

Reflection On Service-Learning Among Universiti Teknologi Malaysia Students

¹Zainudin bin Hassan, ²Jayanthi Marrimuthu, ³Tan Meng Lee Vincent, ⁴Latha Haridass, ⁵Wan Asri Wan Mat

^{1,2,3,4,5}Universiti Teknologi Malaysia, Johor, Malaysia

¹p-zainudin@utm.my, ²jayanthi@graduate.utm.my, ³vincent5373@gmail.com,

⁴latha.haridass@peninsulacollege.edu.my

Article Info

Article history

Received October 3, 2023

Revised October 4, 2023

Accepted October 11, 2023

Keywords:

Reflection; service-learning;
Qualitative research
methodology; semi-structured
interview.

ABSTRACT

The purpose of service learning is to connect theory and practice in a way that gives students a prospect to both participate in a service activity that meets community needs and reflect on the experience in class to enhance their civic engagement and deepen their understanding of course content. A successful service-learning program requires reflective practice. The School of Education at Universiti Teknologi Malaysia (UTM), Malaysia, has been conducting service-learning for many years. Although there is no proper guideline for the students to reflect on their service-learning experiences, students are still expected to do so. The objective of this study is to describe the service-learning experience. This study applies the case study research method to students' reflective experiences in service-learning at the School of Education in UTM. Data was collected using qualitative research methodology involving semi-structured interviews with UTM postgraduates. The triangulation method used to validate the data and continued with thematic analysis to identify the themes. The findings for every research question have been plotted in diagram. Based on the themes from the findings, a template was proposed for improving service-learning reflection for the students from UTM.

1. INTRODUCTION

Service learning (SL) helps students learn through hands-on activities, associating the gap between theory and practice (Resch & Schritteser, 2021). Reflection is essential as part of the service-learning process. Reflective activities generate, deepen, and capture learning related to the service and the academic content (Damons & Dunbar-Krige, 2020). Service-learning is an organized activity designed to meet community needs, with a reflective evaluation process undertaken to gain a deeper understanding of the course content, a better sense of the discipline and a sense of civic responsibility (Bringle and Hatcher 1996, as cited in Damons and Dunbar-Krige, 2020). In this regard, reflective practice in service-learning is essential to make it successful and meaningful for the students, faculty, and the community (Yusof, 2020).

Service-learning and reflection processes help students understand the course content precisely, which helps them improve their learning process by strengthening their personal growth, such as cognitive skills. Anderson, Boyd, Ariemma Marin, and McNamara (2019) also

stated that several learning outcomes can be developed through the combination of reflection with structured participation in community-based activities.

Through reflection on the service-learning experience, students gain a deeper understanding of the course content and a stronger sense of civic responsibility (Resch & Schrittmesser, 2021). In service learning, students analyze the problems in a community and resolve them by applying the knowledge they have gained through academic lessons. For this, the reflection process is crucial in bridging the educational content and community service activities (Bringle et al., 2017). Reflective learning also enhances students' sense of civic responsibility and can inspire them to take action and advocate for social change (Damons & Dunbar-Krige, 2020).

A well-designed reflection should integrate service learning into course goals, be well-structured, allow feedback and assessment, and include a reaffirmation of values (Bringle et al., 2017). Researchers have designed and studied various models for the reflection process in service learning. Bringle and Clayton (2021), who designed the DEAL reflective model, mentioned that the reflection process begins with a service-learning program and continues until after the service-learning program. Supporting this, the SULAM (Service-Learning Malaysia - University for Society) Playbook by the Department of Higher Education (2019), which the Ministry of Education of Malaysia implemented for higher educational sectors, has mentioned that there are three phases of reflection of service-learning can be done which is before, during and after the project.

According to John Dewey, who is thought to be the founder of reflection, experiences are mis-educative when they fail to stimulate critical thinking through guided reflection (Schmidt & Allsup, 2019). Dewey further argued that a guided reflection helps students logically recall the experiences and the lessons learned in class (Schmidt & Allsup, 2019). Research showed that to optimize learning without misunderstanding, the reflection must be well prepared, and it can be done with guidance with some prompting questions such as when, with whom, and why the reflection should be used (Lorenzo et al., 2021).

Service-Learning in Malaysia

Universities in Malaysia have been conducting service learning for several years. Malaysia Education Blueprint 2015-2025 (Higher Education) addresses Shift 1 of the Education Blueprint by establishing Service-Learning Malaysia - University for Society (SULAM) (Department of Higher Education, 2019). As cited in Salleh et al. (2018), in Malaysia, as part of the Ministry of Education's initiatives to develop students' knowledge and skills, service-learning has been implemented in a structured manner in several universities.

