

Report on the Pilot Study of the Interprofessional Final Year Project (or Capstone Project)

PROJECT DESCRIPTION

This is an interprofessional service learning project led by the School of Nursing in collaboration with the School of Optometry and the Department of Applied Social Sciences. The project involved implementation of interprofessional learning and healthcare service provision by students from the Faculty of Health and Social Sciences in 2013-4.

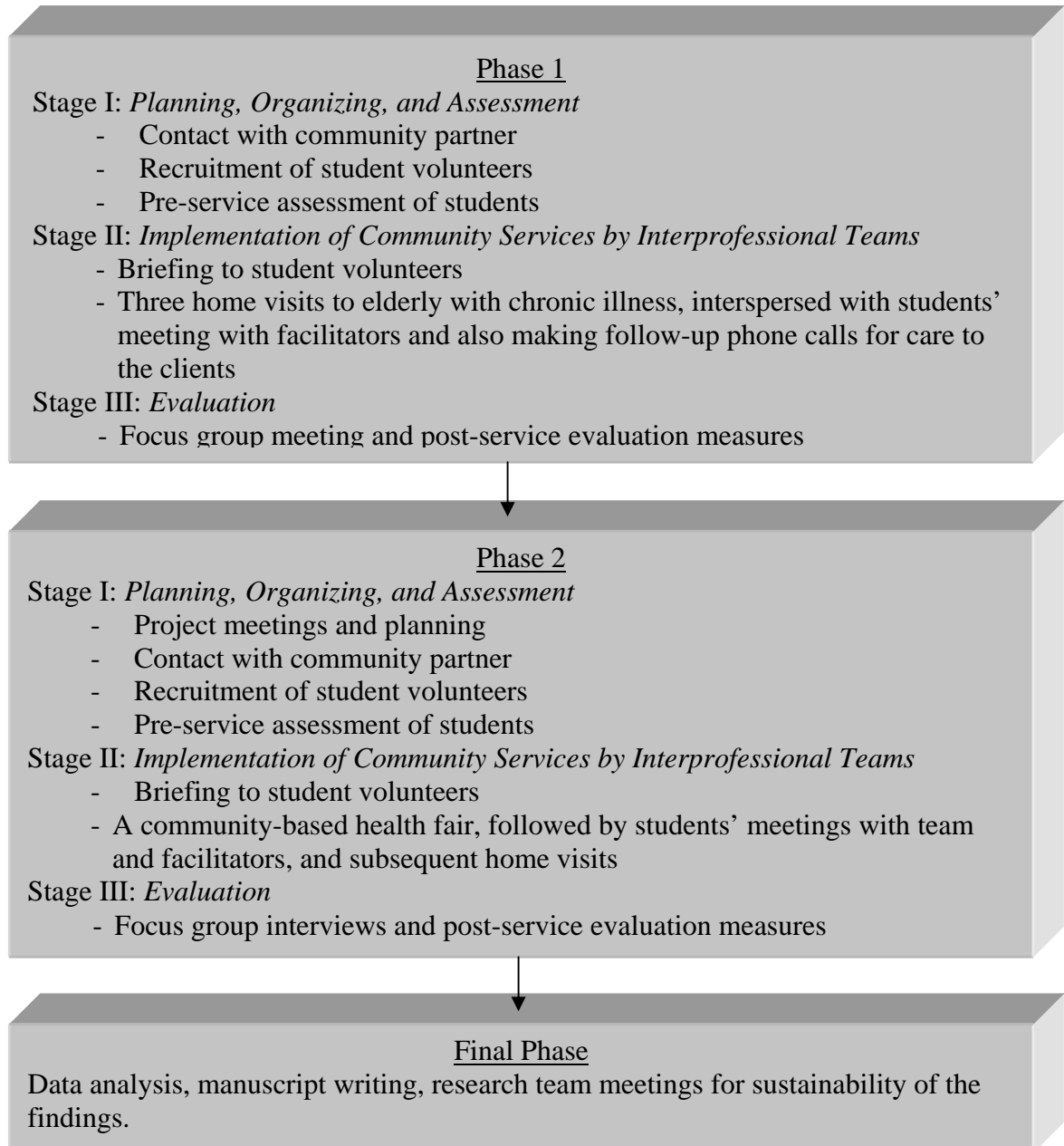
Intended Purpose and Objectives

The project aimed to provide the opportunity for students to actively experience interprofessional learning and collaborative practice in authentic community care. Related objectives included engaging students in active learning through students' collaboration in interprofessional teamwork for community service, developing students' general inquiry abilities, facilitating students' interprofessional knowledge and practice in client care, preparing students for client-centred care in community through experience-based pedagogies, and determining clients' perceived benefits of the interprofessional care provided by the student teams.

