

Development and evaluation of a service leadership subject in a blended learning mode

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Abstract

In view of the emergence of service economies in the global context, it is important to promote service leadership education in universities. In Hong Kong, many studies showed that service leadership education could successfully promote university students' service leadership attributes (competence, character, and care) and foster their well-being. To benefit more students and enrich their learning experiences, there is a need to develop blended learning tools in addition to traditional classroom-based service leadership education in Hong Kong. In this article, we outline the development of a leadership subject in blended-learning mode. Preliminary findings suggest that participating students generally showed positive perceptions of the course, instructors, and course benefits. Besides, students' service leadership qualities and well-being showed positive changes after completing the course. Limitations of the evaluation findings and challenges of implementing a blended service leadership course are discussed.

Keywords: Service, blended course, student engagement, interactive, higher education

Introduction

In the 21st century, one of the most significant challenges faced by higher education is how to incorporate advanced technology to facilitate lifelong learning and to increase student achievement and success (1). On the one hand, information technology has penetrated almost every sphere of human life and greatly reshaped human lifestyle including their learning mode and behavior. On the other hand, there are increasingly diversified profiles of university students in terms of different cultures, regions, socioeconomic backgrounds, personalities, learning motivation, and learning styles (2). Both aspects have raised significant challenges to traditional face-to-face teaching mode, which has

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been criticized for its weak capability to promote higher-order thinking, active learning, and collaborative learning (2). In response to these challenges, blended learning as a new and innovative teaching and learning mode has been increasingly adopted for its potential in learning transformation (3).

Generally speaking, blended learning refers to a hybrid mode of learning based on well-conceived and effective integration/combination of traditional face-to-face classroom learning and electronic learning (1, 4, 5). The integration/combination implies a comprehensive transformation and redesign of traditional teaching in which course instruction includes both face-to-face and online instructions and the time for classroom teaching is reduced (6). Through this integration, teachers could utilize both classroom and online teaching techniques to engage students in active learning. In blended learning, the nature of classroom teaching is a place for students to present, interact, share, discuss, and debate (6, 7). In the classroom setting, students can consolidate and deepen their online learning results. Classroom teaching also plays a vital role in promoting students' social interactions and bonds establishment. In addition, classroom teaching provides instant support and feedback, which is often seen as an advantage compared to online learning (8). Therefore, blended learning aims to "join the best features of in-class teaching with the best features of online learning to promote active, self-directed learning opportunities for students" (6).

Garrison and Kanuka (1) argued that blended learning could foster "a community of inquiry" through "multiple forms of communication" including face-to-face and online communication. This community of inquiry involves both cognitive and social functioning through interactive dialogues. During the process, students develop critical and reflective thinking, which implies that they are engaged in deep and active learning. In blended learning courses, learners could access and learn knowledge and information with no restriction of time and space (2). They have higher autonomy to decide and schedule their own learning pace (9). Students can be "together" physically through face-to-face classroom teaching and virtually through

synchronized online learning; they can also be "apart" through asynchronized online learning (10). All these features make students' learning highly flexible, which is essential for maximizing their learning achievements (10). Furthermore, blended learning provides access to a large body of students with diversified backgrounds, such as students having commuting difficulties, owning part-time jobs, or having financial concerns, whose learning needs could not be easily met by traditional classroom teaching (8).

A growing body of empirical studies has focused on the impacts and the effectiveness of blended learning courses (11, 12). Some scholars found that well-designed blended learning courses could facilitate quality interactions among students and between students and teachers (13), increase student engagement (14), enhance learning satisfaction (8, 15), promote knowledge acquisition and learning achievement (16, 17). Some studies also identified factors influencing the effectiveness of blended learning, including student engagement and perceptions about these courses (8), teacher support (18), and student learning styles and maturity (19). Furthermore, a few studies outlined potential challenges of implementing blended learning courses in higher education institutions, such as a lack of new pedagogical and technological skills among staff, insufficient learner support throughout the learning process, conventional conception, and staff resistance to change (6, 20).