Today, there are many existing frameworks and models for implementing service learning at higher education institutions in Malaysia (Musa et al., 2017). The service-learning framework designed by higher education institutes, researchers, or government educational

policies has included the reflection process as a compulsory part of the service-learning. However, there are no restrictions to implementing a uniform framework of service-learning reflection among higher education institutes. It is important to note that each institution has a unique mission and vision for achieving student learning and obeying national education policy requirements.

Conversely, UTM courses and community service were introduced in 2011/2012 at Universiti Teknologi Malaysia to foster ethics and professionalism and allow students to apply technical knowledge. For other universities in Malaysia, service learning is included in individual courses as part of their project assignments. According to SULAM, learning through reflection enables civic responsibility, strengthens the community, and enriches learning experiences (Department of Higher Education, 2019). Critical reflection is an essential element of SULAM, which connects academic content with SULAM experiences. In higher education in Malaysia, critical reflection practice in writing reflection reports includes individual development, soft skills, communication skills, and technical skills. (Musa et al., 2017).

Notably, this study emphasizes using reflection as a tool to state the experience an individual has gained consciously. The research objective is to explore the description of the service-learning experience through reflection by the postgraduate students from the School of Education in Universiti Teknologi Malaysia.

2. METHODS

This study applies the case study research method to students' reflective experiences in service-learning at the School of Education in UTM. The case study method of research generates a more profound and multidimensional understanding of a complex issue in its real-life setting (Crowe et al., 2011). So, this study's case study research method approach guides the researcher to identify precise information and understanding of students' experiences in describing service-learning, evaluating values in service-learning, and social engagement in service-learning through reflection.

The research methodology used in this study is qualitative research. As Houston (2021) cited, the qualitative data is more descriptive and looks for context based on the respondents' perspectives. The research questions in this study act as the outline for a qualitative study and are analyzed through semi-structured interviews. Therefore, the qualitative research questions should express information about an investigator's intention and viewpoint regarding social interactions (Agee, 2009).

The data gathered from the interview session was validated through the triangulation method. Researchers use triangulation to strengthen the credibility and validity of their findings (Noble & Heale, 2019). The validated data was then analyzed through the thematic analysis method. Essentially, the thematic analysis method involves identifying patterns, which are then reported as themes by the researcher (Lawless & Chen, 2018). In this study, the data from the

interview, which is the transcription of the recordings, data from the Community Engagement Impact Rating (CEIR) form from the faculty, and the data from the written reflection report of the respondents were compared for similarities and retrieving information to the objective of this study. Currently, in UTM, students involved with the service-learning program must complete The Community Engagement Impact Rating (CEIR) form from the faculty as documentation. They must write a brief reflection on their involvement in the service-learning program before and after.

The snowball technique is applied in this research study. The snowball sampling method is used when it is difficult to obtain samples with the target characteristics (Naderifar et al., 2017). Existing study subjects recruit future subjects among their friends and acquaintances through this method. The sampling process continued until saturation was reached. The researcher in this study used this snowball sampling method among the postgraduate students from the School of Education in UTM to identify precisely the students involved in the service-learning project.

The population for this research involves postgraduate students from the School of Education in the Faculty of Social Sciences and Humanities at the University of Technology Malaysia located at Skudai, Johor. The postgraduate students, those experienced in service-learning projects, were targeted as the sample for this research study.

In this qualitative study, the raw data retrieved through the semi-structured interview sessions were analyzed through several procedures. First, it began with verbatim transcriptions of the interviews after the interview session finished. In qualitative research, especially in education research, verbatim transcription is crucial because it allows researchers to understand how participants' different interests are experienced and perceived. (Sebastian, 2012).

The examples of the coding system based on the respondents' information can be seen in Figure 1.

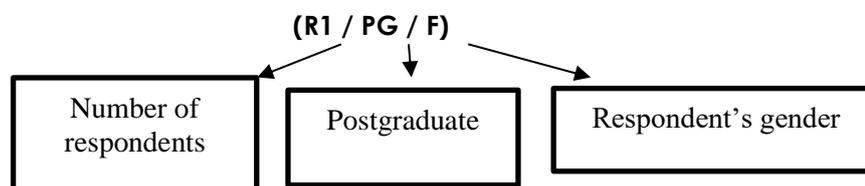


Figure 1. Example of Interview Data Coding System

3. RESULTS AND DISCUSSION

Reflection of Describing Service-Learning Experiences by the Students from the School of Education in UTM.

This study explores the criteria for describing service-learning experiences in students' reflections. When describing service-learning experiences by the respondents, the researcher identified five common themes. They are the objective of the service-learning, the community's details, the place of the activity, the duration, and the problems in the community.

Theme One: Describing the Objective of the Service-learning Program in Reflection.