Design and Activities

Project design was guided by the concept of active learning as a pedagogical tool. Active learning encourages students to participate in learning related activities other than just watching, listening, and taking notes which they typically do in the classroom (Bonwell & Eison, 1991; Felder & Brent, 2009). That is, student learning is more about thinking and doing. As such, an essential component in the learning process is to engage students in doing tasks which involve higher-order thinking. Equally important is to provide them with the opportunity to interact and collaborate with peers, as learning is a social activity in which knowledge is being constructed (Vygotsky, 1962).

With active learning being a pedagogical guide, the project set out to promote undergraduate students' interprofessional learning through community service. There were two main phases of project activities held in 2013-4. Undergraduate students from the Faculty of Health and Social Sciences volunteered to provide healthcare services to elderly in two different local communities. In 2013, a total of 25 students from the School of Nursing, the School of Optometry, and the Department of Applied Social Sciences participated in the project. In 2014, 37 students in total majoring in Nursing, Optometry, Social Work or Applied Ageing Studies volunteered to join. Upon completion of students' service learning, the research team undertook ongoing analysis of data, worked on manuscript writing, and held discussion meetings regarding dissemination and sustainability of project findings. A flow chart of the overall project design and related activities is provided below:



METHODOLOGY

Ethical approval was obtained from the Human Subjects Ethics Sub-committee of the University. A total of 62 students majoring in Nursing, Social Work, and Optometry were recruited to participate as volunteers in the project. Twenty-seven of them were male and 35 were female. Students were briefed about the service learning project and were assured of anonymity and confidentiality of the information they provided. They were formed into interprofessional teams for providing primary health care to elderly in community. In the

process, students met with teachers and other students for brainstorming ideas, exchanging views, discussing and getting feedback, while observing others across discipline. Project activities included a community-based health fair, brainstorming meetings with facilitators, home visits, follow-up phone calls, and focus group meetings.

Multiple sources of data were obtained for evaluating students' interprofessional service learning experience. Focus group interviews with students were conducted by facilitators to collect students' feedback on their satisfaction and learning experience in the interpersonal service project. Each audio-taped interview lasted for about 60-90 minutes and attended by 10-12 students. Data from audio-files were transcribed verbatim and then subject to qualitative coding and theme development (Leech & Onwuegbuzie, 2008). A series of project team meetings were held to analyze, discuss, and validate the findings (Lincoln & Guba, 1985). Furthermore, other sources of data included audio-recording of team discussion, facilitators' observation reports, pre- and post-study surveys, etc. were used. Furthermore, satisfaction evaluation of elderly clients was also sought. While data from verbal feedback were subject to qualitative coding and analysis, numerical data collected from quantitative surveys were analyzed statistically using the SPSS Statistical Software.

PROJECT FINDINGS

Overall findings suggested that students learned to collaborate with others from different professions through interprofessional teamwork and decision-making. They became more reflective about their own and others' professions and about client care, learned about the importance of being flexible when performing their roles in actual care, carried out community service to clients' satisfaction, and were satisfied with their interprofessional experience in this project.

Learning about interprofessional teamwork and decision-making

With their exposure to active learning through collaboration in interprofessional teams for community service, students had the learning space to explore and learn about working in team and, especially, making interprofessional decision for client care. In the process of making joint decision on team care, students engaged in reasoning and jointly developed their own care plans. They learned to prioritize issues of care and work within constraints including time and own competency to maximize the achievable outcome. Besides, students also gained an understanding about the importance of teamwork for providing holistic care for clients. As many reported, they were equal partners and cooperated well in the teamwork process.

