

School Health Partnership in Service Learning: A Hong Kong Experience

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ABSTRACT

Background: Unlike traditional classroom teaching, service learning programs provide new platforms for students to learn and apply knowledge while serving people. Because students are required to link the knowledge acquired from a service learning course with the process of service through writing reflective journals, service learning actually acts as a bridge between the classroom environment and society. **Methods:** In order to examine the effectiveness of service learning teaching approach, this study aims at assessing students' improvement on four selected domains (interpersonal effectiveness, teamwork, problem solving, and social responsibility) before and after taking a service learning course. **Results:** The students showed significant improvement ($p < 0.01$) on all the four domains after completing the course. **Conclusion:** This study demonstrated the effectiveness of the service learning model in higher education. In contrast to a traditional lecture setting, service learning can also improve students' abilities in different dimensions. Service learning, which is an innovative and low-cost teaching method, is not only suitable for Western countries, but also for Chinese society.

Key Words: Hong Kong, Service learning, School Health

1. INTRODUCTION

Unlike traditional classroom teaching, service learning programs provide new platforms for students to learn and apply knowledge while serving people. Because students are required to link the knowledge acquired from a service learning course with the process of service through writing reflective journals, service learning actually acts as a bridge between the classroom environment and society (Heo et al., in press). Contrary to misconceptions, service learning is not the equivalent to volunteer work or even "forced volunteering" (Brail, 2013). Service learning encompasses different practices and interpretations. In a structured curriculum, service learning engages students in more

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than just volunteer work, though students are mostly required to initiate volunteer actions in order to fulfill the course's requirements. The discourse of the meanings of the service and the process of learning is essential in service learning that facilitates the extended learning and beyond practice.

All parties involved in a service learning experience should have a conscious of gaining something from the rendered service. Service learning can therefore be regarded as a platform for students to develop interpersonal skills and establish relationships by serving people in a community. Different scholars and organizations have attempted to define service learning (Alliance for Service Learning in Education Reform, 1993; American Association of Community Colleges, 1995; Jacoby, 1996; National Youth Leadership Council, 2012). This study uses The Hong Kong Polytechnic University's formal definition of service learning: "an experiential learning pedagogy that integrates community service with academic study and reflections to enrich students' learning experience, in order to achieve the intended institutional or program learning outcomes" (Shek and Chan, 2013a). Service learning approaches are popular in western countries among different disciplines such as tourism/sports management (Heo et al., in press), geography (Brail, 2013; Cope, 2009), nursing (Laughlin et al., 2010), medicine (Buckner et al., 2010), and other health professions (Fries et al. 2013). However, service learning is still a relatively new concept in Chinese societies such as in Hong Kong (Shek and Chan, 2013b). In health related academic journals, only six articles were identified in the PubMed database by using the keywords "service learning" and "Hong Kong" (Chung, 2001; Shek and Chan, 2013a; Shek and Chan, 2013b; Leung et al. 2012; Ngai, 2006; Ngai, 2009).

The Office of Service Learning (OSL) of the Hong Kong Polytechnic University notes that service learning courses at the university level must emphasize the importance of civic responsibility and social justice in addition to traditional core focuses such as critical thinking, problem solving, professional knowledge, and career development (2014a). Starting in 2011, Hong Kong's undergraduate curricula changed from a 3 year to a 4-year track. The OSL required Hong Kong universities to include service learning as compulsory credit-bearing courses for all undergraduate students under this new curriculum (Office of Service Learning, 2014b). This added component also contributes to a holistic learning curriculum and an all-round development in higher education.

The students who participated in this study are the first and second waves of university students who took the service learning course in the new 4-year undergraduate curriculum. Although these university students came from different non-health major disciplines, the course's roots were in school health. The title of the course was "Collaborative Care in School Health and Safety" and was organized by the School of Nursing of the Hong Kong Polytechnic University. The course was developed based on the HEARS framework, an acronym which stands for 1) health for all students and staff; 2) environmental consciousness for green and safety; 3) affordability of cost and time; 4) resources from professionals and information; and 5) sustainability of school partnership.

In order to fulfill the first component of HEARS, the students started the program with school wide fitness activities held after lunch and included the participation of all service school students and staff members. The activities included playing basketball, jumping rope, and hula hooping. In addition, health stations were set up on-site for providing health information and carrying out activities related to school health and safety. For environmental consciousness and safety, senior students from the service school were partnered with the university students to organize games and activities for junior service school students; these games and activities promoted school harmony and safety awareness. For affordability of cost and time, the program was integrated into the service school's subject curriculum; by coordinating with English teachers, university

students were able to deliver health talk in class. Free pocket-sized info cards and pamphlets pertaining to health education were provided by the Department of Health and World Health Organization. These no-cost assets fulfilled the resources component. And lastly, sustainability was demonstrated by sharing the program plan and teaching materials with the service school for its own use and follow-up. Since new students begin school every year, it is a naturally sustainable partner, assuming that a high-quality service program can be provided and maintained.

