Article History

# UNDERGRADUATES' PERCEPTION OF COMMUNITY SERVICE **COURSE-NARRATIVES ON CHALLENGES AND INITIATIVES** AT TECHNICAL ENGINEERING UNIVERSITY

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#### Abstrak

Community service is an important co-curricular course which is offered to university students in many countries to develop critical thinking skills, awareness, empathy and soft-skills like management and communication. How such as course is able to instill in students the desired traits requires more study. This study aims to investigate the perception of undergraduates participating in community service course, the challenges that they have to face and their initiatives as mitigation strategies in achieving the goals of community service. Data for this study is elicited via a simple mix-method approach that combines elements of quantitative and qualitative research. The 68 undergraduates who served as purposive samples were enrolled in a 14-week co-curricular course called community service and were surveyed, interviewed and physically observed as they undertook the assigned tasks. All the community service groups were able to plan and execute four main projects. The study found five types of main challenges that the students have to face namely i. sourcing for funds and financial support, ii. logistics and manpower, iii. group dynamics, communication and cooperation, iv. time management and v. task planning and distribution. Initiatives and mitigation strategies undertaken by the students are having more specific meeting and discussion, exploring all possible options, appointing capable group leader who knows roles well and referring to and consulting lecturers. These insights from this study are useful for tertiary level curriculum planners to further enhance the effectiveness of such experiential learning course to further actualize the potential of the university students.

Keywords: community service, soft-skills, perception, challenges

# 1. INTRODUCTION

Community service is one of the options under co-curricular courses which is compulsory for undergraduates to enroll in as a graduating criteria at universities in Malaysia. For many technical universities that offer engineering and technology courses the elements of soft-skills like teamwork, communication problem-solving, and cooperation present in such courses like community service strongly complement the core skills within the engineering and technology curriculum. The synergy and integration of core hard skills as well as soft skills is

extremely essential for technical engineering students to develop to prepare them for the demanding workplaces challenges (Ahmad & Mohd Said, 2013). As a whole the objectives and content of the community service curriculum strongly relate to the seventeen sustainable development goals (SDGs) stipulated by the United Nation. Such co-curricular activities serve as a practical platform to instill positive values relevant for character development of a graduate who will join the workforce in the future and become leaders within their respective field and career. Ahmad (2012) believes that university has essential roles in not only in creating technological solutions for preserving the environment but more significantly in enhancing public awareness and sense of activism on sustainable matters. All these can be realized via a formal platform such as co - curricular activities like community service when tertiary students can put to practice the knowledge and skills that they acquire in the process of lending a hand to the needy within the community. Project-based community service learning experiences can also play an important role in preparing future engineering professionals (FSU, 2019).

Community service activities incorporate elements of indirect teaching and learning strategy where the lecturers must play an effective role of strategic advisors, counsellors, guide and facilitator in assisting the students to achieve the intended outcomes of the community service course. Participation in community service-learning and volunteering contributes to university students' positive development in terms of academic, psychological, and prosocial development (Hill, 2022). Integral elements in students' cognitive and emotions such as empathy could also be enhanced as they immersed in their roles within the mission to successfully carry out the goals of the community service. Apart from critical thinking, problem solving and teamwork, empathy is the element that must be instilled in technical engineering students due to its utmost importance (Ahmad et al., 2019). A strong sense of empathy could be enhanced once adequate awareness and realization of other peoples' misfortune, deprivation or lacking are internalized within the students. A higher education curriculum that integrates meaningful community service with instruction and reflection could further enrich the learning experience of the undergraduates, teach them civic responsibility, and strengthen ties networking with local communities (Huff et al., 2016).

Organizations and companies will gain competitive advantage by involving in good corporate citizenship activities like doing corporate social responsibility (CSR) work because such selflessness values are increasingly becoming intangible assets much sought after in human and intellectual capital within the modern competitive worlds (Titus & Hoole, 2021). Similarly, universities as a multi-functional organization should develop social responsibility initiatives just like other organizations as an approach to meet the stakeholders' expectation and satisfaction (Vasilescu, Barna, Epure, & Baicu, 2010). Due to this, there has been a high increase throughout the academia in terms of implementing high impact educational initiatives which include corporate social responsibility, community service and service learning (Salam et al., 2019; Bringle & Clayton, 2020)

