

## **Reflective Learning in Myanmar - International Medical University Collaborative Community Project (MICCP)**

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### **Abstract**

*Introduction:* The aim of this study was to determine the enhancement of the student community service-learning experiences through the reflective learning approach.

*Methods:* A total of 56 students from various Medical and Health Sciences programmes participated in the MICCP. Services provided were health screening, education talks, nutritional assessment, teaching first aid and English activities. Students listed their expected learning outcomes before the project. Upon completion of the activities, a semi-structured, open-ended written survey was conducted. It consisted of student's daily diary and narrative reflection. Significant descriptions were extracted, coded by content, and then grouped into subcategories. Items were scored using a five-point Likert scale. The subcategories were then grouped to eight main themes.

*Result:* The 91% of participants responded the questionnaire survey. A total of 26 participants (90%) submitted daily diary reflection. In the open-ended questionnaires survey, the participants (81%) rated the high score in terms of the categories of learning via the community project was more meaningful than in a classroom setting and learning tool for inter professional collaboration work. The main eight themes identified were team working skills, leadership skills, communication skills, inter-professional learning, community health learning, learning clinical and technical soft skills, real life problem solving and reasoning skills, understanding of social accountability and altruism.

*Conclusion:* Authentic learning can be promoted in a contextual setting through reflective practice. Better communication skills, teamwork, leadership and inter-professional learning were demonstrated.

*Keywords:* Community service learning; Reflective learning; Inter-professional learning

### **Introduction**

The International Medical University (IMU) is initiating various local and international charitable community service activities via IMU Cares to provide opportunity for IMU staff and students to experience inter-professional learning through the practice of professionalism, leadership and teamwork.

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The IMU students' community service club initiates various local and international community service activities under IMU Cares as a student directed charity volunteering program. Higher learning institutions are concerned with the solution to social problems through community service. Aplin-Snyder (2023) stated that service-learning partnerships allow institutions to respond respectively to meet community needs and while providing students with practical learning experiences by demonstrating the mutual benefits of community engagement, establishing such higher education programs as a catalyst for social change (Aplin-Snyder et al., 2023).



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Talberg and van Wyk (2024) discussed the reflections of graduates about their roles in community service and noted that participants felt empowered to make meaningful contribution to public health. These strong feelings can help to bridge the gaps in healthcare access for underserved populations and the importance of socioeconomic factors.

The experiences gained via community service without formal reflection are difficult to impact learning for the students (Song, 2012), these experiences not only encourage lifelong learning and students' commitment to serve other populations but also prepare students in advance to make sure they are confident enough before entering their clinical practice (Jessani, 2024).

The MICCP project started in 2014 to provide students with the opportunity for hands-on experience in working with a rural health teams in a foreign jurisdiction; to experience working together with students from other health programmes, and to broaden their horizons by experiencing life in a village of Myanmar. While local projects are easy to plan and execute, community service projects delivered internationally with different cultural, socioeconomic, and geographical differences are challenging (Wood *et al.*, 2011). The aim of this study was to determine if the reflective learning approach can enhance a student's community-based service learning experiences.

## Methods

This study was approved by the International Medical University's (IMU) Joint-Committee of the Research and Ethics Committee with IRB number; IMU 325/2015/IA 398.

A total of 56 students from Medicine, Dentistry, Pharmacy, Nursing, Dietetics with Nutrition, Chiropractic, Psychology and Master of Science in Public Health Program participated from the year 2014 to 2015 MICCP. The students conducted health screening and health education talk, nutritional assessment to primary school children, teaching first aid and English, healthy cooking demonstration and

some entertainment at the village primary school within the five days duration.

The students were alerted via e mail to create learning objectives depending up on their expectation before the trip. The student self-identify learning objectives were initially entered in Microsoft Excel Software, were summarized into related thematic areas, post-coded and mentioned as frequencies and percentages. At the completion of the program, we conducted semi-structured, open-ended written questionnaires which were developed from the top five students-identified learning objectives. One of the top learning objectives was that the project enhanced awareness of cultural differences between two countries, as responded mainly by the students who had already participated in 2014 (Table 1). The students had to write daily diary reflection during the 2015 MICCP trip (Study Protocol Figure 1).

## Data Analysis

The semi-structured, open-ended written questionnaires were assessed by using Microsoft Word, and Excel software. The items were scored using a five-point Likert scale, where 1=strongly disagree, 2=disagree, 3=somewhat agree, 4=agree, and 5=strongly agree. For each question, the mean score with standard deviation and the percentage of strongly agree score were identified.