In general, a service learning course has three objectives: 1) Students' knowledge about contemporary and fundamental issues concerning school health and safety will be increased; 2) Students will promote the importance of health and safety within the school community and assist schools to become Health-Promoting Schools; and 3) Students sense of social responsibility will be developed through service participation and reflection on the collaborative care experience. This course demonstrates that health-centered service learning courses are also suitable for non-health majors.

Multiple teaching and learning methodologies were adopted in order to achieve the above teaching objectives. In general, students were required to work as teams to address the fundamental and contemporary issues of school health and safety. Through the services they performed, students learned the practical applications of their studies. Students also took on active citizenship roles that contributed to the health of the school's community. Particularly, the following four means were adopted for the course: 1) Lectures and tutorials facilitate the application of the subject matter and related readings to school health practices. Students will apply what they learn about improving health situations and safety issues in the school environment; 2) Students are provided with online learning materials. A web-based learning platform will be available for learners to clarify concepts as well as to reinforce peer-sharing and learning; 3) Students will provide health services for schools through team participation. Students will have opportunities to develop social communication and teamwork skills as well as their individual roles as contributors to society; 4) Reflective writing: students will describe and relate the process of the changes (if any) introduced by their service to the school environment, work relationships, attitudes, and perceptions of health and safety issues and the work plan.

More information about the course content can be found from the subject description form (<http://sn.polyu.edu.hk/filemanager/common/programme/syllabus/SN2S01.pdf>) and music album (http://sn.polyu.edu.hk/filemanager/download/SN2S01_SubjectSynopsis.ppsx) for the course.

Five learning outcomes were expected from students upon course completion. 1) Safety issues of the school environment and food choices will be addressed; 2) Healthy behaviors and balanced lifestyles of children and adolescents will be reinforced; 3) Skills for communicating with team members and people in their community will be acquired; 4) Roles and responsibilities both as professionals in their chosen disciplines and as responsible citizens will be reflected upon; and 5) The essence of service learning will be appreciated and they will be motivated to serve the community with a stronger sense of social responsibility.

Currently, a significant amount of research has attempted to demonstrate the effectiveness of service learning through qualitative methods such as analyzing students' reflective journals (Brail 2013) or conducting focus group interviews (Shek and Chan, 2013b). These methods have the advantage of being able to obtain in-depth information related to the achievement of learning outcomes. However, stronger supporting evidence can only be obtained by conducting a pre-post survey design (Polit and Beck, 2014). Students may claim they have achieved all of the intended learning outcomes in their

reflective journals (in order to ensure they are rewarded with higher academic grades) when these may not be entirely accurate assessments. In contrast, the students' abilities will be assessed both before and after they have completed the course. A pre-post survey design ensures a greater objectivity of the assessment.

In order to obtain stronger evidence for proving the effectiveness of a service learning teaching approach, this research aims at using pre-post surveys to objectively assess student development in relationship to the learning outcomes. Traditional subjective approaches (e.g. analyzing reflective journals) will also be used.

2. METHODS

2.1 Participants

In this study, 81 undergraduate students were enrolled in a service learning course. These students' majors were from a variety of fields, including accounting, hotel and tourism management, design, social policy and administration, and industrial system engineering. Before and after completing the course, a questionnaire titled "Service Learning Survey" (SLS) was given to the students for assessing their overall development from the course's beginning to end. In addition, these students' reflective journals (written after completing the program) were also collected for analysis.

2.2 Instrument

The SLS was originally developed by the OSL of The Hong Kong Polytechnic University. It consists of 32 items for assessing students' overall learning experience (8 items; Table 3), generic/soft skills (20 items; Table 3), and qualitative comments on the program. The generic soft skills include four domains: interpersonal effectiveness, teamwork, problem solving, and social responsibility. Each domain has five questions, and each question has five options ranked from "always" to "never," and is scored from 5 to 1 respectively. The internal consistency of the SLS was tested using Cronbach's alpha on the first wave of students before the course started. The alpha values for the four domains (i.e. interpersonal effectiveness, teamwork, problem solving, and social responsibility) were 0.67, 0.77, 0.83, and 0.85 respectively, values which are generally considered to be high enough for practical use (Moss et al. 1998).

2.3 Data analysis

Descriptive statistics were used to illustrate the students' background characteristics. Paired t tests were used for comparing the students' post-program development on the four generic soft skills. All analysis was done by using SPSS 20, and the significant level was set at 0.05.