Basically, the term community service has been used interchangeability with service learning, volunteerism, community-based learning, civic engagement and service-learning internship. All these experiential learning via activities relate to a number of theories for learning such as the Lewin's iterative model of action learning, Kolb's experiential learning cycle and constructivist learning theory which explains that learning process starts with a prior knowledge and reconstructed through reflective piece that impact future actions (Hudin, et al., 2018). The theory of learning approaches centering around community service and service-learning could be traced to have originated from the theory of four philosophers and experts in the field of education, namely John Dewey, Paulo Freire, David A. Kolb, and Ernest Boyer. This concept of active learning via "learning by doing" emphasizes

practicality and effectiveness towards students' cognitive, affective and overall soft-skills development. These are all high-impact practices in transformative pedagogical learning, which are experiential in nature (Mamat et al., 2019).

Based on Kolb and Kolb (2005) experiential learning theory, concrete experience preceded reflective observation. Through reflective observation, students would be able to create new meaning of the experience which is also described as abstract conceptualization. With this new meaning conceptualized, they then proceed to actively experiment on the newly acquired concept. This whole process is known as the Kolb's experiential learning cycle. Higher education administrations should provide more emphasis on such cycle of experiential learning and they need to start to view the faculty and student development from the community service and outreach angle (Akdere & Egan, 2005). This is affirmed by Eyler (2002) that in order to enhance the engagement of the university community like academics and undergraduates, a diverse set of actions is required such as developing community service-learning courses and educations for citizenship. In addition, the planning could also include increasing the faculty support and services for the community via funds and scholarship that encourages community partnership (Monk, Benson & Bordere, 2019). It is an immersive learning experience that promotes high impact practices in a curriculum that caters for the development of critical thinking skills, people skills, innovativeness, entrepreneurial mind-set, resilience with cognitive flexibility, emotional and contextual intelligence, and passion for lifelong learning (Awang Hashim, Kaur & Valdez, 2019). In addition, engagement in community based projects by university students also enhances their micro-skills such as making accurate estimation and being critical in planning things (Collins & Redden, 2020)

#### **Problem Statement**

For the community service course, students were required to form their own groups and to arrange their own community service engagement. They were facilitated and given tips on best practices in organizing the task that involves participation a number of parties such as the sponsors, the clients as the target groups and lecturers as observers and evaluators of their initiatives. They get to communicate with potential sponsors from the general public, government agencies to philanthropy organizations, which involves in social responsibility and charity. These aspects of communication, planning and seeking funds are made part of the requirements in the community service task to align with the intended learning outcomes of the course. Not many studies were done in examining the magnitude of the impact of participating in community service activities on tertiary students. There are even less studies that highlight the micro aspects of decision making, problem solving and overcoming challenges on the part of the students as the key participants in executing their planning for the community service related activities. Not many studies thoroughly report on the mechanics of the programmes such as the obstacles faced by the students and the mitigating strategies undertaken by them in ensuring successful organizing of the activities to meet the intended learning objectives from the course.

## **Aims and Objectives**

This study aims to document students' experiential learning process in undertaking community service works and see their perceptions on the challenges faced, mitigating strategies applied and impacts gained. Basically, this study aims to provide answers to the following research questions;

- 1. What are the challenges faced by students in planning and executing community service works?
- 2. What are the mitigation strategies applied by them to overcome arising obstacles and challenges?

- 3. What are the students' perception on their motivation for executing community service projects and the impacts gained
- 4. What are the students' perception on the ways to improve community service works by university students?

#### 2. METHODOLOGY

The research was conducted using a mixed-method approach which incorporate both qualitative and quantitative methods to elicit primary and secondary data. Respondents in the research are students from Universiti Kuala Lumpus Malaysia France Institute (UniKL MFI), Selangor, Malaysia. Data was collected through literature review, interviews, focus group discussions, and questionnaires. The distribution of the questionnaires was carried out in a period of 12 - 20 December 2022.

The data collected were analyzed using qualitative data analysis techniques and descriptive analysis. According to Kirkpatrick and Kirkpatrick (2006), there are four levels of activity evaluation namely i) reaction which measures satisfaction; ii) learning which is a measure of increase in knowledge or capability; iii) behaviour which is a measure of behavioural change or extent of capability improvement and iv) results which is a measure of the effects on the institutional environment resulting from the participants' performance. The responses obtained through surveys, interviews and focus group interviews can be mapped according to these four levels. This is a suitable approach to measure phenomenon such as community service work in terms of qualitative values such as perception, reaction and impact.

