

Proposal for a Paper Presentation

Achieving Civic Outcomes, Academic Connection, Career Preparation and Personal Growth in Service-Learning modules @ HMS

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Abstract:

1. Introduction

Ngee Ann Polytechnic (NP) adopted Service-Learning (S-L) as a signature pedagogy in 2016 to achieve the graduate outcomes of passionate learners, big-hearted persons, and global-smart professionals. Indeed, many efficacy studies on S-L have shown promising outcomes in students' civic learning, academic learning and personal growth (Yorio & Ye, 2012). However, these studies have mostly been conducted in university settings overseas. Could we expect similar results if S-L is applied to a polytechnic context in Singapore?

Given the institutional requirement for every course in NP to offer at least one S-L module to students, a team of lecturers from the School of Humanities & Social Sciences (HMS) carried out a study over three semesters (from April 2017 to August 2018) to examine the impact of S-L with structured reflections on student outcomes such as civic outcomes, academic connection, personal growth and career preparation.

2. Theoretical framework/literature review

This study adopts Bringle and Clayton's (2012) definition of S-L, a "course-based, credit-bearing educational experience in which students (a) participate in mutually identified service activities that benefit the community, and (b) reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline and an enhanced sense

of personal values and civic responsibility” (pp. 114-115), in its investigation of the impact of curriculum-based S-L on student outcomes.

Research has shown that reflection is a consistent predictor of better outcomes in S-L (Celio et al., 2011) and stronger positive effects were observed when reflections are structured and regular (Mabry, 1998; van Goethem et al., 2014), and when the content of reflection activities is aligned with academic topics (Astin et al., 2000) and the desired outcome category (that is, students’ civic attitudes improved when they reflected on their civic attitudes during service) (van Goethem et al., 2014).

This study investigates the questions: (a) What is the impact of S-L with structured reflections on civic outcomes? (b) How well do students perceive the connection between S-L project and academic content, and career preparation in curriculum-based S-L? What is the impact of S-L on students’ personal growth? What S-L features are correlated with change in civic outcomes, academic connection and career preparation?

3. **Methods/analysis**

Participants: There were two groups of participants in this study:

(a) Year 1 students from each diploma within HMS were invited to complete a 9-item survey measuring civic outcomes at the start and end of their first semester when there was no S-L module (control). In a subsequent semester when they had a S-L module (experimental), these students completed the 9-item pre-, 16-item post-survey. Only participants with both pre- and post-tests in the control and experimental conditions were included for the within-subject analyses (N=351). Students’ responses were tagged to their student identification number to enable comparison of pre- and post-test responses;

(b) Students who took a S-L module during a semester within April 2017 to August 2018 were invited to complete a pre-, post-survey (N=832 enrolled in 13 modules and included the 351 students mentioned above). The mean age of the participants was 18.34, SD=1.12 and a majority of them was female (86.9%).

Design: This study adopts a mixed methods approach, with quasi-experimental (pre-post test) design to examine the change in students’ civic outcomes scores under no S-L condition and S-L condition (within-subject design), quantitative analysis of the mean scores for academic connection, and career preparation, correlational analysis of the variables, and qualitative analysis of interview data from selected students on their perspectives of their personal growth.

Instrument: The survey that participants completed under no S-L condition was a 9-item survey (civic outcomes) at the start and end of Semester 1.1. Under S-L condition, 832 participants completed the 9-item pre-S-L survey (civic outcomes) and the 33-item post-S-L survey that

measured civic outcomes, academic connection, career preparation and S-L design and delivery features such as perceived impact of S-L, preparedness for S-L, quality of reflection prompts, frequency of reflection, and amount of interaction with the community. The scales were adapted from relevant scale items in the literature (e.g., Aselage 2005) and principles of good practices (Howard, 2001). These scales had high internal consistency (Cronbach's alpha ranged from .81 to .89). The responses for items in the survey were based on a five-point Likert scale, ranging from (1) *Strongly Disagree* to (5) *Strongly Agree*; for items measuring frequency of reflection and amount of interaction with the community, ordered responses of numerical ranges were used.

Qualitative interviews: A total of 39 students were interviewed either in focus group discussion or individually over three semesters. Students were asked question such as "Do you see that you have grown through this S-L experience?" and probed for elaboration and examples of their growth.

Procedure: At the start of a S-L module, lecturers briefed students about S-L, the purpose of S-L in the module, and the S-L projects they would be undertaking as a service to the community partners. Students reflected before, during and after S-L, as they learnt academic contents to apply in their S-L projects. In addition to other faculty development activities focused on implementing S-L, lecturers were also provided reflection prompts based on the DEAL - Describe, Examine, Articulate Learning - model (Ash & Clayton, 2009) that emphasized academic connection, civic outcomes, and personal growth.