All the respondents described service learning according to the interviewer's questions. Respondent Tasha's description of the objective of her service-learning is as follows:

"Our service-learning activity title is "Eco Enzyme to Save Our Rivers and Environment...We have a few objectives for conducting this service-learning related to the environment. The first is to give awareness to the local community on food wastage from each household, to educate society on the environmental issues to maintain sustainable growth and development for the future, and lastly to build a responsible and caring community in handling household wastage..."
(R1/F/Interview).

Tasha's reflection from the interview data supported her documented reflection report and CEIR with clear objectives stated below:

"Our service-learning activity is "Eco Enzyme To Save Our Rivers & Environment," a co-organized program with Lions Club of Johor Bahru Premier members. Our objectives are to create

- i) Awareness to the local community on food wastage from each household.*
- ii) We try to educate society on environmental issues to maintain sustainable growth and development for the future.*
- iii) We want to build a responsible and caring community handling household waste.*
- iv) We hope to reduce chemical cleaning products that harm the environment.*
- v) last but not least, we want to nurture the responsibility among the Z and Alpha generations in taking care of the environment because they are the future, and they need to learn how to protect our environment."* (R1/F/Reflection Report)

Objectives are written in Tasha's CEIR form as below:

"1. To create awareness in the local community on food wastage from each household.

2. *To educate the society on the environmental issues to maintain sustainable growth development for the future.*
3. *To build a responsible and caring community in handling household wastage*
4. *To reduce the usage of chemical cleaning products which harm the environment and pollute the river."* (R1/F/CEIR)

From the three data types, Tasha is aware that reflecting on the objective of service-learning is essential in describing service-learning experiences during the reflection process. Following Tasha, respondent Shyam expressed his reflection on describing the objective of his service-learning as below:

"The objective of my service-learning project is spreading knowledge about how to create an herb garden at the school..." (R2/M/Interview)

When analyzing Shyam's documented reflection report, he found that he did not specify the objective of his service-learning project. However, as supporting Shyam's interview data, his CEIR form stated the objective of his service-learning project as below:

1. *Educate pupils and impart an appreciation of nature's beauty, as well as the need to utilize existing natural resources to ensure the sustainability of a clean environment.*
2. *Instil the idea of "how easy you can grow your herbs.*
3. *Children and staff of the school can reach out to the herbs in the garden.*
4. *Students can grow their herbs in their mini project."* (R2/M/CEIR)

Shyam's reflection identified that he could describe the objective if the question asked explicitly for the project's objective. He only mentioned the objective in the interview question and CEIR form when specifically asking to reflect on the objective.

Followed by Shyam, respondent Jessy reflected on the objective of her service-learning project for describing service-learning interview questions. Her reflection from the interview as below:

"...due to the influence of the epidemic outbreak, we planned to conduct service-learning related to awareness of the epidemic. This is because our main aim is to enhance teachers' and the students' consciousness of epidemic prevention and control in school..." (R3/F/Interview)

Jessy's interview reflection is supported by her documented reflection report, which mentioned the aim of her service-learning reflection project. Her reflection report about describing the objective of her service-learning project is below:

"In the context of the current New Crown epidemic, which is still spreading, we organized these activities to protect students' health, prevent the spread of the New Crown virus, and create a safe learning environment. This activity aims to raise students' awareness of epidemic prevention and control." (R3/F/Reflection Report)

In CEIR form, Jessy has mentioned her service-learning project's objective more clearly:

"1. Through the epidemic prevention campaign, students will be able to improve their overall epidemic prevention skills and awareness and focus on safe hygiene and healthy growth.

2. As the global epidemic is spreading, teachers and leaders should strengthen their awareness of epidemic prevention and control to protect the health and safety of students.

3. Epidemic prevention and control is everyone's responsibility. The development of activities can enhance students' and teachers' sense of social responsibility.

4. Like the Novel Coronavirus, there are still many puzzles in the world, many challenges to human survival, and many unknown Spaces. Students are encouraged." (R3/F/CEIR)

From the three different reflections, Jessy knew that stating the objective of service-learning is one of the essential criteria in describing the service-learning experience.

From the respondents' reflections as above, the researcher can identify that when students inquired to describe their service-learning projects, they reflected on the objective of their service-learning. Hence, reflecting on the purpose of their service-learning, also known as the objective of service-learning, counts as one of the essential criteria to be described in service-learning reflection.

Theme Two: Describing Community Details of the Service-learning Program in Reflection.

All the respondents have described the community involved in their service-learning. When describing service-learning experiences, the information about the community is widespread among the respondents. Below is the interview reflection by respondent Tasha describing the community involved in the service-learning project.

"...total of 24 people involved in our service-learning program. Some members from the Lions Club of Johor Bahru Premier participated in our program...and some are residents from the riverside area. All are aged from 16 to 26 years old..."