A survey instrument comprising section A, B, C, D and E which students need to respond by filling up information was distributed online via Google form to all 68 course participants during week 15, at the end of the overall 14-week Co-Curriculum Course. The sections in the survey instrument represent the following categories of information to be elicited:

**Table 1 Sections in Survey Instrument and Information Elicited** 

Section A	Demography	Section B	Aims & Objectives of Joining
Section C	Challenges & Obstacles faced	Section D	Mitigation strategies
Section E	Suggestions for Improvement		

## 3. FINDINGS AND DISCUSSION

The demographic information shows that the research participants are made up of 57 males (83%) and 11 females (17%) from the Bachelor of Engineering Technology and Bachelor of Engineering courses at UniKL MFI, a private technical engineering university in Malaysia. The Bachelor courses taken at the university are Welding Quality Inspection (WQI), Automotive Engineering Technology (AET), Mechanical Engineering, Mechatronics and Electromechanical Systems. The age categories indicate within which semester the students are taking this co-curricular course and through which level they enter the Bachelor's Degree Programme. Many of those above age 22 basically joined after they completed Diploma courses. While those who are younger joined after they completed the pre-university, foundation courses or matriculation programmes. The age categories and the number of participants are as follows:

Table 2 Age Range and Number of Participants

Age 19-20		Age 21-23		Age 24	
12	(17.6%)	38	(55.9%)	18	(26.5%)

## Aims and Objectives for Choosing the Community Service Course

Majority of the participants disclosed that their primary aims of choosing and participating in the Community Service course is self-motivation and interest (82.4%). The second reason is following friends (11.8%) and a small number of participants indicated the reason as no other choice as the other courses are full (6%). This self-motivation coming from the participants could be seen from the group achievement in the assessment criteria for the Community Service Course. Throughout the 14 weeks, the students were assessed via four assessment modesnamely project proposal (30%), activity & involvement (10%), project implementation (40%) and project report (20%). The Mean scores for the assessments are as follows:

Table 3 Course Assessment and Mean Scores of Marks Attained

Item	Percentage	Mean	Std. Dev	Attainment
Activity & Involvement	10%	10	0	(100%)
Project Proposal	30%	24.99	3.8	(83.33%)
Project Implementation	40%	35.29	3.2	(88.15%)
Project Report	20%	16.75	3.9	(83.75%)

This indicate that more than 83% attainment by the students in this course. Moreover, the receptiveness of the participants towards the running of the course could be seen from the rating that they give for the Course Performance evaluation. The lecturer teaching the course received an overall 4.75 rating out of 5 for the course performance survey distributed for students to rate online via the campus learning management system (LMS). Below are the pertinent survey items indicating effectiveness of the course

**Table 4 Course Performance Rating by Learners** 

No	Item	Rating
1	I am satisfied with the teaching commitment of lecturer(s).	4.73
2	My lecturer(s) clearly explains Course Learning Outcomes in Week 1	4.73
3	The course content is related to real life application	4.76
4	The course content is delivered according to schedule and development of student	4.76
5	The course workload is manageable.	4.72
6	My lecturer checks students' understanding by asking questions or giving quizzes.	4.76
7	My lecturer gives clear explanations using sufficient examples.	4.73
8	My lecturer encourages self/independent learning	4.73
9	My lecturer supervises/facilitates class activities	4.73
10	My lecturer is knowledgeable in his/her field.	4.73
11	My lecturer's teaching methods are effective.	4.73
12	My lecturer assesses students based on course syllabus	4.71
13	My lecturer provides clear assessment instructions.	4.72
14	My lecturer conducts assessments according to course schedule.	4.72
15	My lecturer uses clear rubrics for assessing	4.70

## **Types of Community Service Planned and Executed**

The students were able to work tighter and support each other in organizing and participating in a number of community service activities. The community service activities were carried out at different phases throughout the 14-week semester with different groups heading different projects as initiators or main committee and other groups serve as support committee and participants. This collaborative strategy enabled the students' involvement to be maximized as they get to play different roles at different times within the whole duration of the community

service course. Below are the examples of the main community service activities being organized and carried out by all the students;