Steps Coding and Theorization (SCAT) used for qualitative analysis of daily diary reflection (Maeno *et al.*, 2013). The reflection was initially entered in Microsoft Word Software, were summarized into related thematic areas and significant descriptions were extracted, coded by content, and then grouped into subcategories based on this coding. These subcategories were then separated into main categories based on their emergent themes, and gave a title. The first and second authors who participated in MICCP worked together to analyse and title these themes and categories. A figure was created by the two authors to interpret the relationship within the main categories.

## Results

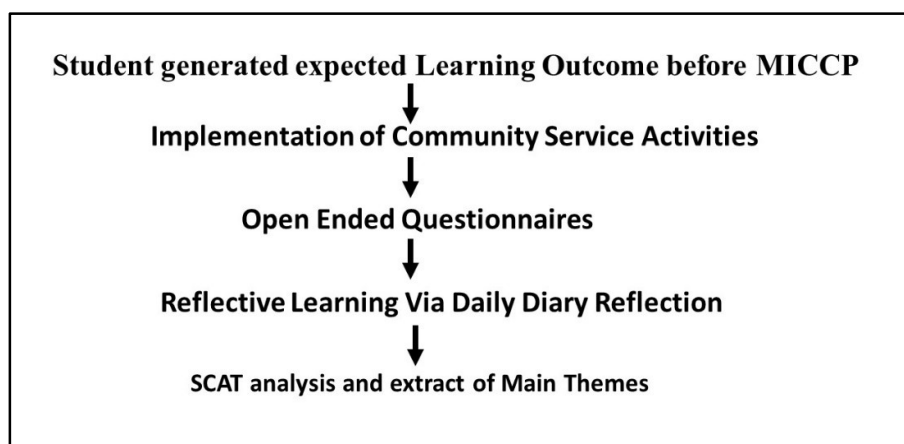
A total of 51 participants responded to the open-ended questionnaire survey. Response rate was 91%. A total of 26 out of 29 (90%) MICCP 2015 participants submitted daily diary reflection.

Table 1 shows the data obtained from the questionnaire concerning the students' perceptions on community-based service learning. The percentage response as "strongly agree" score was between 75 to 81% among the five questions.

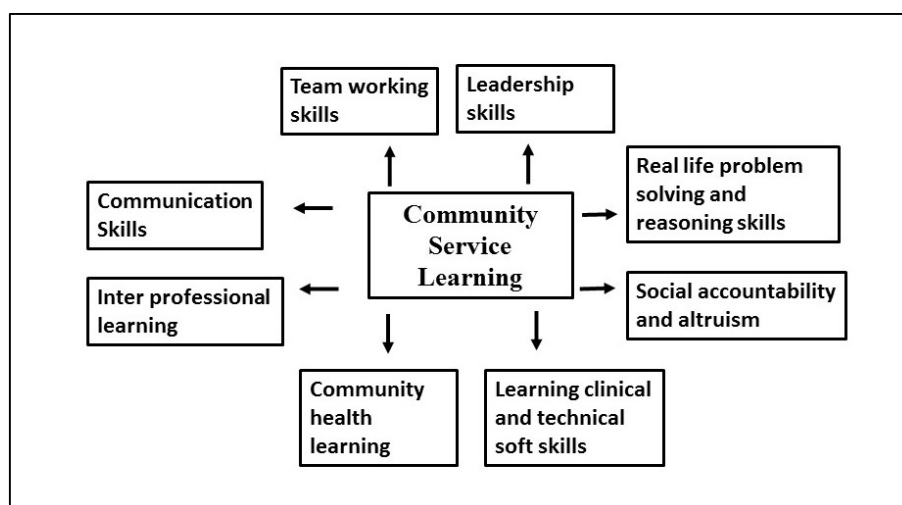
A total of 156 descriptions were extracted from student's daily diary reflection, coded by content and grouped into 34 subcategories based on coding. These were then grouped into eight main categories based on emergent themes. The main eight themes identified were team working skills, leadership skills, communication skills, inter professional learning, community health learning, learning clinical and technical soft skills, real life problem solving and reasoning skills, understanding of social accountability and altruism (Figure 2). Some students' description on main theme described (Table 2).