(R1/F/Interview)

Tasha did not mention in her reflection report about describing the community involved. However, in her CEIR form, she mentioned the information of the community involved in her service-learning project. Her CEIR form reflection as below:

"There is a total of 24 members involved. 1 of the members is a UTM student."

(R1/F/CEIR)

Although Tasha has mentioned the information about the community involved in the CEIR form, the details during her interview were clearer about the community involved. Followed by Tasha, Shyam also gave his reflection on describing the community involved in his service-learning program during the interview as below:

"In my service-learning program, 18 pupils and three teachers, including me, are actively involved. Our principal also involved and supported us. The students are from primary five consists of 9 male students and 9 female students..."

(R2/M/Interview)

His reflection report does not directly support Shyam's interview reflection data. He mentioned who has been involved while explaining his service-learning activities. He does not intentionally mention the information of the community involved. His reflection report, as shown below, indirectly describes the community involved.

"The activities that I have done are. First, my group and I cleaned the place the school had left untouched. Then, we plan to plant some plants or herbs in the garden. My group planted some of the plants. Then, on 10 January, I and my group did the activities with the students. We plant tomatoes, cherries, turmeric, and mints. The students then took care of the plants and observed their growth. Students and staff at school can use the garden to taste and learn about the plants in the garden." (R2/M/Reflection Report)

However, in the CEIR form, Shyam has mentioned detailed information about the community involved in his service-learning project.

"Total community involved is 22; they consist of 1 Principal from SRIH, 3 Master students from UTM, and 18 Year 5 students from SRIH" (R2/M/CEIR)

Shyam could give detailed information in his reflection during the interview and in CEIR form compared to the reflection report writing. This is due to the prompting questions in the CEIR and interview questions. Followed by Shyam, Jessy has given her reflection about describing the community involved in her service-learning program as below:

"My community of service-learning comes from our boarding school, and...there are thousands of students and hundreds of teachers in our boarding school. So, I made all of them participate in the service-learning program." (R3/F/Interview)

Since all the boarding school's students and teachers were involved in the service-learning, Jessy did not mention exactly how many of them in the interview reflection. However, her reflection still gives the picture of the community involved. Her interview reflection data is supported by her reflection report writing as below:

"The event was supported by the relevant school leaders, classroom teachers, and students." (R3/F/Reflection Report)

Jessy did not provide comprehensive information such as how many of them, who they are, and so on about the community involved in her service-learning project. However, in her CEIR form, she has mentioned detailed information about the community involved. This is mainly due to the prompts available in the CEIR. Her reflection on describing the community involved in the service-learning project is as follows:

"90 people from Fukang No. 4 Middle School, 18 people from Suining Renli primary school, and 2 UTM students." (R3/F/CEIR)

Next is Tila's interview reflection on describing the community involved in the service-learning project as below:

"There are...total 33 people involved in my service-learning project. 5 of them are teachers, and the rest are the pupils from different levels of primary classes..." (R4/F/Interview)

When comparing Tila's interview reflection with her reflection report, there is a lack of detailed community information. However, in the CEIR form, she can give detailed information about the community involved with the help of prompts, as she described during the interview. Her reflection in CEIR form is as follows:

"30 students from 3 Al Bukhari, total 9 teachers from Science, Mathematics and Vocational stream, 1 cleaner and 1 UTM student." (R4/F/CEIR)

Similarly, during the interview, respondent Nick reflected on the community involved in the service-learning project. His reflection is as follows:

"...ah...I remember there were 24 primary school students and three teachers joined in my service-learning program enthusiastically... The students are aged from 9 to 11 years old..." (R5/M/Interview)

Based on the responses of all six respondents, it is evident that describing the community involved in service learning varies according to the availability of reflection prompts. Prompts in reflection help students describe the community information in detail, such as who they are, how many of them are involved, and so on.

Theme Three: Describing the Place of Service-Learning Program in Reflection.

Describing where the service-learning program took place is identified as one of the important criteria for describing the service-learning experience reflected by all six respondents of this study. Below is the interview reflection from Tasha about describing the place of her service-learning program conducted:

"Our service-learning program is held near one of the rivers at Johor Bahru. Beside the river, we set up a few stations to give some explanation and awareness about our service-learning project and the objectives of our service-learning to our community". (R1/F/Interview)

When Tasha's interview reflection was compared with her written reflection report, the information on the place of the service-learning project was not described. However, her CEIR form has mentioned the venue clearly as below:

"Location: Lions Club of Johor Bahru Premier, No : 29A, Jalan Sutera Tanjung 8/3, Taman Sutera Utama, 81300 Skudai, Johor." (R1/F/CEIR)

Respondent Shyam described where his service-learning project took place in his interview reflection but did not specify the place's name. The interview reflection is as follows:

"I chose to conduct service-learning in my school, specifically my school garden, where we organized our herbs planting activities with students." (R2/M/Interview)

However, in the interview, Shyam mentioned that he chose to conduct his service-learning project at his school. His reflection report was unclear with the place details as his interview reflection. His written reflection report indirectly mentioned that the place of service-learning is in his school.