- i. Work-party to clean and repair Insaniah Hill Park Musolla (small prayer house)
- ii. Work-party to clean and repair Al Falah Musolla at Section 15, housing area
- iii. Work-party to clean and repair Raudhatul Jannah Mosque at Sungai Buah village
- v. Food distribution to vagrants and homeless people in Chow Kit area, Kuala Lumpur

# **Primary Challenges by the Participants**

The next section of the questionnaires elicited information of the types of challenges and obstacles faced by the students as they go about planning and implementing all the community service activities throughout the semester. The students rated the following as the five main challenges and obstacles that they encountered during the whole process;

Table 5 Examples of Challenges and Obstacles Faced

No	Category of Challenges	Examples
1.	Sourcing for Funding & Financial Support (32%)	Difficult to source for funding, not easy to get sponsors
2.	Logistics & Manpower (27%)	Lack of transportation to musolla, lack of equipment, a few members get tired easily, unable to fulfil all requests for community service, work capability, lack of tools for repairing and cleaning
3.	Group dynamics, Communication & Cooperation (17%)	Communication, perception among group members, cooperation amongst group members, lack of interaction among group members, lack of initiative among group members
4	Time Management (13%)	Finding suitable dates, time constraints, unsuitable time, weather, doing activities at night, dividing time between studies & activities for community service, finding common time for group members from different courses
5.	Task Planning & Distribution (11%)	Selection of suitable post for specific tasks, task distribution difficulty, doing activities far from house location, Difficult to find target group like homeless people nearby campus, more attention on issue of safety

From this study we know the types of challenges that the students have to encounter and overcome. Sourcing for funds and financial support has been rated as the number one obstacles followed by logistical and manpower issues. This is understandable that the post Covid 19 period means that many companies are in the process of reviving and growing again. They do not have as many financial resources unlike before to be extended to charity, CSR and community service groups unlike before. As for the logistical materials for the activity, again, this requires money to buy or they come in the form of donated goods and materials from companies. Likewise, things are not as easy as during the times before the pandemic. As for group dynamics, communication and cooperation issue these are all common obstacles that arise due to the short span of the group being together as it is human nature that people from different background require adjustment phase to understand each other better. Efforts need to be made to gel together better as a team. When group synergy improves, the elements of time management, task planning and distribution of tasks will become less

challenging as more members could understand their assigned roles better. This is an important learning curve that all the community service course participants get to experience.

# **Mitigation Strategies Undertaken**

All the students reported that their group took the following mitigation strategies to overcome arising problems that they encounter during the planning and executing of the community service tasks.

**Table 6. Mitigation Strategies** 

No	Types of Mitigation Strategies	Percentage
1	Have specific meeting & discussion	44.1 %
2	Explore all possible options	36.8%
3	Appoint capable group leader who knows roles well	10.3%
4	Refer to & consult lecturers	8.8%

#### **Benefits Gained**

The students from all the groups reported that they have benefit from the community service programmes in terms of the following;

**Table 7 Perception on Benefits Gained** 

No	Benefits	Percentage
1	Increase motivation in helping the community	44.1%
2	Get new experience in working with the community	31.2%
3	Able to increase cooperation and teamwork	20.3%
4	Increased self-awareness on community issues	4.4%

Generally, the students disclosed that they are impacted in terms of having more motivation and inclination to continue to do community service to help the needy within the society. This is because they were able to gain a lot on useful new experiences during all the community service activities organized and carried out throughout the 14-week semester. The third highest impact mentioned is the ability to enhance more cooperation and increase team-work among the students as they develop more self-awareness on existing issues in the communities that require attention. Even during the individual interviews and focus group interviews the group leaders narrated a host of benefits that they were able to gain as well as the many types of impact that have been created especially among the undergraduates themselves. The following are examples of excerpts on community service experiences and the impact that they have gained from the activities:

- Melatih diri untuk sentiasa bersikap positif antara satu sama lain dan ada semangat berkumpulan
  (Trains oneself to be always positive between group members and have a sense of camaraderie)
  (Student A)
- ii. Memberi kesan positif kepada pelajar masa akan datang tentang keseronokan membantu gelandangan atau membuat kebajikan bersama rakan-rakan (Leaving positive impact on students to continue enjoy helping the vagrants and homeless people together with friends) (Student B)
- iii. Membuka minda terhadap berbagai pengalaman dikalangan kawan kawan yang berbeza latar belakang (Opens one's mind to different experiences among students from different backgrounds) (Student C)
- iv. Dapat mendengar pendapat orang lain dan vote sama ada untuk terima atau tidak (Able to listen to other people's opinions and to vote whether to accept or otherwise) (Student D)

