goals

Community service programs frequently align with sustainability goals by tackling environmental, social, and economic issues. Previous research indicates that involving students in sustainability-centred projects enhances their awareness and encourages practices that

benefit both communities and the planet. Furthermore, service-learning programs have been shown to produce positive outcomes for the environment and the community, thereby reinforcing sustainable practices and urging students to critically reflect on their roles in promoting sustainability (Sterling, 2001).

Challenges in Scalability, Compatibility and Evaluation

Previous research has identified considerable challenges in scaling community service programs and evaluating their effectiveness. Many programs face limitations due to scarce resources, differing levels of institutional commitment, and inconsistent partnerships with the community. Additionally, assessing the impact of these initiatives proves challenging, as it often necessitates comprehensive metrics to evaluate both student learning outcomes and benefits to the community. Rahim and Khalid (2020) explore the challenges faced by lecturers and students in Malaysia when participating in service-learning. It emphasizes the need for a deeper understanding of contextual compatibility to effectively implement service-learning programs in the country.

The SULAM initiative demonstrates the potential of service-learning to enhance educational experiences and address societal challenges. By integrating academic coursework with community engagement, SULAM projects contribute to sustainable community development and student skill enhancement, although challenges in scalability and evaluation remain to be addressed for future improvements (Aris et al., 2024).

Methodology

This study adopts qualitative approach based on the project report review and analysis on the symposium activities. Besides that, a quantitative approach also conducted where the data collected through participant feedback surveys focusing on the perceived impact of the projects on the students involved. The project was conducted on 17 June 2023 as shown in Figure 1, consist of one main program “Guardian Against Garbage (GAG)” with four sub program River Monitoring & Community Greening, River Care, Water Filter Race and Eco Brick Project.



Figure 1: Tentative of Guardian Against Garbage (GAG)



Figure 2: Poster of the Symposium

Meanwhile, the 1st International Symposium on Sustainable Communities Through SULAM Projects 2023 was held on the 26th of June 2023 as shows in Figure 2. It was organized by the final year students involved in GAG program for course Engineers in Society (EIS) in collaboration with Universiti Sains Malaysia and Presidency University, India. The activities include keynote speeches, panel discussions, and project presentations by the EIS students on their community project showcases to the experts from both Presidency University and Universiti Sains Malaysia in Figure 3. This symposium boosts the students' understanding of benefits on the community services integration with the course EIS (ECC589).

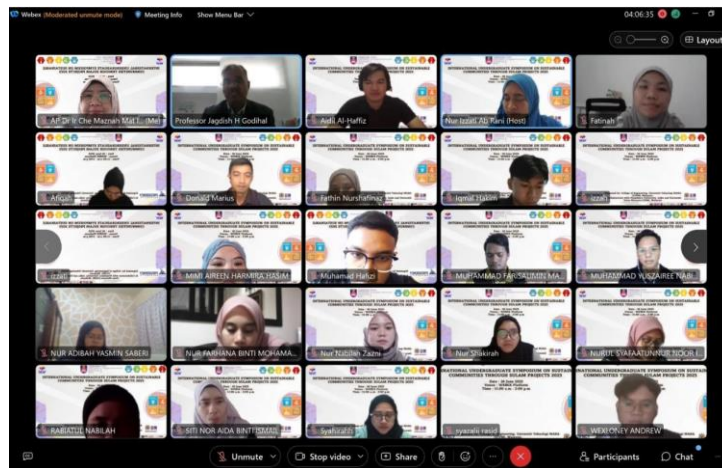


Figure 3: Keynote Speech by Prof Jagdish, Presidency University, India

Table 1 shows the entry survey in the early semester item t-1-1 to t-1-4, meanwhile at the end of the semester, there is an exit survey questions from item t-2-1 to t-2-3. Furthermore, Table 2 shows the Likert-scale of entry-exit survey from scale 1 (strongly disagree) to scale 5 (strongly agree).