Overall speaking, blended learning can be regarded as an irresistible trend in higher education because of its potential for improving student learning. With the continuous advancement of information technology, the inclusion of blended learning is increasing. However, Halverson and colleagues (3) have claimed that one research gap was that a large body of existing work primarily focused on theoretical discussion on definitions and models while there were relatively fewer empirical studies. Some scholars further discussed the limitations of blended learning at the institutional level (e.g., the complexity of its management and the demand for advanced learning management systems) and the student level (e.g., requirement of becoming self-directed learners, ineffective communication in an online environment) (21, 22).

In addition, there are studies showing no significant differences in course effectiveness between traditional learning and blended learning (23, 24). Therefore, more studies should be conducted in order to understand the potentials, design, practices, and effects of blended learning in different higher education settings. In addition, few studies have examined blended learning development in Asian contexts. It is necessary to advance scholarly knowledge on blended learning and provide useful guidance for administrators and educators to design and implement effective blended learning courses in higher education in non-Western contexts, such as in Hong Kong.

Higher education in Hong Kong has been undergoing significant changes. One significant change is the transformation of the previous three-year undergraduate curriculum to the new four-year curriculum in order to offer more general education to students (25). Another change is the usage of information technology in teaching and learning in order to enrich the learning experiences of students. In order to facilitate these changes, the University Grants Committee (UGC) provides funding to support the course development and to staff professional training on blended learning and on e-learning in different universities (26). With this support, a notable project on blended learning entitled “The Responsive University: Appreciating Content Sharing in General Education” (“Responsive 4U” in short) was initiated in the academic year of 2018/2019. Four top-ranking universities in Hong Kong participated in the project, including The University of Hong Kong, The Chinese University of Hong Kong, The Hong Kong Polytechnic University (PolyU), and The Hong Kong University of Science and Technology. This project attempted to develop “sharable” blended learning general education and “cross-institutional learning system” among different participating institutions. Specifically, eleven blended-learning general education courses were offered to students. Among the eleven courses under the “Responsive 4U” project, one blended learning course entitled “Service Leadership” was offered by PolyU. The design of the “Service Leadership” blended course and preliminary evaluation findings for its course effectiveness are presented in sections below.

Design of “Service Leadership” blended course

The “Service Leadership” course is a 3-credit general education subject designed based on the Service Leadership Model proposed by Po Chung, the Co-founder of DHL International (Asia Pacific). According to Chung (27), service leadership is defined as “satisfying needs by consistently providing quality personal service to everyone one comes into contact with, including one’s self, others, groups, communities, systems, and environments.” Effective service leadership consists of three key components: “competence,” “character,” and “care” (28). Nowadays, the global economy is transforming from manufacturing to service economy. For university students to remain competitive, it is important to develop their service leadership qualities to accommodate themselves to the new requirements. As an innovative response to this call, the “Service Leadership” course aims to help students understand basic models of leadership, be aware of leadership qualities of themselves, apply the principles and improve themselves in daily life.

This course has been previously taught in a traditional classroom face-to-face approach at PolyU. The evaluation of the traditional course has been very positive since its inception in 2012/2013 academic year (29-31). The blended version of this course was developed in the first semester of the academic year of 2018/19 and implemented under the “Responsive 4U” project in the second semester. A total of 43 students were enrolled, including both PolyU and non-PolyU students. We used Blackboard as the Learning Management System for this blended course.