"The service activities that I had done is creating a herbs garden at my school." (R2/M/Reflection Report)

When comparing Shyam's interview reflection with his CEIR form, the details of the place of service-learning have been mentioned with the help of the prompt in the form. His reflection in CEIR form is as follows:

"Location: Hidayah Islamic Primary School (SRIH), Johor Bahru." (R2/M/CEIR)

Next, respondent Jessy described the venue of her service-learning project in her interview reflection as below:

"We directed our service-learning at one of the boarding schools in China. Since it was restricted to going out of the campus due to the pandemic, we conducted

our service-learning project by distributing brochures in every school class".

(R3/F/Interview)

Jessy's interview reflection compared with her written reflection and CEIR form. The comparison found that her reflections about describing service-learning places are more detailed in her CEIR form than in her interview reflection and written reflection report. Her reflection report did not mention the school's name and location. However, in CEIR, it was mentioned in detail below:

"Location: Fukang No. 4 Middle School and Suining Renli primary school". (R3/F/CEIR)

Tila has described in her interview reflection specifically about the place where her service-learning program took place as below:

"I decided to conduct my service-learning project in my school, SMK Seri Pulai Perdana, in Johor Bahru. I specifically chose and focused on the front of the Technology Design workshop in my school that has been abandoned for a long time after the pandemic". (R4/F/Interview)

When comparing her interview reflection with her written reflection report, the details of the place of the service-learning have been described in detail. Her written reflection is as follows:

"I run my service-learning activities at Technology Design Workshop in my school located at Seri Pulai Perdana." (R4/F/Reflection Report)

Her reflection data describing the place of service-learning further compared with her CEIR form, and she found that the details are similar and straightforward. Her CEIR form reflection is as follows:

"Location: SMK Seri Pulai Perdana, Kulai, Johor." (R4/F/CEIR)

According to all respondents' reflections, some describe their service-learning place with superficial information; others have stated their exact location. However, those who gave superficial information about the place of service-learning in their interview reflection or written reflection report have described their location in detail in CEIR form. This is because the CEIR form requests students to write the location of service-learning more specifically.

Theme Four: Describing the Duration of Service-Learning Program in Reflection

Describing the duration of service-learning includes the time taken for the entire service-learning project to be completed successfully. During the interview, when the researcher asked the respondents to reflect on how long it takes them to conduct their service-learning, they expressed their reflections as follows.

Respondent Tasha's reflection is as follows:

"...ah...It took two and half months for us to complete our service-learning successfully. The activities of the two months include the preparations, conducting the event, and writing reports and other documentation of our event. The event takes only one day, but the entire service-learning preparation was over two months..." (R1/F/Interview)

In the interview, Tasha described the duration of her service-learning activity in two ways. One, she gave the total time taken for the entire service-learning process, and another one is about the main event of the service-learning. When comparing her interview data with her written reflection report, it shows that she does not reflect on her service-learning duration at all. However, according to the prompts available, her CEIR form mentioned the date and duration more clearly. Her CEIR form data is as follows:

"Period of project Execution: Start date 1st December 2021 until 14th February 2022."
(R1/F/CEIR)

Like Tasha, Shyam has described the duration of the service-learning project by explaining with detailed information. In his explanation, he described how he separated the activities every week. Furthermore, he has emphasized that the activity and documentation work take separate periods. Shyam's interview reflection as below:

"My service-learning activity in my school took three weeks to plan, prepare, and execute. In the first week, I plan, then during the second week, I prepare the materials, and then in the third week, I conduct the activity in my school. However, if I include the documentation process of my service-learning project, it took almost another two months plus." (R2/M/Interview)

When comparing Shyam's reflection with his CEIR form, I found that he mentioned specifically the time taken to complete the entire service-learning as below:

"Period of project Execution: 21 October 2021 until 29 January 2022, which is about 3.5 months." (R2/M/CEIR)

Below is the reflection from respondent Jessy. Aside from describing how long it took her to conduct the service learning, she also shared her experience of the time consuming due to the Movement Control Order (MCO) to prepare the service-learning project.

"For me, it took almost 2 months to start and finish my service-learning program in my school. Due to the Movement Control Order, it was relatively difficult to prepare the brochures, and it consumed more time for me to release the brochures and other related posters to my school teachers and students. Despite

that, I completed my service-learning project within the time frame prescribed by the course materials.” (R3/F/Interview)

When comparing Jessy's interview reflection with her reflection report, she did not mention how long it takes for her service-learning project. Instead, she only wrote that the time for service learning has been discussed with the school management, which is very superficial information about the duration.