3. RESULTS

3.1 Basic characteristics of the service learning students

Table 1 shows the basic characteristics of the two waves of service learning students. The first wave of the students included freshmen (25; 31%), and the second wave students were in their second year of university (56; 69%). The majority had prior volunteering service experience (65; 80%). One-fourth of them had more than one year of voluntary service experience. A detailed breakdown can be found in Table 1.

Table 1 Basic Characteristics of the Service Learning Students (N=81)

| Basic Characteristics | | Total | |
|--|---------------------|-------|----|
| | | N=81 | % |
| Year of study | One | 25 | 31 |
| | Two | 56 | 69 |
| Prior voluntary service experience | Yes | 65 | 80 |
| | No | 16 | 20 |
| Length of voluntary service experience | None | 16 | 20 |
| | Less than half year | 24 | 30 |
| | Less than 1 year | 21 | 26 |
| | More than 1 year | 20 | 25 |

3.2 Reason of taking the service learning course

The two most popular reasons for taking the course were, “I believe it will broaden my horizons in understanding the life of the underprivileged people inside/outside of Hong Kong” (35; 43%); and “I want to contribute to society” (35; 43%). A detailed breakdown can be found in Table 2 below.

Table 2 Reason of taking the service learning course

| Reasons | Total | |
|--|-------|----|
| | N=81 | % |
| 1. I believe it will broaden my horizon on understanding the life of the underprivileged people inside/outside Hong Kong | 35 | 43 |
| 2. I want to contribute to the society | 35 | 43 |
| 3. I want to help others in need | 32 | 40 |
| 4. To better communicate with others | 32 | 40 |
| 5. To develop my problem solving skills | 25 | 31 |
| 6. To develop my teamwork skills | 24 | 30 |
| 7. I was invited by my friends/teachers | 22 | 27 |
| 8. It is part of my course requirement | 8 | 10 |
| 9. Others | 4 | 5 |

3.3 Overall learning experience after taking the service learning course

Table 3 below is about the students' overall learning experience after taking the service learning course. The results show that most (46; 90%) agreed they applied professional knowledge/skills that they learned from class during their service learning activities/projects (item 1). Moreover, over 85% of the students (44) expressed that they treasured the learning experiences throughout the activities/projects (item 2). Nearly all of them (50; 98%) agreed serving needy people is meaningful (item 4), and over two-thirds (35; 69%) agreed that the project allowed them to serve needy people in the district for a longer period (item 3).

Over four-fifths of the students (43) believed that they learned better from the service learning activities/projects than traditional classroom learning modes (item 5). Moreover, 88% (45) agreed that the activities/projects were well-prepared and well-organized (item 6). 79% (40) said they will participate again in service learning activities in the future (item 7), and 80% (41) said they will recommend friends or classmates to participate in service learning activities (item 8).

Table 3 Overall learning experience after taking the service learning subject

| Overall Learning Experience (n=51) | Strongly agree | Agree | Neutral | Disagree | Strongly disagree |
|--|---------------------------|--------------|----------------|-----------------|------------------------------|
| 1. I applied the professional knowledge / skills that I learnt from class at the service learning activity / project. | 4 (7.8) | 42 (82.4) | 4 (7.8) | 1 (2.0) | 0 (0) |
| 2. I treasured the learning experience throughout the activity / project. | 14 (27.5) | 30 (58.8) | 7 (13.7) | 0 (0) | 0 (0) |
| 3. The project has allowed me to serve the needy people in the district for a longer period. | 6 (11.8) | 29 (56.9) | 15 (29.4) | 1 (2.0) | 0 (0) |
| 4. I agree that it is meaningful to serve the needy people. | 18 (35.3) | 32 (62.7) | 1 (2.0) | 0 (0) | 0 (0) |
| 5. The activity/project was well prepared and organized. | 9 (17.6) | 34 (66.7) | 8 (15.7) | 0 (0) | 0 (0) |
| 6. Generally speaking, I learn better from the service learning activity / project than traditional classroom learning mode. | 11 (21.6) | 34 (66.7) | 6 (11.8) | 0 (0) | 0 (0) |
| 7. I will participate in service learning activities in the future. | 11 (21.6) | 29 (56.9) | 11 (21.6) | 0 (0) | 0 (0) |
| 8. I will recommend friends or classmates to participate in service learning activities. | 14 (27.5) | 27 (52.9) | 10 (19.6) | 0 (0) | 0 (0) |

3.4 Post-program changes in generic/soft skills

Table 4 shows the results of the paired t-test for assessing the students' development in the four domains following completion of the service learning course. Because some students dropped out of the program or did not complete the post-test questionnaire, only 44 of the 81 students were included in the pre-post comparison. A significant development was observed in all four generic/soft skills, which were (1) interpersonal effectiveness ($p < 0.001$); (2) teamwork ($p < 0.001$), (3) problem solving ($p < 0.01$), and (4) social responsibility ($p < 0.001$).