Data analysis: (a) Paired sample t-test was used to measure if the change in civic outcomes scores under S-L condition (during semester when a S-L module was conducted) was significantly greater than no S-L condition (during semester 1.1 when there was no S-L module); (b) One sample t-test was used to measure if the Academic Connection and Career Preparation mean scores were significantly different from the neutral point of 3; Pearson Correlation was used to analyse whether the variables (S-L design and delivery considerations) studied were associated with change in Civic Outcomes, Academic Connection and Career Preparation; the qualitative data was analysed thematically to identify patterns or themes in students' personal growth.

4. Results and Discussion

Paired sample *t*-tests revealed that the 351 participants showed significantly greater improvement in their Civic Outcomes scores in the S-L (Experimental) condition ($\text{Mean}_{\text{diff(SL)}} = 0.35$, $\text{SD} = 0.53$) than the No-S-L (Control) condition ($\text{Mean}_{\text{diff(No SL)}} = 0.05$, $\text{SD} = 0.51$), $t(350) = -7.93$, $p < .01$.

A one-sample *t*-test showed that the academic connection mean score of 3.96, SD=0.70, ($t(831)=39.56$, $p < .01$) and the career preparation mean score of 3.78, SD = 0.77 ($t(831)= 29.28$, $p < .01$) were significantly greater than the neutral/mid-point (3), following S-L.

Pearson correlations showed positive and significant relationships between S-L design and delivery features (such as perceived preparedness for S-L, perceived impact of S-L, perceived quality of reflection prompts) and change in civic outcomes score (r s ranged from .21 to .34, $p < .01$), academic connection (r s ranged from .61 to .79, $p < .01$), and career preparation (r s ranged from .61 to .73, $p < .01$).

Spearman correlations showed weak, positive and significant relationships between the amount of interaction students had with the community and change in civic outcomes score ($r(831) = .17$, $p < .01$). There were positive and significant correlations between S-L features (such as amount of interaction, and perceived frequency of reflection) and academic connection (r s ranged from .17 to .23, $p < .01$), and career preparation (r s ranged from .14 to .16, $p < .01$).

Thematic analysis of students' interviews on their personal growth revealed two major themes: (a) interpersonal development - students reported enhanced skills in interacting with community members, interacting and working with external parties, working with team members, and leadership; and (b). personal development - students reported changes to their perceptions and initial assumptions of the community members (reduced stereotyping), greater self-knowledge/awareness, and strengthened character and professional traits such as adaptability, perseverance, and patience.

The findings from this study are consistent with other efficacy studies on S-L overseas.

5. Conclusions and contributions to theory and practice

The encouraging findings that students at HMS were able to achieve the desired outcomes through their participation in S-L modules hold important implications for faculty development. In order to achieve the outcomes that S-L promises, the quality of the S-L modules (or students' perception of the quality) is important. Faculty need to design S-L projects that are meaningful, that allow for continued engagement with community members, design structured reflection prompts that are of high quality, ensure that students are well prepared for S-L, and conduct regular reflections aligned with civic learning, academic learning, and personal growth. Finally, the findings support the work of the Office of Service Learning in its faculty development activities, quality assurance of S-L modules, and institutionalization of S-L in Ngee Ann Polytechnic.

Keywords: civic outcomes, academic connection, career preparation, personal growth, structured reflection

References: no more than 10 references.

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Biographical sketch of each presenter

Please send the biographical sketch of the presenters together with the proposal using the following format:

Presenter:

- i. Last name followed by first name: Faith Ong Ying Shiuh
- ii. Position/department/organisation/country: Lead Catalyst (Curriculum & Design)/Office of Service-Learning/Ngee Ann Polytechnic/ Singapore
- iii. Short biography (word count should not exceed 70 words)

Faith is currently a Lead Catalyst (Curriculum & Design) and Master Trainer in the Office of Service-Learning (S-L) in Ngee Ann Polytechnic (NP). In 2016, Faith received the S-L Staff Champion Award for her commitment to initiate and lead Service-Learning endeavours. She has presented her works at “Redesigning Pedagogy International Conference 2017” and “Applied Learning Conference 2018”. In addition, she is part of the HMS S-L research team, investigating the “Impact of Service-Learning with Structured Reflections on Academic Connections, Civic Responsibility and Personal Growth in Polytechnic Students” under the MOE Tertiary Education Research Fund (TRF).

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