“During the event, we first communicated with the school to determine the approximate time of the event...” (R3/F/Reflection Report)

However, compared to her CEIR form, the duration of the service-learning project was indicated more in detail. This is mainly due to the availability of the reflection prompts in the CEIR form, which could not be found in the reflection report questions. Her CEIR reflection is as follows:

“Period of project Execution: Start date: 28 /10/ 2021; End date: 27 /1/ 2022. Altogether is 2 months.” (R2/M/CEIR)

Respondent Tila also explained how long it took to complete her service-learning activities alone but did not include the duration of her documentation work. So, there is still a lack of information on the total duration of her service-learning project. Her reflection is as follows:

“...but it took two months for me to plan and execute my service-learning project. I plan the time and activity every week. Because it was easy for me to track the flow of my project. Furthermore, I did not use the two months for service-learning-related documentation work. So, I fully focused and utilized the two months only to plan and run my service-learning project successfully.” (R4/F/Interview)

When comparing her interview reflection with her written reflection report, I found that the duration of service learning was not well described. It was a very superficial explanation, as shown below:

“...that I can run a program successfully managed in a short period.” (R4/F/Reflection Report).

In describing the duration of service-learning, the respondents gave their reflections based on the prompts available. This is why some of their reflections from interview data are not supported by their CEIR form and written reflection report. The reflection report consists of questions not designed with specific prompts. However, the

CEIR form is designed with prompts that help the students to provide detailed information on service-learning duration.

Theme Five: Describing the Community's Problem of Service- Learning in Reflection

In service learning, students identify issues in their surroundings and select one to resolve through a service learning program. During the interview, respondents were asked to describe the issues they faced in their community. Most of their description includes the problem they identified in their surroundings and the effect of the problem if it is not clarified.

Respondent Tasha's interview reflection about describing the issues in the community that became the reason for their service-learning project is as follows:

"...the problem has been identified by one of our teammates...ah...which is about the people in a residential area unaware that the daily chemicals used in their housework can produce hazardous waste, which eventually mixes and pollutes nearby river water. Suppose this issue is not identified and fails to be solved immediately. In that case, it may lead to a condition that any living organism cannot use the river water and also can cause diseases to the animals or humans who consume it..." (R1/F/Interview)

The societal problem was not explicitly described in Tasha's written reflection report. However, the data from her CEIR form has supported her interview reflection data as she has clearly explained the community's problem that became the reason for her service-learning program. The data from her CEIR is as follows:

"From the survey, we found none had ever heard about a service-learning program. Besides, they have wrong information about enzymes and their method. They gained information from social media channels such as YouTube and FB. They have never been taught correctly about the making of enzymes. They have little knowledge in food wastage management and environmental issues." (R1/F/CEIR)

Following Tasha, respondent Shyam has given his interview reflection about his service-learning community's issues as below:

"When I was trying to figure out the issues in my school for my service-learning project, I found that many students are unaware of herbs garden. They did not even know that some herbs could be eaten freshly. So, I decided to let my students learn what an herb garden is, how to plant them... and how to care for the plants...I think the new generation may not have a chance to learn about various herbs if they did not get a chance to learn about it from school." (R2/M/Interview)

Shyam has described the issues he found in his school environment and specifically explained the importance of resolving those issues. However, his explanation of the community's problem in his reflection report and CEIR form was not identified. Hence, his interview reflection data is more clearly described than the other two documented reflection data. On the other hand, respondent Jessy describes the problem in her school community and the solution through her service-learning project in her interview reflection as below:

"Yes, I found that the spread of the COVID-19 virus is faster in the school environment. I believe that it is mainly because the students do not have enough knowledge. So, I decided to raise awareness of epidemic prevention and control through service-learning to the students and teachers. The knowledge I shared through this project was beneficial...the number of COVID-19-positive cases has reduced among students and teachers after several months." (R3/F/Interview)

Parallel to Shyam's data of reflection about describing community problems, Jessy was also able to describe the problem of the community during the interview reflection. However, her reflection report and CEIR form did not provide enough details about the problem of the community, which was the reason for their service-learning project.

On the other hand, Tila provided her interview reflection on the issue in the community, which supported her reflection report data. Her interview reflection and written reflection report are as stated below:

"...I started to survey my school compound and found a place called "Kawasan Bengkel" that was left untouched for almost a year; the area does not give a pleasant look with a lot of grasses, rubbish, and unused things thrown there just like that. If that place is left abandoned, it may cause the spreading of diseases like Dengue. So, I decided to do something in that area to change it into something beneficial and give a fresh look to the school. So, using the service-learning program, I devised a project planting various plants to resolve the problem." (R4/F/Interview)

"The Technology Design Workshop in our school has been abandoned for a long time after the pandemic, which can be transformed into a beneficial and attractive place for the school." (R4/F/Reflection Report).