- v. Dapat belajar menjadi lebih berdisiplin dan jujur sewaktu tugas khidmat masyarakat (Able to learn to be more discipline and honest in during charity work) (Student E)
- vi. Dapat belajar berkerjasama dan memberi kesedaran tentang keadaan masyarakat (One gets to cooperate and give awareness on society's condition) (Student F)

## **Suggestions for Improvement of Community Service Course**

Within any implemented course and activities, feedback and post-programme input are very essential in order to further improve the effective running of such courses within an academic setting. This is necessary to ensure that impact from such courses like community service will be maximized for the continuous growth of undergraduates' positive traits, values and characters. From the individual interviews and focus group interviews, the group leaders recommended the following measures to be taken into account in order to further improve the running of the community service course;

- i. Lebihkan perjumpaan pada waktu kuliah atau pada masa yang sesuai untuk bantu pelajar berinteraksi dan kenal sesama sendiri, kerana semua datang dari kursus yang berbeza. (have more meeting during lecture times or during other times to help students interact and know each other more as all students come from different courses) (Student G)
- ii. Sediakan dana yang cukup, ianya diperlukan untuk memeriahkan lagi program (Prepare sufficient funds as it is needed to further enliven the programme (Student H)
- iii. Berbincang lebih untuk mendapatkan sokongan dari tenaga pengajar dan pihak atasan (engage in discussion to get support from teaching staff and the superiors) (Student I)
- iv. menganjurkan program di sekolah untuk memperkenalkan universiti. (organize such programme at schools to promote the university) (Student J)
- v. Menambahkan lagi aktiviti bermasyarakat dengan lebih kekerapan di tempat selain dari surau, masjid dan kawasan gelandangan (Have more community activities more frequent at other places apart from musolla, mosque and homeless people area) (Student I)
- vi. Memberi semangat pelajar dengan cara memperbanyakkan lagi ceramah tentang kesan positif khidmat masyarakat agar pelajar memahami dan mengetahui agar dapat memupuk sifat nilai nilai murni seperti tolong menolong antara insan (provide encouragement to students by having more talks on the positive impact of community service so that students could understand and know how to instill in themselves good values like helping out other people) (Student K)
- vii. Membuat aktiviti yang lagi menarik dan beri tazkirah ringkas selepas habis program (Organize more exciting activities and have short religious talk session after each activity) (Student L)

As a whole, the findings from this study to a certain extent support Arnett's conceptualization of university students as emerging adults, who's goal of obtaining tertiary education is to expand one's world vistas and acquire new knowledge or understanding (Arnett 2016). It could be seen that the elicited data strongly indicate that the community service course participants were very favourable towards the course and they have reported that they have benefited in one way or another from the process. Based on what could be observed from the students' effort and participation rates, they have apparently explored ways to challenge themselves, enacted their positive values, and tried new experiences which are almost similar to what has been reported by Hill and Hammond (2021) in their study.

In terms of benefits, the involvement of the students in the community service program has been able to provide various benefits for them in the form of competence development, skills improvement, and understanding of communication and team work importance to meet the needs of future graduates which are in some ways related to what was reported by Sukoco et al. (2022) in their study. The participants even put forth useful suggestions so that improvements could be made to ease future course participants. This study was able to fully capture the students' experiences serving others and their perceptions on the learning that they undergo and the challenges and mitigation that they had to endure and mitigate during the community service projects.

## 4. CONCLUSION

This study provides useful insights into the experiential learning process whom technical engineering students had gone through when participating in community service course at a public technical engineering university. These insights would provide essential information on the micro elements such as challenges faced, mitigating strategies taken and benefits gained by the course participants. This will be useful for tertiary level curriculum planners to provide more training workshops on community service learning to lecturers or any university staff who are involved in the planning and facilitating the community service-learning course This is ensure that the implementation could be enhanced to be more efficient and all the intended learning objectives of the course could be achieved. Again, experiential learning avenues such as community service, CSR, service learning and voluntarism must be further propagated as a means to further self-actualize tertiary students potential to better prepare them for the workplace environment and the multitudes of challenges that await them in the world outside of academia.

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