The blended course lasted for 13 weeks, including 10 online sessions and 3 face-to-face lectures. The main structure of all 13 lectures are shown below:

- 1st Week (1st Lecture): “Introduction of Service Leadership Model” (face-to-face)
- 2nd Week (2nd Lecture): “Core beliefs and key components of service leadership”
- 3rd Week (3rd Lecture): “Basic leadership competencies: Intrapersonal competencies”

- 4th Week (4th Lecture): “Basic leadership competencies: Interpersonal competencies”
- 5th Week (5th Lecture): “Character strengths and service leadership”
- 6th Week (6th Lecture): “In-class interactions and consultation” (face-to-face)
- 7th Week (7th Lecture): “Care and service leadership”
- 8th Week (8th Lecture): “Character strengths in Chinese philosophies”
- 9th Week (9th Lecture): “Contemporary leadership models and the dark side of leadership”
- 10th Week (10th Lecture): “Factors leading to creation, development, and maintenance of positive social relationships”
- 11th Week (11th Lecture): “Self-leadership and service leadership”
- 12th Week (12th Lecture): “Developmental assets and service leadership”
- 13th Week (13th Lecture): “Review of effective service leadership qualities and wrap-up” (face-to-face)

Online modules

As mentioned earlier, the course aimed to help students to understand basic models of leadership, be aware of their own leadership qualities, apply the principals and improve themselves in daily life. Online sessions contained both video lectures introducing concepts and theories related to service leadership, as well as different activities improving students’ understanding and leadership skills. These activities included reflective activities, tests, discussion forum, group discussion, and class chat sessions. Table 1 summarizes the features of this blended course and the duration/frequency of different activities.

Online video lectures

In each week, students were required to watch several videos online under the same topic. The videos lasted for around 3-18 minutes with an average duration of seven minutes. Through watching videos, students were expected to gain knowledge of basic leadership attributes and contemporary

models of leadership in the service sector. Online video lectures were convenient for students to arrange a flexible study schedule, especially for non-PolyU and part-time students.

Reflective activities

We developed reflective activities to deepen students’ understanding and reflection, and cultivate their service leadership qualities. Through reflective activities, students could reflect on the importance of developing essential service leadership attributes, leadership qualities of themselves, and the way to apply knowledge in daily leadership practice. Reflective activities targeted on higher educational objectives of learning goals according to Bloom’s taxonomy, including applying, analyzing, evaluating, and creating (32). For example, after watching a video explaining different types of contemporary leadership models, students were required to further reflect on the differences between these models and the Service Leadership Model. Compared to face-to-face classroom reflective activities, students felt less time pressure or insufficient preparation when completing online reflective activities, and tended to share more genuine in-depth thoughts. In addition, after obtained their approval, we uploaded students’ anonymous sharing on Blackboard so that all students could learn from their classmates’ reflection. Besides, we specifically selected those topics demonstrating their creative thinking, problem-solving skills, integrity, and leadership. For those questions receiving interesting or controversial responses, we brought them to class chat or face-to-face lectures to further share or discuss with students.

Test

After watching online video lectures during each week, the students were required to complete a final test to recall and memorize the knowledge that was covered in service leadership. The test was used to evaluate student’s recalling and understanding of the basic knowledge (32). Multiple choices, true and false, and cloze were often used in the final test. In addition, some open-ended questions were asked to collect feedback on the online lecture each week.

Table 1. Features of a blended course of service leadership

Blended design	Participants	Duration/frequency of activity	Learning tools
Online modules			
Online video lectures	Individual	Average 7 mins/per video, 4-6 videos/per week, 10 weeks	Videos on Blackboard
Reflective activity	Individual	3-7 topics per week, 10 weeks	Reflective activities on Blackboard (e.g., reflective writing, arguments, write metaphor, etc)
Online test	Individual	5-7 items per week, 10 weeks	Tests function on Blackboard
Online discussion forum	Among all students	5 times under specific topic in Week 2, 5, 8, 11, and 12	Blackboard discussion group
Group discussion	Among group members	3 times in Week 3, 7, and 9	No specific tool is regulated. Only discussion record is required. Students can use WhatsApp, group forum function on Blackboard, etc..
Online chat sessions	Among all students and lecturers	1 hour per session, 2 sessions in Week 3 and 10, respectively	Blackboard Collaborate Ultra
Face-to-face modules			
Face-to-face lectures	All students and lecturers	3 hours per lecture, 3 lectures in Week 1, 6 and 13	

Group discussion

Students were also required to conduct group discussion on a topic from time to time. Group discussion helped students to practice their leadership through group activity and facilitate their group project preparation. Students had full autonomy in the way to arrange their group discussion. Students could do it online or offline. No specific tool or approach was suggested. They could use WhatsApp or group discussion board on Blackboard. The discussion record was required for our reference.