**Table 1: MICCP participants' perceptions of community service learning**

| Questionnaires                                                                                      | (Mean $\pm$ SD) | Percentage (strongly agree score) |
|-----------------------------------------------------------------------------------------------------|-----------------|-----------------------------------|
| Learning via the community project was more meaningful than in a classroom setting                  | 4.79 $\pm$ 0.46 | 81.0                              |
| Community service learning is learning tool for inter professional collaboration work               | 4.79 $\pm$ 0.46 | 81.0                              |
| The project enhanced aware of cultural differences between the two countries                        | 4.77 $\pm$ 0.47 | 79.5                              |
| The experience helped them to a better understanding of team-working in the provision of healthcare | 4.69 $\pm$ 0.56 | 75.0                              |
| Community service learning is learning tool for social accountability to others                     | 4.70 $\pm$ 0.55 | 75.0                              |



**Figure 1: The study protocol of Myanmar – International Medical University Collaborative Community Project (MICCP), SCAT = Steps Coding and Theorization**



**Figure 2: The main themes identified from the student's daily diary reflection**

**Table 2: The main themes identified and descriptions of student**

| No. | Main Themes                                    | Students' Descriptions                                                                                                                                                                                                                                                                                         |
|-----|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Team working                                   | "It was incredibly disarranged, as there were many children in the visual acuity examination station. Participants' eagerness and enthusiasm for reflection and improvement, the afternoon session improved dramatically. This showed good Team Work and Problem Solving Skills as a team, hence commendable." |
| 2   | Leadership skills                              | "As for the project onwards to be done, it as an important lesson to be learned by the MICCP committee and me with regards on the time lime of task delegation adhere to deadline and the appropriateness of the task for the participants."                                                                   |
| 3   | Communication skills                           | "I can felt that the elderly are not only coming for health screening but also coming to enjoy the company of our participants, as many of them are very happy to communicate with us and even started to teach us some simple local language."                                                                |
| 4   | Inter professional learning                    | "It was really a good exposure as we learnt to manage patients with conditions that we do not see often in the clinic. We had a chance to understand better on each of their professional roles in healthcare and enhanced the inter-professional communication and collaboration between all of us."          |
| 5   | Community health learning                      | "It was quite informative and interesting to understand the healthcare system in the region and the endemic diseases."                                                                                                                                                                                         |
| 6   | Learning clinical and technical soft skills    | "Medical students were able to experiences ourselves the possible blood pressure reading of patterns from various ages and also learn how to communicate despite the language barrier."                                                                                                                        |
| 7   | Real life problem solving and reasoning skills | "We were surprised to have found most of them having extremely high blood pressure. However, this was justifiable due to the highly fatty-oriented diet and salty diet that the villagers have every day."                                                                                                     |
| 8   | Social accountability and altruism             | "Basic health care supposed to be villager's rights and not gifts. We were merely doing something that they deserved to have and yet they treat us like kings. It just pains me to realize that they see health care services as gifts instead of their rights."                                               |

## Discussion

MICCP project achieved its targeted educational goals including learning from within a community and from other health professions. Students gained valuable knowledge and skills required for effective teamwork and the skills necessary to work in a multicultural environment. They developed an appreciation of the life of those less privilege peoples and an understanding of how to improve health through education.

In the present study, the structured reflections activities suggested that MICCP had helped students enhance their community service learning. The reflective writing practice is commonplace in medical and health sciences education. The concept of reflection is implicit in experiential learning such as structured assignment for patient case report (Song, 2012) and community service (Schmidt, 2016). The innovativ form of community-based education known as service-learning which is a balanced partnership between communities and medical and health professions schools and a balance between serving the community and achieving expected learning objectives (Seifer, 1998). In our study, most students achieved their expected learning objectives. Our students now have further understanding of the community health through observing the nature, causes of chronic disease among villagers and whilst proactively assisting in solving of those problems. Our students are also aware of social responsibilities which is important in shifting the focus of education from campus into the community. The value of the community-based service-learning was reviled in medicine and nursing (Wee *et al.*, 2010), nursing (Bittle, 2002; Schmidt, 2016), density health education (Strauss *et al.*, 2003; Rubin, 2004) and medical students in terms of the affective domain (Bartz, 2022).

We assessed the pedagogical value of a student-led community-based experiential learning project by using a self-administered anonymised questionnaire on medical and nursing students who participated in Public Health Screening (PHS) program. The students felt that PHS learning experience

helped them to improve in communication skills, teamwork, ability to identify social issues, taking action, and gaining and applying their knowledge than those in clinical years (Wee *et al.*, 2010). The nursing students learned to use resources more effectively to promote public well-being, leadership, management skills and cultural competence via community service learning (Bittle, 2002). Schmidt mentioned that the students developed critical thinking and social awareness by reflecting through real experience with community services activities which support finding of our study (Schmidt, 2016).