Table 1: Entry-Exit Survey Questions

Item	Description
t-1-1	I am able to engage with the community as a prospective civil engineer in solving complex problems involving the civil engineering profession
t-1-2	I am able to contribute to the community by applying knowledge and skills learned in the classroom to help solve local problems.
t-1-3	I do understand that the Service-Learning Malaysia University for Society or known as SULAM is an initiative that provides a learning experience by integrating theory and practice to expose students to real-world problem solving in the community.
t-1-4	I do understand that SULAM is one of the important agendas in Ministry of Higher Education translated at the university level which can be considered as a noble effort by the university in producing holistic graduates by engaging them in helping the local community.
t-2-1	I understand and comprehend the ethical and professional conduct that guide a civil engineer's professional practice and service to the community.
t-2-2	I am able to adopt ethical and professional behavior that guides the professional practice and services of civil engineers to the community.
t-2-3	I do comprehend the role of engineering ethics and the professional responsibility of an engineer to public safety; the impacts of engineering activity: economic, social, cultural, environmental and sustainability

Table 2: Likert Scale of Entry-Exit Survey

Scale	Indicator
1	Strongly Disagree
2	Disagree
3	Mixed Feeling
4	Agree
5	Strongly Agree

Results and Discussion

Figure 3 illustrate the average ratings from the entry-exit survey for 20 students of the four sub projects students. The average of the entry survey can be seen as the students disagree on the they can engage with the community as a future civil engineer to solve complex engineering problems. They also disagree they can apply what they have learned in school to help address local issues. They also cannot understand how Service-Learning Malaysia University for Society (SULAM) is a program that combines theory and practice to give students real-world problem-solving experience. The also disagree to recognize SULAM is a key initiative by the Ministry of Higher Education to help universities create well-rounded graduates by involving them in community service.

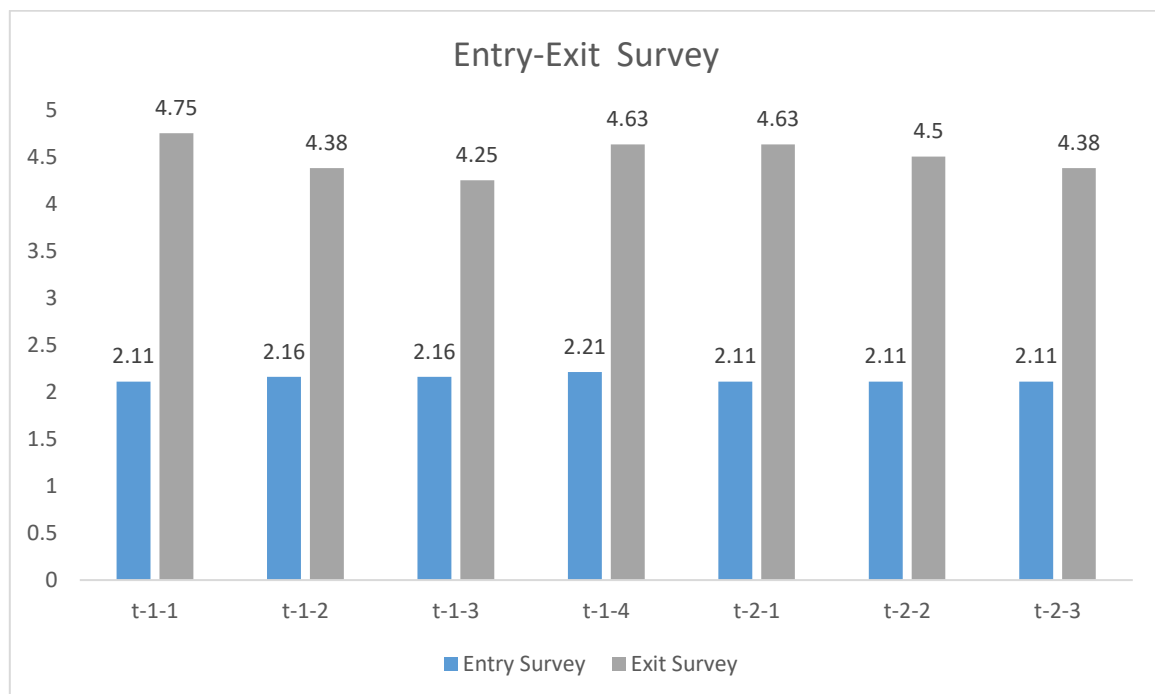


Figure 3: Average Ratings From Entry-Exit Survey For 4 Groups

However, after they conducted the program with the community and having the international symposium, they can relate with the ethical and professional standards in their work as a civil engineer in future to benefit the community. They also need to understand the importance of engineering ethics and the responsibility of engineers to ensure public safety, as well as the various impacts of engineering on the economy, society, culture, environment, and sustainability.