Online discussion board

Some lectures contained discussion tasks, which required students to share their opinions on a given topic and give comments on others' posts. Students needed to present their own ideas, review and respond to other perspectives. For example, we asked students to recommend books or movies reflecting key elements of service leadership. We adopted the discussion board on Blackboard.

Online chat sessions

Online class chat aimed to establish direct and instant communication between students and lecturers. Students could receive instant feedback from lecturers and vice versa. We attempted to tackle the issues raised during the online learning. For each chat session, we provided two timeslots for students to choose. Blackboard Collaborate Ultra was used.

Face-to-face lectures

Three face-to-face lectures provided introduction and periodical wrap-up to students. Feedback on online activities was also covered in these face-to-face lectures. We also provided many opportunities for students to practice and reflect service leadership qualities during the face-to-face lectures. Based on the results of the online activities, we gave further feedback and explanation. For example, we shared the data of students' online learning to motivate them, shared the distribution of their opinions on different topics, disclosed ourselves, and invited them to share their experiences and reflections. In addition, we also gave feedback to some questions they mentioned in the online feedback.

Course assessment

The assessment of the blended course included three parts: class participation, group project, and term paper. For class participation, students were required to watch videos, participate in activities and complete related assignments on time to get the participation marks. For students who successfully completed all tasks on time, a total of 15 marks for Class Participation/Preparation were given. The assessment scheme is shown in Table 2.

Table 2. Assessment scheme of the blended course “Service Leadership”

Time	Requirements	Marks
Each week	Participate in required online activities and complete assignments of each respective online lecture	10
In Lecture 6	Participate in classroom interactions	1
In Lecture 13	Participate in classroom interactions	1
Before Lecture 3	The Pretest Objective Outcome Evaluation Form	1
Before Lecture 13	The Personal Reflection Form	1
Class chat session time	Participate in two class chat sessions	1
Total marks		15

*1 mark for each online lecture 10 online lectures in total.

For the group project, each group needed to produce a 30-minute video presentation on one of the key elements of effective service leadership. Group project presentation showed students’ understanding of theories and concepts related to service leadership qualities, interpersonal skills, personal and group reflections, and the recognition of essential elements of service leadership covered in the course. For the individual term paper, all students were required to submit term papers on topics related to service leadership. Individual term paper indicated students’ understanding of key concepts and theories, their self-assessment and self-reflection based on personal experiences.

Evaluation

To examine the effectiveness of the blended “Service Leadership” course in promoting student leadership qualities and well-being, we conducted a preliminary evaluation study. We employed multiple evaluation approaches, including the one-group pretest-posttest method, subjective outcome evaluation, and qualitative evaluation. All students gave their written consent to participate in the study. The evaluation study aimed to answer the following three questions.

- Question 1: Do students show positive changes in service leadership qualities and well-being after completing the blended “Service Leadership” subject?
- Question 2: How do students perceive the subject?
- Question 3: How do students evaluate their learning experiences in this blended course?

Methods

The one-group pretest-posttest used service leadership qualities (“knowledge,” “attitude,” and “behavior”) and well-being (“positive youth development” or PYD, and “life satisfaction”) as major outcome measures. Students participating in the blended course were invited to respond to these measures through an online survey before the delivery of the first lecture (i.e., pretest) and after the completion of all lectures (i.e., posttest). The data collected from 28 students were matched between the pretest and the posttest. The demographic information of the matched sample is presented in Table 3.

