Measuring the Effectiveness of Service-Learning Teaching Assistants in Enhancing the Quality of the Courses with Service-Learning Elements

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1.   Introduction

Lingnan University (LU) aims at providing students with skills, competences and sensibilities for pursuing their goals in society and to foster a sense of civic duty in order to prepare the students to be the future community leaders (Lingnan University, 2017). Accordingly, the Civic Engagement requirement was introduced in 2012. Subsequently, Service-Learning (S-L) as a graduation requirement was implemented in 2016-17. At LU, course instructors adopt an S-L approach in their courses by designing additional meaningful service opportunities for students to practice their subject-related knowledge and personal skills in community. To cater for such extra workload, since 2013, the Office of Service-Learning (OSL) has launched the Service-Learning Teaching Assistants (SLTA) programme, a unique undergraduate teaching assistant model in Hong Kong, in which OSL provides training to selected undergraduate students to be SLTAs. These SLTAs offer additional support to faculty and help offset faculties' limited time in fulfilling research and managing other teaching obligations, while also coordinating S-L responsibilities and mentoring the students in S-L projects. Since its launch, SLTAs are welcomed by all stakeholders (including students, faculty members, community partners and OSL coordinators) in LU's courses with S-L elements.

2.   Literature Review

Previous research reveals that undergraduate teaching assistants are able to bring reciprocal benefits to faculty members and students (Fingerson, & Culley, 2001; Roberts, Lilly, & Rollins, 1995). Other studies show that undergraduate leadership teaching assistant experience can be a high-impact practice for undergraduates in learning leadership (Kuh, 2008; Odom et al., 2014). A previous study (Timberlake & Frank, 2006) in S-L also argues that teaching assistants can create a number of benefits for S-L, including the teaching assistants' ability to better relate to students, understand students concerns and constraints that students face, and provide unique connections between course knowledge and service opportunities in reality. Moreover, employing teaching assistants instead of professional staff members can also bring a financial advantage to S-L programmes with better utilization of resources. The benefits also extend to teaching assistants, by providing them opportunities to gain transferrable skills, by enhancing their self-confidence,

and by affording the satisfaction of working for the public good, thereby laying the foundation for continuing community service when moving into the workforce.

On the other hand, involving teaching assistants in S-L also poses challenges, including repeated recruitment and training cycles due to the short service tenure of teaching assistants, and the need for more supervision in comparison with professional staff members (Timberlake & Frank, 2006). We considered that it was necessary and important to conduct a review of the SLTA arrangement, in order to understand how to overcome the challenges involved in the arrangement, and how to maximize the effectiveness of the SLTAs in supporting S-L.

Furthermore, there has been little prior research about student partnerships (e.g., as teaching assistants) in or through S-L (Jacoby, 2012), with no similar studies found in Hong Kong about SLTA effectiveness in the context of S-L. Therefore, a salient research gap has been identified.

According to the background above, the research aims at addressing the following objectives:
- Identifying and assessing the key aspects of SLTA effectiveness in supporting courses with S-L elements
- Identifying how to enhancing the SLTA arrangement in the courses with S-L elements at LU
- Developing an initial model for evaluating SLTA effectiveness in Hong Kong
- Developing a database for long term SLTA assessment and for further related research
- Validating the SLTA training model based on the findings so as to enhance the associated training programme.

The intended outcomes for the faculty members and universities include:
- Appreciating how SLTAs benefit through enacting their role in supporting S-L
- Improving teaching and learning outcomes for both students and SLTAs by enhancing the SLTA effectiveness in S-L

3.   Methods

A mixed method approach was adopted for the research, which involves a combination of qualitative and quantitative methods. According to Creswell & Plano Clark (2007), *"the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone"* (P.5). This mixed method approach also matches our research objectives to 1) identify and assess the SLTA effectiveness in the courses with S-L elements by a) different stakeholders by measurement and b) data mining in the past data (quantitative approach) and 2) study how the SLTA arrangement can be enhanced with maximizing its effectiveness by conducting focus groups or in-depth interviews (qualitative approach).

Regarding the quantitative approach, a quasi-experiment research design with control group comparison was employed. The treatment group was selected from the courses with both S-L elements and the SLTA support, and the control group comprised the courses with S-L elements without the SLTA support. The SLTA effectiveness was measured by two sets of indicators, namely a) the self-rated learning outcomes for undertaking the respective courses, and b)

stakeholders' satisfaction level. The student learning outcome indicators were derived by the differences between the results of the pretest and posttest questionnaires on the seven S-L outcome scales that are routinely collected by OSL. The stakeholder satisfaction indicators were based on questionnaires, completed after the respective courses had finished. All the measurement results were compared between the treatment and control groups to identify the SLTA effectiveness, i.e., to ascertain whether the SLTA support creates any benefits for the courses. In addition, the past data related to the SLTA performance collected in the past was also used for data mining to uncover additional insights into the SLTA effectiveness.

Specifically, the target participants were selected on a basis of quota sampling. Quota sampling is *"a type of nonprobability sampling in which units are selected into a sample on the basis of pre-specified characteristics, so that the total sample will have the same distribution of characteristics"* (Babbie, 2013, p.130). The research study included three courses with the SLTA support, one from each of the three faculties at LU as the treatment group, and another three courses without the SLTA support from the same faculties as the control group, resulting in six courses to be assessed in total. On each course, 30 – 40 students, were invited to complete the pre- and post-questionnaires, resulting in an expected sample size of around 200 students. Existing well-validated scales [namely the scales assessing the seven S-L outcome indicators (OSL, 2016)] were adopted in the research study. We conducted comparisons between the treatment and control groups to identify the extent of the SLTA effectiveness (Objective 1). Besides descriptive analysis, T-testing and ANOVA were used in SPSS 23 for quantitative data analysis.