Service-learning was shown to install a sense of social responsibility in chiropractic students by enabling them to see their role beyond clinical practice. Bahammam (2023) conducted a study that documented the changes in attitudes in which students joined the community service programs, most students started to embrace community service as part of their obligations. One student said, "I now realized that being a healthcare provider means being an advocate for those who have no access to healthcare". These experiences promote a lifelong commitment to equitable healthcare delivery.

Strauss studied the how structured reflection assignments, photographic narratives, critical incident essays, and small group discussions promote community-based dentistry in service to communities program. In this study, reflection helps learners to process emotions generated from, and gain insights into, issues and situations not typically encountered in traditional dental education. He also suggested that reflective activities address an important need seldom emphasized in health professional education, namely, the need to develop a reflective practitioner (Strauss *et al.*, 2003). Rubin conducted forty hours of non-dental community service to sixty-one freshmen dental students, reflective journals were completed by the end of service and most students reported that the project enhanced cultural understanding and recognized the social responsibility (Rubin, 2004). Bartz emphasized that service-learning

affects medical students in terms of the affective learning domain by through the experiences, they developed a greater sense of empathy, emotional intelligence, and a more patient-centered care. These qualities are essential for creating compassionate, empathetic, and socially responsible healthcare persons (Bartz, 2022).

In our study, MICCP was organized by the student community service club and all necessary preparation and implementation was performed by committee members and participant students. Our results suggest that student-organized community service projects have potential educational and professional value to students.

In our study, one of the main themes set by the students was inter-professional learning. Maeno *et al.* (2013) conducted qualitative research of opinions of medical, nursing and medical sciences students who participated in the inter-professional program. This study suggested that the program helped students' understanding of health professionals, inter-professional work, communication, holistic care, sharing, and empowerment. Similarly, Hasnaina and colleagues developed and offered a three-week intensive course as an inter-professional learning experiences for medicine and pharmacy students by conducting seminar, community site visits, sharing their reflections about working collaboratively with inter-professional colleagues. This course helped students learn the value and importance of teamwork (Hasnaina *et al.*, 2012). Bridges (2011) described three university training curricula models which represented a didactic program, a community-based experience and an inter-professional simulation. The community-based experience demonstrated how inter-professional collaborations provide service to patients and how the environment and availability of resources impact one's health status (Bridges *et al.*, 2011). Similarly, inter-professional learning among various programmes was promoted in a contextual setting in our study and insights into team-working, diversity and altruism were gained.

A main theme identified by students in our study was learning clinical and technical soft skills. Community service was shown to give chiropractic students the opportunities to apply theoretical knowledge in practical settings. This bridges the gap between academic learning and clinical practice. Gliedt explored the introduction of entrustable professional activities (EPAs) in chiropractic preceptorship programs. The authors pointed out that EPAs provide a structured way of evaluating students' preparedness to carry out their healthcare duties which supports their confidence and competence (Gliedt, 2024). This ensures that students possess the technical and decision-making skills that are required to be successful professionally.

Similarly, Talberg found that graduates from medical school who engaged in community service during their training showed significant improvements in their problem-solving skills and diagnostic abilities. One graduate said, "Practicing in underserved populations honed my clinical decision-making skills and adaptability, especially when faced with limited resources". These findings highlight how involving in community service can train hands-on skills and make one to become more resilient (Talberg, 2024).

This study has a few limitations. There is a time gap between data collection and publication due to the COVID-19 pandemic and limited resource availability. However, the core educational values of our study—community service learning with real-world application and inter-professional learning—remain consistently relevant over time. The dairy reflection written responses were used, but we could not investigate deeply like a focus group detail discussion. But we did a debriefing session and discussed about gain and weakness during the trip and how to improve in the next project. We could not do an interview session with our collaborative community membership due to constrict time and busy service activities schedule. Further studies should be able to conduct the interviews with partners by asking the questions of "how" community felt towards the

student community service and feedback, and suggestions to improve the project.

## Conclusion

In our study, students showed an enhanced understanding of community service learning by achieving their expected learning outcomes. The students draw upon the community service processes, experiences, and understandings generated through reflection on actions in their daily diary writing. An authentic reflective learning was promoted in a contextual setting. The students demonstrated better communication skills, teamwork, leadership and inter professional learning.