Table 3. Demographic information of participants (n = 28 matched sample)

Demographic variables	Frequency	Valid Percent (%)
Gender		
Male	13	46.4
Female	15	53.6
Age		
18-year-old	2	7.1
19-year-old	4	14.3
20-year-old	8	28.6
21-year-old	8	28.6
22 or above	6	21.4

Mean = 21.11; SD = 3.02.

The 40-item “Service Leadership Knowledge Scale” (SLK) was employed to measure knowledge. The 40 multiple-choice questions are related to knowledge of service leadership, such as “manufacturing versus service economies in the modern world,” “the importance of 3Cs to effective service leadership,” “everyone can be a leader,” “features of the service leadership theory,” and so on. Students get “1” point for correct answer or “0” points for incorrect answers. This knowledge scale was developed following a standardized procedure of constructing a reliable and valid assessment tool. Previous studies have supported its good reliability and validity (33).

Attitudes toward service leadership practice were measured by a 23-item version of the “Service Leadership Attitude Scale” (SLA) which used a 6-point rating scale (“1” = “strongly disagree,” “6” = “strongly agree”). This scale was also constructed based on a solid scale validation procedure, and it has been demonstrated to possess good psychometric properties (34, 35). The twenty-three items were pertinent to different elements, such as “self-reflection” (sample item: “A leader should closely examine his or her own thoughts and behavior”), “caring disposition” (sample item: “A good leader listens to his or her subordinates’ views”), “ethical role model” (sample item: “A good leader uses himself or herself as an example in order to influence the behavior of followers.”), and so forth.

The 19-item version of the “Service Leadership Behavior Scale” (SLB) was adopted in order to assess student leadership practice on a 6-point rating (“1” = “strongly disagree,” “6” = “strongly agree”). The good reliability and validity of SLB have been supported by a series of validation studies (36,37). The 19-item scale includes different aspects of desired service leadership practice, such as “self-improvement” (sample item: “I keep learning new knowledge”), “problem-solving” (sample item: “I am able to argue in a logical way”), “resilience” (sample item: “When difficulties or setbacks appear in my life, I do not give up easily”), and so on.

Life satisfaction was measured through the Chinese version of “Satisfaction with Life Scale” (SWLS) (38, 39). The “Satisfaction with Life Scale” included five items (e.g., “In most ways, my

life is close to my ideal” and “The conditions of my life are excellent”), and it adopted a 6-point rating scale (“1” = “strongly disagree,” “6” = “strongly agree”).

PYD attributes of the students were assessed by the “Chinese Positive Youth Development Scale” (CPYDS), using a 6-point rating scale (“1” = “strongly disagree,” “6” = “strongly agree”). The present study utilized thirty-one items (e.g., “I know how to communicate with others” and “I can differentiate between the good and the bad aspects of things”) in relation to ten subscales. Three higher-order Positive Youth Development qualities can be computed based on the specific subscales: 1) “Cognitive-behavioral competence” calculated by three subscales including “cognitive competence,” “behavioral competence,” and “self-determination”; 2) “Positive identity” calculated by two subscales including “clear and positive identity” and “belief in future”; and 3) General Positive Youth Development qualities calculated by the remaining five subscales including “social competence,” “emotional competence,” “moral competence,” “spirituality,” and “resilience.”

Subjective outcome evaluation

Students were invited to complete a “Subjective Outcome Evaluation Scale” (SOES) after the last lecture in Week 13. A total of 19 completed questionnaires were collected and used for data analysis. The SOES allowed students to express their views toward the blended course in terms of perceptions of “course contents” (e.g., “The content design of the curriculum is very good”), “lecturer” (e.g., “The lecturers showed good professional attitudes”), and “course benefits” (e.g., “It has strengthened my self-confidence.” In addition, the SOES assessed students’ overall satisfaction with the blended course through the following three questions: a) “Will you suggest your friends to take this program?” b) “Will you participate in similar programs again in the future?” and c) “On the whole, are you satisfied with this program?”. All items included in the SOES used a 5-point rating and the scale showed good internal reliability in previous studies (29, 40, 41).