In Tila's CEIR form, the problem identified in the community that had been stated was not similar to her interview reflection and reflection report data. However, she mentioned the other problems she identified in the community, which also became one of the reasons for her service-learning project to be conducted. Her CEIR form data is as follows:

"...but they rarely involve themselves with activities outside the classroom. For them, farming is something unusual because they give priority to teaching and learning in class only." (R4/F/CEIR)

Like how other respondents explained the problem and the solution, Nick also reflected similarly during the interview. He described that,

"I found many students, especially the primary kids, are very playful and careless in following protection guidelines to prevent Covid virus fever. I think it is because they lack awareness and may be too young to understand. So, I decided to develop simple and easy information and methods for the students to understand and follow the guidelines through a service-learning program." (R5/M/Interview)

Nick's written reflection report supports his interview reflection about describing the problems in the community. His written reflection is as follows:

"The global outbreak of the new crown epidemic has faced many school closures and prevented many children from receiving formal education." (R5/M/Reflection Report)

However, Nick's CEIR form did not describe the community's problem. This is mainly due to a lack of prompts in CEIR to request students to specifically mention the problem in the community where they chose to conduct service-learning.

Reflection on Describing Service-Learning Experiences

According to the studies conducted by Mcleod (2017), Wain (2017), and Adeani, Febriani, and Syafryadin (2020), the reflective models such as DEAL, Kolb's and Gibb's explain that description is the first part of the service-learning reflection process. Hence, the interview questions, which act as prompting questions, began with asking the students to describe their service-learning experiences.

Five common themes are reflected by the respondents for the research question of describing the service-learning experience. They are the objectives of service-learning, the community details, the place of activities, issues in the community, and the duration of their service-learning program, as shown in Diagram 5.1. The process of reflection with right prompting questions expanded as the students described service-learning experiences (Kawai, 2021).

The students' reflections were more evident in the interview than in their documented reflections. This is because, during the interview, students were exposed to various prompting questions. This outcome is supported by Ash and Clayton (2009) and Lorenzo et al. (2021), who reflect on critical questions such as: What happened? What is the motive? Where? Who

involved? When? Why? and so on, enables the students to think critically. It helps them recall and reflect on their service-learning activities from the beginning in a well-ordered manner. With the prompts' aid, the respondents could reflect on their experience precisely and vividly.

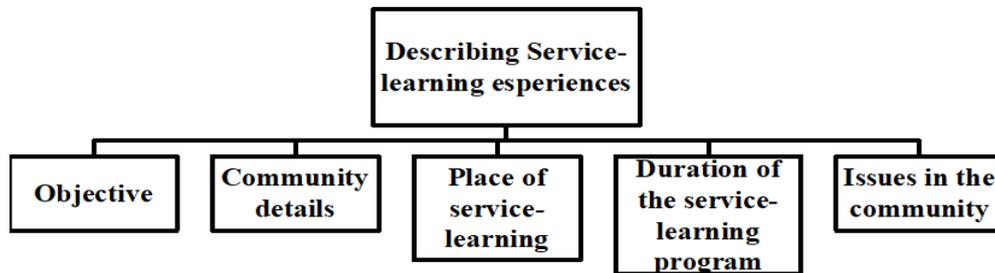


Figure 2. Criteria of describing service-learning experience in reflection.

4. CONCLUSION

This qualitative study examined how the students from the School of Education reflect on their service-learning program. The researcher selected six postgraduate students and conducted semi-structured interviews to collect the data. Using the triangulation method, the collected interview data was validated with documented reflection data of the respondents. Then, it was analyzed with thematic analysis, and several themes were identified from each research question. This study has successfully collected critical criteria or themes for the research questions about describing service learning. Several previous studies have been discussed and were very helpful in providing a basis and guide for this study. Previous research has also discussed the importance and quality of reflection in service learning. The findings hope to help the students do meaningful and systematic service-learning reflection. I recommend that this study be furthered with students from other faculties, involve undergraduate students, and use mixed research methods.

5. ACKNOWLEDGEMENTS

The authors would like to acknowledge the financial support from Universiti Teknologi Malaysia (R.J130000.7353.4B542) and (R.J130000.7853.5F484) under the Fundamental Research Grant Scheme. Opinions, findings, conclusions, or recommendations expressed in the material are those of the author and do not necessarily reflect both Universities.