## Conflict of Interest

None

## References

- Bahammam HA, Bahammam SA. Service-learning's impact on dental students' attitude to community service. *BMC Medical Education* [Internet]. 2023 Dec 1 [cited 2024 Nov 28];23(1). Available from: <https://researchebscocom.ezp2.imu.edu.my/linkprocessor/plink?id=8f381a24-2222-3348-aeb8-8f0da12bf914>
- Bartz D, Pelletier A, Alexander EK, Osman NY, Johnson NR. Service learning and the medical student affective domain. *Clinical Teacher* [Internet]. 2022 Jun 1 [cited 2024 Nov 28];19(3), pp. 247–50. Available from: <https://researchebscocom.ezp2.imu.edu.my/linkprocessor/plink?id=7ecbe085-8fb9-3a94-9f4a-0a6629b55f78>
- Bittle M, Duggleby W, Ellison P (2002). Implementation of the essential elements of service learning in three nursing courses, *J Nurs Educ*, 41,3, pp. 129-32.
- Bridges DR, Davidson RA, Odegard PS, Maki IV, Tomkowiak J (2011). Inter-professional collaboration: three best practice models of inter-professional education. *Medical Education Online*. 16, 6035.
- Gliedt JA, Mathers KS, King J, Schneider MJ, Wiles MR. The development and introduction of entrustable professional activities at 2 community-based chiropractic student preceptorship sites in the United States. *Journal of Chiropractic Education* (Allen Press Publishing Services Inc) [Internet]. 2024 Oct 1 [cited 2024 Nov 28];38(2), pp. 161–71. Available from: <https://researchebscocom.ezp2.imu.edu.my/linkprocessor/plink?id=b93567a2-1fd3-3e09-a760-3b815d7b4286>
- Hasnain M, Koronkowski MJ, Kondratowicz DM, Goliak KL (2012). Training future health providers to care for the underserved: A pilot inter-professional experiences, *Education for Health*, 25, 3, pp. 204-7. Available at <http://dx.doi.org/10.4103/1357-6283.109790>.
- Jessani A, Athanasakos A, Kachwinya S. "A life-changing experience and the beginning of a lifelong commitment": experiences and impact of Global Health Community Service-Learning in undergraduate dental curriculum in Canada. *BMC Oral Health* [Internet]. 2024 Jul 15 [cited 2024 Nov 28];24(1), pp. 1–15. Available from: <https://researchebscocom.ezp2.imu.edu.my/linkprocessor/plink?id=b06b0c40-c64d-3af8-bc49-bb172d797cf4>
- Maeno T, Takayashiki A, Anme T, Tohno E, Maeno T, Hara A (2013). Japanese student's perception of their learning from an inter-professional education program: a qualitative study, *International Journal of Medical Education*, 4, pp. 9-17. Available at <http://dx.doi.org/10.5116/ijme.50e5.e29a>.
- Rubin RW (2004). Developing cultural competence and social responsibility in preclinical dental students, *J Dent Educ*, 68, 4, pp. 460–7.
- Schmidt NA, Brown JM (2016). Service learning in undergraduate nursing education: Strategies to facilitate meaningful reflection, *Journal of Professional Nursing*, 32, 2, pp. 100-106.
- Seifer, S. D (1998). Service-learning: Community-campus partnerships for health professions education, *Academic Medicine*, 73, pp. 273–277.
- Song P, Stewart R (2012). Reflective writing in medical education, *Medical Teacher*, 34, 11, pp. 955-956, Available at <http://dx.doi.org/10.3109/0142159X.2012.716552>.
- Strauss R, Mofidi M, Sandler ES, Williamson R 3rd, McMurtry BA, Carl LS, Neal EM (2003). Reflective learning in community-based dental education, *J Dent Edu*, 67,11, pp. 1234-42.
- Talberg H, van Wyk JM. Graduate reflections on Community Service: a view of roles in practice. *BMC medical education* [Internet]. 2024 Nov 7 [cited 2024 Nov 28];24(1):1276. Available from: <https://researchebscocom.ezp2.imu.edu.my/linkprocessor/plink?id=3696f754-244a-3d1c-a6d0-63d7d56ea9e2>
- Wee LE, Yeo WX, Tay CM, Lee JJ, Koh GC (2010). The pedagogical value of a student-run community-based experiential learning project:

The Yong Loo Lin School of Medicine Public Health Screening, *Ann Acad Med Singapore*, 39, 9, pp. 686-6.

Wood C.A, Banks S, Galiardi S, Koehn J, Schroeder K (2011). Community Impacts of International Service-Learning and Study Abroad: An Analysis of Focus Groups with Program Leaders, *A Journal of Service Learning & Civic Engagement*, 2(1), pp. 1-23.