Qualitative evaluation

During learning, students were encouraged to express their personal views toward each online lecture after they completed all learning activities required for each online lecture. Besides, during the two online chat sessions, students were also invited to share their learning experience and feelings. After the completion of the course, a personal reflection form was further

used to collect subjective evaluation of their learning experiences in the blended course. First, students were asked to use three words to describe their feelings and perceptions. Second, students were invited to think of a metaphor with a brief explanation to stand for the subject. In total, 37 completed personal reflection forms were collected and student responses were reviewed and analyzed.

Table 4. Student changes in outcome indicators based on aggregated data ($n = 28$)

Outcome Indicators	Pre-test	Post-test	Positive change	Binomial Test (p)
Higher-order PYD factors				
Cognitive-behavioral competence	4.59	4.75	Yes	.008
Positive identity	4.45	4.66	Yes	
General PYD qualities	4.39	4.55	Yes	
Total PYD score	4.48	4.66	Yes	
Life satisfaction	4.00	4.14	Yes	
Service leadership qualities				
Service leadership knowledge	27.68	31.93	Yes	
Service leadership attitude	4.82	4.90	Yes	
Service leadership behavior	4.67	4.81	Yes	

Results

As shown in Table 4, there was a trend of positive changes in all eight outcome indicators. However, due to the small sample size ($n = 28$), participants' pretest and posttest scores did not follow a normal distribution, which violated the precondition of conducting repeated-measures multivariate general linear modeling analysis. As a result, we performed a binominal test based on the aggregated data. The result suggested that the positive change of the eight indicators was significant ($p = .008$), which gave tentative support for the claim that the subject was effective to promote the development of the students.

Subjective outcome evaluation

Summaries of student responses in the SOES are presented in Table 5 and 6. Results showed that most of the students expressed positive evaluations on most evaluation items. For example, over 78% of the respondents agreed that "the objectives of the curriculum are very clear," "the activities were

carefully arranged," and "on the whole, I like this course very much." In addition, nearly 85% of the participants expressed that the course lecturers had good teaching skills and were willing to help students. Furthermore, more than 78% of the participants felt that their critical thinking and self-confidence were enhanced after taking the course. Overall speaking, 78.9% of the respondents were satisfied with the blended course. Despite these positive evaluation findings, only around 47% of the participants thought that the course was helpful for the pursuit of meaning in life.

Qualitative evaluation

For comments on each online lecture, students mainly opined that they learned useful knowledge and concepts about service leadership which could help them to understand effective leadership in service economies and related determinants. Besides, those online reflective activities can help them to think deeply about own strengths and weakness and how to improve. Most importantly, students commented that the blended learning was convenient for them to

arrange a study plan. In this regard, most students agreed that learning through online lectures could give them more flexibility. For example, they could do the lecture activities several times and perform revision by going through the whole lecture by

themselves whenever they wanted to. However, some students also complained that the workload was heavier compared with other face-to-face general education subjects.

Table 5. Summary of the positive views (options 4-5) of the participants in different aspects