Table 4 Post program change on the Generic/soft skills (n=44)

| Generic/soft skills | Students' service learning (SL) Status | Mean scores (SD) | Differences in mean scores | p-value |
|-----------------------------|---|-------------------------|-----------------------------------|----------------|
| Interpersonal Effectiveness | Pre-SL | 18.43 (2.40) | 1.95 | <0.001*** |
| | Post-SL | 20.39 (2.27) | | |
| Teamwork | Pre-SL | 19.16 (2.36) | 1.41 | <0.001*** |
| | Post-SL | 20.57 (2.14) | | |
| Problem Solving | Pre-SL | 18.61 (2.39) | 1.27 | 0.003** |
| | Post-SL | 19.89 (2.38) | | |
| Social Responsibility | Pre-SL | 18.77 (2.71) | 1.59 | <0.001*** |
| | Post-SL | 20.36 (2.27) | | |

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Particularly, different students also mentioned their improvement on each of the four aspects in their reflective journals. The following sections contain direct passages taken from various students' journals.

Interpersonal effectiveness

In this service learning subject, leadership skills and inter-personal skills are the major skills I have learned. Truth to be told, it was absolutely difficult to work with a group of people who are unfamiliar and coming from different departments at the very beginning; but our effective cooperation could be a consequence of sharing a same goal and conviction in this community service programme. Cooperating with other members is definitely a good way to train one's inter-personal skills, as he or she has to receive different comments and suggestions given by the teammates. After working with my groupmates in these weeks, I learned more in how to respect others' opinions and views, and this social skill allows me to fit in a group setting, and every comment could be a precious source and inspiration.

Teamwork

I believe my team working [sic] skills can be enhanced. Take our group as an example, members are from different backgrounds and this may have caused different problems. Some of the members may be rather silent and tend to follow others' suggestions than expressing their own ideas. However, for some members, they may be rather emotional. They may find it hard to accept criticisms [sic] from others or even disagreeing [sic] people in an emotional manner. This has greatly affected the discussion progress and the team spirit within the group. In response to this, we tried to talk to the person and encourage them to control their emotions during the discussion. Through this experience, I believe my team working and management skills can be enhanced.

Problem solving

At the first time for giving talks in the service school, we encountered a time crash and also there was a communication problem happened [sic], as we did not know that the class was expanded from one to three classes. At first I was quite panic [sic] as we had to divide the talks and duty as to fit in the arrangement from the schoolteacher. Fortunately we tackled the problem by dividing our teammates into three classes and the talks still ran smoothly. It is thankful [sic] that we applied the problem solving skills and communication skills to tackle this kind of real-life and unexpected problems [sic].

Social responsibility

I have taken the first step as an [sic] service-learner, I hope I can adopt the experience I gained this time, further display them [sic] in a different aspect, such as in my major of Social Sciences and try my best in making [sic] an influence on more people.

4. DISCUSSION

Clearly, the results obtained in this study are very promising. Faced with a small sample size (N=44), the power of the statistical test is expected to be very low (Ellis, 2010). However, significant developments can still be observed among the four primary learning outcomes. In her reflective journal, one of the students wrote about her overall development after taking the course, "Along the service planning process, I acquired and improved my abilities in leadership, communication and managing whereas the servicing experience has promoted my willingness in serving the community."

The above positive results are also in line with the positive results obtained from other service learning studies, although several only had qualitative results based on

reflective journals (Heo et al., in press; Brail, 2013). This study provided further evidence for supporting the implementation of service learning courses in Chinese communities. Such objective evidence could not be obtained merely by analyzing reflective journals, as researchers may question if students are claiming they have achieved the learning outcomes in the reflective journals primarily to receive a high grade.

5. LIMITATIONS

This study has two major limitations. First, the design of the study lacked a control group for comparison. The improvement observed in this study must still be validated, as such improvement could also be observed in other courses with traditional settings. Without a scientific comparison, it is impossible to know how much better service learning is than traditional classroom courses. Second, the assessment in this study was only limited on the students' side. The spirit of service learning is to serve society; ideally, the targets of this service should be assessed as well.

6. CONCLUSION

This study demonstrated the applicability of the service learning model in higher education. In contrast to a traditional lecture setting (which only focuses on delivering knowledge to students), service learning can also improve students' abilities in different dimensions (e.g., interpersonal effectiveness, teamwork, problem solving, and social responsibility). Service learning, which is an innovative and low-cost teaching method, is not only suitable for Western countries, but also for Chinese society. With one-fourth of the world's total population, the further development of service learning could greatly benefit China and its people.

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