In addition, a qualitative method was also implemented by inviting the stakeholders in the courses with the SLTA support to participate in focus groups or in-depth interviews, in order to provide further data on how the SLTA support can benefit S-L and how to improve the SLTA arrangement for better S-L quality (Objective 1, 2, 3). The findings also helped validate the SLTA training model based on the findings to enhance the teaching and learning quality (Objective 4). The qualitative analysis results also served to uncover the factors that affect the SLTA effectiveness, and hence shed light on what data to be collected for the long-term SLTA performance database development (Objective 4). The focus groups or in-depth interviews covered the following topics:: a) whether the SLTA support benefits the courses; b) what are the benefits if any; c) factors facilitating the SLTA support benefits; d) factors impeding the SLTA support benefits; e) suggestions to improve the SLTA arrangement for enhancing the quality of teaching and learning in the future.

In the qualitative part, for each course with S-L elements selected for the research, one SLTA, one faculty member, one representative from a community partner organization, one OSL coordinator and four students (two male and two female) were invited to participate in focus groups and in-depth interviews. The interviewees were selected based on the logic of Maximum Variation Sampling. It was expected that altogether 24 interviewees would participate. Each interview was audio-recorded and transcribed, and content analyzed, using grounded theory. Grounded Theory is *"an inductive approach to the study of social life that attempts to generate a theory from the constant comparing of unfolding observation"* (Babbie, 2013, p.336).

4. Initial Findings

Findings will be elaborated in the full paper, where we will include the findings of the quantitative part of the research. Perceived benefits brought by SLTA were identified in the qualitative study. These were grouped into five broad categories, as described below:

- *Project Briefing*. The SLTAs helped to clarify the requirements and objectives of the project for the students.

- *Project Logistics*. The SLTAs played a key role in relieving the logistical burden of the instructors and partners. They handled all the logistic works that the instructors and partners were too busy to take care of.

- *Communications & Liaison*. The SLTAs delivered useful and timely reminders to students and instructors. They were more accessible than instructors to receive students' opinions and concerns that the latter were reticent about expressing to the instructors (students are usually too shy to express their ideas directly). They engaged in mediation between students and the instructors, because students preferred to express their ideas to the SLTAs, whom they regarded as their peers, rather than directly to the instructors. The SLTAs were able to keep track of and promptly report on students' progress to course instructors. The SLTAs were able to liaise between instructors and agency partners, who might not be able to arrange meeting with each other. Another key role for SLTAs involved providing psychological support to students, for example, listening and saying something encouraging.

- *Facilitating Reflection & Debriefing*: In some cases, SLTAs were able to guide students toward articulating/linking their projects to the course content. The effectiveness of SLTAs in this process depends on the ability of the SLTA to adopt approaches to leading the reflection sessions as well as on their willingness to initiate more debriefings on a voluntary basis. In cases of project "failure" it appeared difficult for SLTAs to support good quality reflection unless the SLTA had developed a strong bond with the students (this appeared especially challenging in the context of indirect service).

- *Supporting Direct Service Delivery*: The SLTA's active presence/engagement in direct service practicums appeared to an important contribution. Sometimes they even co-performed as an S-L student and joined an S-L project in order to provide better coordination and delivery. In such cases, their participation was undertaken to provide a sense of security/psychological support to the students. Such involvement as co-participants was more limited in the context of indirect service.

Major challenges and concerns of serving as a SLTA, as perceived by SLTAs themselves, were identified and grouped into three broad categories:

- *Difficulties Enacting the Role as SLTA*: The SLTAs sometimes had difficulties in communicating with instructors, if the latter appeared to have distinctive working styles. They also found it hard to support those students, who were doing indirect services, for whom they could only provide marginal support. In the context of indirect service, they found it hard to build up close relationships with students, and it was hard for them to lead the reflection for students doing indirect service, due to the abovementioned limitations. A

further difficulty in some cases was that courses assigned were not relevant to the majors of the respective SLTAs.

- *Concerns Regarding the SLTA Training Programme*: The SLTAs felt that a one-year commitment to the SLTA training programme was too demanding time-wise, and that its attractiveness was fading. For example, the opportunity for receiving training under trainers from overseas was no longer available, and the subsidy for overseas exposure had been withdrawn. Some SLTAs felt that they lacked necessary advanced training, i.e., that the training was useful for fresher SLTA, but was too generic for the more experienced SLTAs. There were also concerns that topics useful for some people, such as time management training, was not needed by other SLTAs, and that some other topics could only be learned through experience.

- *Concerns about SLTA Succession*. The SLTAs reported concerns about succession planning because of difficulties in retaining and training-up senior SLTAs. They perceived that there was competition with other programmes when recruiting SLTAs. The increased workload for SLTA was also less attractive to new SLTA recruits.

5. Concluding Remarks

The initial findings of the research provide insights into how the existing teaching and learning can be enhanced by better S-L design in terms of the SLTA arrangement, according to the SLTA effectiveness data collected. Existing evaluations focus on the student learning outcomes, yet the SLTAs can also affect the course quality which in turn influences students' learning results. Knowing the mechanisms of and assessing the SLTA effectiveness can bridge the gap in S-L evaluation and can provide useful information on how to enhance the S-L design in order to achieve a better teaching and learning outcomes to all stakeholders, especially students, faculty members and the SLTAs themselves.

Keywords:

Service-Learning, Service-Learning Teaching Assistants, Effectiveness, Teaching and Learning

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