Table 3: Content Analysis of the 1st International Symposium

No.	Theme	Discussion
1	Impact on Community Engagement and Student Skills	The 1st International Symposium on Sustainable Communities Through SULAM Projects 2023 showed that combining academic learning with community service greatly improves community engagement and enhances student skills.
2	Contributions to Sustainability Goals	SULAM initiatives have made significant contributions to sustainability goals by addressing various societal challenges.
3	Challenges in Scalability and Evaluation	Scaling up these initiatives requires robust frameworks and sufficient resources, while effective evaluation necessitates comprehensive metrics to assess both educational outcomes and community impact.

Table 3 shows the content analysis from the 1st International Symposium on Sustainable Communities Through SULAM Projects 2023 highlighted the transformative impact of integrating academic learning with community service. SULAM projects that have been conducted were discussed at the symposium have demonstrated significant benefits in enhancing community engagement and student learning. Content analysis from the discussion through the symposium reveals that SULAM projects significantly enhance community engagement and improve student skills. These projects facilitate mutually beneficial relationships between students, faculty, and communities, promoting practical application of academic knowledge in real-world settings (Husin & Abd. Rahim, 2023; Aris et al., 2024).

Through these projects, students apply their academic knowledge to develop sustainable solutions, fostering a deeper understanding of sustainability issues and promoting long-term community benefits (Hassan et al., 2023). For instance, Paul et al., (2023) emphasize the role of service-learning in developing social consciousness and personal development among students.

Despite the successes, the study identifies challenges related to the scalability, compatibility and evaluation of SULAM projects. Scaling up these initiatives requires robust frameworks and sufficient resources, while effective evaluation necessitates comprehensive metrics to assess both educational outcomes and community impact. Recommendations for future initiatives include developing standardized evaluation tools and fostering collaborations between educational institutions and community organizations to sustain and expand the impact of service-learning projects (Naufal et al., 2024). Similarly, Bilous et al., (2022) discuss the reciprocal and respectful relationships fostered through community-based service-learning, which challenge traditional giver-receiver dynamics.

The symposium also revealed challenges in scaling these projects and evaluating their long-term impact. Hurd and Stanton (2022) propose a multilateral, equity-focused approach to community engagement that can potentially address these challenges and transform higher education's approach to community partnership-building and student learning. Furthermore, González-Sánchez et al., (2022) demonstrate the efficacy of service-learning in achieving sustainable development goals by integrating it into the curriculum, thus contributing to more inclusive and resilient communities.

Conclusions

Sustainable The findings from the qualitative analysis on the symposium activities indicate that SULAM projects significantly enhance community engagement and student learning outcomes in terms of improved soft skills, such as communication, teamwork, and problem-solving, as well as a deeper understanding of sustainability issues. However, challenges remain in scaling these projects and implementing robust evaluation frameworks. There are some limitations of this study, in which the SULAM projects presented at the symposium were conducted over relatively short periods, limiting the depth of engagement and long-term impact on both students and communities. Second, is the analysis primarily relied on self-reported feedback from participants, which can introduce bias and affect the accuracy of the findings. While individual projects showed significant impact, scaling and compatibility these initiatives to benefit a larger audience remains a challenge due to limited resources and logistical constraints. Next, is the online format of the symposium and some projects may have limited face-to-face interactions, which are crucial for building strong community relationships and engagement.

Recommendations For Future Research

Future research should involve extended duration studies to assess the long-term impact of SULAM projects on both students and communities. Longitudinal studies could provide deeper insights into the sustainability of project outcomes. A mixed-methods evaluation frameworks that combine quantitative and qualitative data to provide a more comprehensive assessment of project impact. This could include pre- and post-project assessments, interviews, and focus groups. Research could explore models for expanding reach, securing additional funding, and building stronger community partnerships. Research could focus on hybrid models that combine online and face-to-face interactions to maximize engagement and learning outcomes. academic excellence.

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