Items	N	M	SD	Positive Responses ^a	
				n	%
Perceptions of course content					
1. The objectives of the curriculum are very clear.	19	3.89	1.12	15	78.9
2. The content design of the curriculum is very good.	19	4.05	.83	15	78.9
3. The activities were carefully arranged.	19	3.84	1.09	15	78.9
4. The classroom atmosphere was very pleasant.	19	3.84	1.09	13	68.4
5. There was much peer interaction amongst the students.	19	3.89	.91	14	73.7
6. I participated in the class activities actively (including discussions, sharing, games, etc.).	19	4.11	.85	15	78.9
7. I was encouraged to do my best.	19	3.79	1.10	14	73.7
8. The learning experience enhanced my interests towards the course.	19	3.74	1.02	13	68.4
9. Overall speaking, I have a very positive evaluation on the course	19	3.79	1.10	14	73.7
10. On the whole, I like this course very much.	19	3.84	1.09	15	78.9
Perceptions of lecturer(s)					
1. The lecturer(s) had a good mastery of the course.	19	3.95	.94	14	73.7
2. The lecturer(s) was (were) well prepared for the lessons.	19	4.05	1.00	15	78.9
3. The teaching skills of the lecturer(s) were good.	19	4.05	.94	16	84.2
4. The lecturer(s) showed good professional attitudes.	19	4.05	.94	16	84.2
5. The lecturer(s) was (were) very involved.	19	4.05	.83	15	78.9
6. The lecturer(s) encouraged students to participate in the activities.	19	4.16	.99	16	84.2
7. The lecturer(s) cared for the students.	19	4.16	.81	16	84.2
8. The lecturer(s) was (were) ready to offer help to students when needed.	19	4.26	.64	17	89.5
9. The lecturer(s) had much interaction with the students.	19	3.95	.89	13	68.4
10. Overall speaking, I have a very positive evaluation on the lecturer(s).	19	4.05	1.05	16	84.2
Perceptions of course benefits					
1. It has enhanced my social competence.	19	3.63	1.09	12	63.2
2. It has improved my ability in expressing and handling my emotions.	19	3.74	1.02	13	68.4
3. It has enhanced my critical thinking.	19	3.84	1.09	15	78.9
4. It has increased my competence in making sensible and wise choices.	19	3.74	1.07	14	73.7
5. It has helped me make ethical decisions.	19	3.74	1.07	13	68.4
6. It has strengthened my resilience in adverse conditions.	19	3.79	1.06	13	68.4
7. It has strengthened my self-confidence.	19	3.89	.91	15	78.9
8. It has helped me face the future with a positive attitude.	19	3.79	1.06	13	68.4
9. It has enhanced my love for life.	19	3.32	1.38	8	42.1
10. It has helped me explore the meaning of life.	19	3.58	1.14	9	47.4
11. It has enhanced my ability of self-leadership.	19	3.95	.89	13	68.4
12. It has helped me cultivate compassion and care for others.	19	3.95	.76	13	68.4
13. It has helped me enhance my character strengths comprehensively.	19	3.84	.93	13	68.4
14. It has enabled me to understand the importance of situational task competencies, character strength and caring disposition in successful leadership.	19	3.95	.83	14	73.7
15. It has promoted my sense of responsibility in serving the society.	19	3.74	.91	12	63.2
16. It has promoted my overall development.	19	3.63	1.09	12	63.2
17. The theories, research and concepts covered in the course have enabled me to understand the characteristics of successful service leaders.	19	4.05	.83	15	78.9
18. The theories, research and concepts covered in the course have helped me synthesize the characteristics of successful service leaders.	19	3.79	.95	12	63.2

Note: ^a For every item, respondents with positive responses (Options 4-5) are shown in the Table.

Table 6. Summary of students' overall satisfaction with the course

Items		N	M	SD	Positive Responses ^a	
					n	%
1.	Will you suggest your friends to take this course?	19	3.89	.85	13	68.4
2.	Will you participate in similar courses again in the future?	19	3.74	1.07	12	63.2
3.	On the whole, are you satisfied with this course?	19	3.95	.76	15	78.9

Note: ^a For every item, respondents with positive responses (Options 4-5) are shown in the Table.