6. REFERENCES

- Adeani, I. S., Febriani, R. B. and Syafryadin, S. (2020). 'Using Gibbs' reflective cycle in making reflections of literary analysis,' *Indonesian EFL Journal*, 6(2), pp. 139-148.
- Agee, J. (2009). 'Developing qualitative research questions: a reflective process,' *International Journal of Qualitative Studies in Education*, 22(4), pp. 431-447.
- Anderson, K. L., Boyd, M., Auriemma Marin, K., & McNamara, K. (2019). Reimagining Service-Learning: Deepening the Impact of This High-Impact Practice. *Journal of Experiential Education*, 42(3), 229-248.
- Ash, S. L. & Clayton, P. H. (2009). 'Generating, deepening and documenting learning: The power of critical reflection in applied learning,' *Journal of Applied Learning in Higher Education*, 1 (Fall 2009), pp. 25-48.
- Bringle, R. G., & Clayton, P. H. (2021). Civic Learning: A Sine Qua Non of Service Learning. *Frontiers in Education*, p. 6.
- Bringle, R. G., Hatcher, J. A., and Hahn, T. W. (2017). Introduction to research on service learning and student civic outcomes. *Research on student civic outcomes in service learning: Conceptual frameworks and methods*, 3, pp. 3-24.
- Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A. & Sheikh, A. (2011). 'The case study approach,' *BMC Medical Research Methodology*, 11.
- Damons, V. M. and Dunbar-Krige, H. (2020). 'The use of reflection in a service-learning project in a post-graduate program,' *Journal of Service-Learning in Higher Education*, 11, pp. 21-40.
- Houston, K. (2021, December 23). *Qualitative data-collection Methods*. The JotForm Blog. <https://www.jotform.com/blog/qualitative-data-collection-methods/>
- Kawai, T. (2021). 'A Theoretical Framework on Reflection in Service Learning: Deepening Reflection Through Identity Development,' *Frontiers in Education*, 5.
- Lawless, B., & Chen, Y.-W. (2018). Developing a Method of Critical Thematic Analysis for Qualitative Communication Inquiry. *Howard Journal of Communications*, 30(1), 92-106.
- Lorenzo Moledo, M. del M., Sáez-Gambín, D., Ferraces Otero, M. J. and Varela Portela, C. (2021). 'Reflection and Quality Assessment in Service-Learning Projects. When, With Whom, and Why', *Frontiers in Education*, 5.
- McLeod, S. (2017). *Kolb's Learning Styles and Experiential Learning Cycle*. Simplypsychology. <https://www.simplypsychology.org/learning-kolb.html>
- Musa, N., Abang Ibrahim, D. H., Abdullah, J., Saeed, S., Ramli, F., Mat, A. R. and Ahmad Khiri, M. J. (2017). 'A Methodology for Implementation of Service Learning in Higher Education Institution: A case study from Faculty of Computer Science and Information Technology, UNIMAS,' *Journal of Telecommunication, Electronic and Computer Engineering*, 9(2-10), pp. 101-109.
- Naderifar, M., Goli, H., and Ghaljaie, F. (2017). Snowball sampling: a Purposeful Method of Sampling in Qualitative Research. *Strides in Development of Medical Education*, 14(3).

- Noble, H., & Heale, R. (2019). Triangulation in Research, with Examples. *Evidence-Based Nursing*, 22(3), 67–68.
- Resch, K. and Schritteser, I. (2021). 'Using the Service-Learning approach to bridge the gap between theory and practice in teacher education,' *International Journal of Inclusive Education*. pp. 1–15.
- Salleh, M. S., Mokhtar, M., Suhairom, N., Abdullah, A., Ibrahim, N. and Zaid, N. (2018). 'Impact of Service Learning from the Perspectives of UTM Undergraduate and Postgraduate Students,' *Advanced Science Letters*, 24, pp. 12–14.
- Schmidt, M., and Allsup, R. E. (2019). John Dewey and Teacher Education. *Oxford Research Encyclopedia of Education*. <https://doi.org/10.1093/acrefore/9780190264093.013.475>
- Sebastian, A. (2012, May 12). *Verbatim Transcription in Qualitative Research Benefits 2021*. <https://www.scriptsphere.com/verbatim-transcription/>
- Department of Higher Education. (2019). SULAM: Service-Learning Malaysia, University for Society, SULAM Playbook. Ministry of Higher Education Malaysia. <https://www.iium.edu.my/media/60247/SULAMPlaybook-eBook.pdf>
- Wain, A. (2017). 'Learning through reflection,' *British Journal of Midwifery*, 25(10), pp. 662–666.
- Yusof, N., Tengku Ariffin, T. F., Awang Hashim, R., Nordin, H. & Kaur, A. (2020). 'Challenges of service-learning practices: student and faculty perspectives from Malaysia,' *Malaysian Journal of Learning and Instruction*, 17(2), pp. 279–309.