Becoming more reflective in healthcare practice

Students had the opportunity to develop general inquiry and thinking abilities. Through collaborating with teammates and across profession, students knew about others' professional perspectives and sometimes experienced conflict owing to differential values or views. Yet with the awareness about team care as a goal, they managed team conflict and reflected on teammates' perspectives, clients' needs, and realistic conditions. Besides, with help from teacher-facilitators, students reflected on their own and others' professional values. Quantitative findings obtained from survey revealed that, across time, students had a significant increase in confidence in critical thinking. Qualitative findings also supported an improvement in students' critical reflection, for instance, over what they learned in the classroom and what happened in the field.

Appreciation of interprofesional collaboration to optimize client care

Students had the opportunity to engage in interprofessional knowledge and practice in client

care. At first, they were provided with a background about the interdisciplinary context of learning and practice in a project briefing. As they immersed in interprofessional collaboration, they shared ideas, communicated and discussed over issues, negotiated about client selection, made collective decision, and excising their professional roles (nurses/optometrists/social workers) in team. After the project exposure, they expressed appreciation for interprofessional collaboration in providing more holistic care to clients.

Understanding the importance of role flexibility in authentic care

Students learned about client-centred care in community through experience-based pedagogies. For project participation, students assessed and served elderly clients in the actual context of community care. In 2013, student service teams conducted assessment, intervention and evaluation in a series of home visits and follow-up phone calls. In 2014, the teams implemented a community-based health fair in an elderly centre and conducted home visit to the older people. Through active service in the authentic setting, students were able to apply their professional knowledge and skills in practice. Furthermore, they learned to be flexible in care when encountering clients' immediate needs in the actual environment.

Outcome of team care as supported by client evaluation

The interprofessional service provided by students were supported by clients' perceived benefits of the care they received. Overall, elderly clients were highly satisfied with the services provided by the two cohorts of student teams. For instance, on the 10-point scale for rating overall satisfaction with student service teams in 2013 and 2014, eight out of the 13 elderly (61.5%) and six out of 11 (55%) elderly gave the maximum rating of "10" respectively, three offered a rating of "9" in 2013 (23.1%) and 2014 (27%), one rated "8" in 2013 (7.7%) and in 2014 (9%), and one rated "7" in 2013 (7.7%) and in 2014 (9%). When being asked about the aspect(s) of service which they felt most satisfied, these elderly clients reported to be most satisfied with health checkups, the value of eye check and having someone to talk to. They all expressed the importance of these kinds of interprofessional care and visits.

Student satisfaction with their learning exposure

Findings obtained from focus group interviews suggested that students were satisfied with their interprofessional learning experience in this project. They mentioned reasons including their finding the project experience to be enjoyable, gaining other perspectives, and being motivated to learn even more. For instance, a social work student reported that she liked teamwork because her teammates interacted like good friends. An optometry students acknowledged the importance of have a wider perspective instead of being bound by a uniprofessional view. A nursing student reported that she was motivated to search for more information on dementia for client care, while a social work student found the need to know more about social resources in relation to the service of Traditional Chinese medicine.

DISCUSSION & RECOMMENDATIONS

Implications for Teaching/Learning

Project findings have implications for educational practice. After their exposure to active and inquiry-based learning in this service learning project, students learned more about interprofessional teamwork and decision-making and became more reflective about healthcare practice. This lends support to the importance of using active learning as a curricular and pedagogical strategy. Insights from the findings revealed that providing students with the opportunity to engage in critical reasoning and reflection, brainstorm and discuss issues, share and challenge their own and others' perspectives, make decision for

themselves in learning, observe and learn from and with others, and actually explore or test out what works and what does not can be viable pedagogical approach to adopt. That is, letting students to engage in thinking-and-doing or reflection-in-action (Schön 1983) is an important part of the educational process.

Besides, the importance of having teachers' facilitation in students' interprofessional learning is supported by the project data. For active and inquiry-based mode of teaching/learning to be in place, it is important that teachers assume their roles differently from those in the traditional classroom. Findings from our project unveiled that the teachers' role is essential to facilitate student learning and promote active learning. In this regard, teachers can serve not merely as a knowledge-transmitter but also as a mentor to students acquiring professional expertise and as a guide in their reflective journey through education. This implies that relating and communication skills are part of the teacher's tool kits.

Furthermore, findings about students' appreciation for interprofessional collaboration to optimize client care and about understanding the importance of role flexibility in authentic care point to the importance of providing interprofessional service learning for better preparing students to undertake professional practice in the field. Students majoring in health and social care can benefit from interprofessional education which bears global significance in healthcare as promoted by the World Health Organization. Offering the opportunity for students especially those majoring in health and social care to get immersed in inter-professionalism in the authentic setting is much beneficial. It does not only allows them to apply theoretical knowledge to the actual practice but also stimulates them to reflect on relevant issues including their own and others' professional values, acquire the ability to manage conflict, and learn how to optimize authentic team care. As such, endeavours among the Schools/Departments for bringing about interprofessional collaborative learning, especially with the element of service learning in the field, is worth the effort.

Recommendations for Sustainability of the Findings

Efforts have been undertaken to sustain the impact of project findings, as informed by students' feedback. Overall, students valued interprofessional learning/collaboration and were satisfied with their project experience. At the same time, they had concerns over the amount of time, year of study, and having grade allocation for interprofessional learning in the curriculum. For instance, students in both 2013 and 2014 expressed concern about the need to have more time for building relationship with clients. Regarding the year of study for curriculum integration, students' opinions varied. Some deemed that upper-year students were more ready for their participation whereas others thought that early exposure to interprofessional learning was more desirable. About the issue on grading, students also had divergent thoughts. For instance, a nursing student preferred interprofessional learning to be optional or voluntary for them to participate, while a social work student proposed integrating it into the formal curriculum as final year interprofessional placement work.

Based on the findings and student feedback, the project team concurred that it is worth the effort to pilot curriculum integration of interprofessional learning. Ongoing team discussion has been undertaken for developing general principles (e.g., be optional for students to take, be flexible, build on what is existing in the curriculum, aiming at the quality) and also highlighting concerns (e.g., timing, course assessment, student team combination, licensure requirements) regarding the potential curriculum/programme integration. After a series of meetings and an understanding that there is an interprofessional freshman seminar within the Faculty, a team consensus has been reached on piloting interprofessional learning in students'

final year projects (FYP) or Capstone project in Nursing, Social Work, and Optometry. Given the different programme logistics, three potential designs were considered but is subject to future refinement: (i) social work students will collect research data on a subject group, and the findings could later inform the kind of possible research questions for nursing and optometry students for their FYPs; or (ii) social work and optometry students will identify together a research population group regarding the value of interprofessional health care for clients and then collect data for findings. While the next cohort of nursing students are yet to join in later, related FYP information can be provided to all students in briefing about their FYP/Capstone; or (iii) social work students will do their integrated seminar as part of programme requirements, and then meet optometry students at the stage of their Capstone project. Follow-up team discussion in the coming future is expected for consolidating a pilot plan on joint FYPs scheduled for the academic year of 2015-6.

In addition, attempts have been made to communicate and share relevant findings in the University community. Contact has been made with a teacher whose course has objectives relevant to this project (e.g. “facilitate students to work with different disciplines and facilitate students to apply their own professional expertise to help promote vision care in the community”). Project findings regarding interprofessional teaching/learning indeed converge and consolidate this Optometry course (course title; “Learning Through Providing Eye Care and Vision Health to the Community”): e.g., use of authentic cases to enhance student learning, provide a template for students’ brainstorming purpose, and asking students to take on certain roles in team discussion. In addition, this project has also actively shared an assessment tool on team dynamics with the course teacher.

With implications and expected value of the project findings, efforts have been made to disseminate the findings. A report of the project was published in the *School of Nursing Newsletter* in April, 2014. The online publication serves to share our project experience and make known the ongoing practice of interprofessional education in the PolyU community and in the field of health care education at large and can be found at http://sn.polyu.edu.hk/enewsletter/index.asp?news_id=90. Besides, a manuscript has been submitted for potential publication in a peer-reviewed international health care journal. Furthermore, a paper was presented in the Conference on Communication, Medicine, and Ethics (COMET) held in June, 2015.