Regarding personal reflections, students positively evaluated their learning experience in the blended course. Specifically, students frequently used positive descriptors to present their feelings and subjective experience in the course. The frequently used descriptors included “interesting,” “inspiring,” “joyful,” “fruitful,” “enjoyable,” “useful,” “helpful,” “meaningful,” “interactive,” “reflective,” and “innovative.” Regarding metaphors, students’ positive expressions were impressive. For example, a student claimed that the course “seems like a travel trip where I can look around the world to learn somethings that I have never touched or seen before in every other destination (lecture).” Another student used “a mirror” because “it reflects a lot of my own leadership strategies and imperfections, just like a mirror reflects physical appearance.”

Discussion

Previous evaluation findings have repeatedly indicated that the “Service Leadership” subject delivered through traditional face-to-face mode is successful in nurturing university students’ service leadership qualities and promoting their well-being (29,41-43). The present evaluation findings further suggest that a well-designed blended “Service Leadership” course is also a promising approach to promote service leadership qualities and well-being among university students. As one of the innovative and technology-enriched teaching pedagogies, blended learning is considered increasingly important or even the “new normal” in higher education (44, p. 207-208). The redesign of the traditional “Service Leadership” course into a blended one complies with this global trend. Past research suggests that blended learning can entail great learning achievement among students as compared to either sole e-learning or sole face-to-face learning (45-47). This may be because the blended design is flexible and technology-oriented, thus can

enhance student engagement (48, 49). This speculation is consistent with the present observations that students appreciated the flexible study plan including the convenient revision plan they can enjoy in the blended course.

Of course, we have to be mindful of the limitations of the blended learning approach. First, studies suggest that blended learning raises more demanding requirements for institutional management, teaching staff’s mindset, and students’ skills in mastering multiple learning strategies (21, 22). Second, blended learning requires students to take a more active role in learning and become intrinsically motivated, which are not in line with the characteristics of Chinese students who normally prefer didactic teaching (50, 51). Third, as blended learning takes up much time of the students (e.g., going through the online activities and assignments), students taking up part-time jobs may not like it as it may interfere with their earning activities. This point is important when we realize that students at PolyU are mostly from the grassroots.

There are several limitations of the current evaluation work. First, the sample sizes were small. In addition, due to the absence of a control group, objective outcome evaluation was unable to inform the causal effect of the blended course. Furthermore, all data were collected through self-report measures. Hence, while the present evaluation findings tended to support the effectiveness of the blended “Service Leadership” course, the findings were very preliminary. There is a great need to collect more data from multiple informants in the future to further evaluate the course effectiveness of a blended “Service Leadership” subject.

During the implementation of the blended course, we encountered several challenges, which should be further tackled for course improvement. The first challenge is related to student engagement. For example, some students were not able to complete online learning on time and some others came to face-to-face lectures without well preparation. Manwaring

et al. (52) argued that while blended designs have been perceived to effectively engage students in learning, blended classes can also make engagement more difficult for some students. Students with low self-regulation may not perform well in navigating online learning modules independently without others' monitoring (53). Besides, some students may still prefer regular face-to-face learning contexts. These students may feel "isolated" due to reduced classroom interaction with classmates and teachers, which in turn lead to a lower level of learning motivation (44). In fact, some students in our course indicated that they expected more face-to-face interactions, which may be due to the "passive" learning style they have developed during primary and high schools.

The second challenge has to do with teachers' timely feedback. Students were required to do some individual reflective activities after completing certain online learning. For example, students were asked to think about self-leadership strategies they used in daily life and ways to improve self-leadership. After most of the students provided their reflective responses, we reviewed these responses and gave feedback to each of the questions. Besides, to facilitate student learning, especially learning from others' experiences, we summarized and shared student opinions among all students. However, as students had different time schedules in completing online lectures, it was not easy for teachers to collect all students' responses and gave timely feedback. Last but not least, some students perceived that the workload of online learning was heavier than traditional classroom classes. In this case, some students may fail to complete all learning activities, which consequently hinder the achievement of intended learning outcomes.

To help students engage in online learning and better interact with peers and teachers, one feasible strategy is to design tailor-made group activities. For example, students need to do a group discussion focusing on a specific topic where related concepts have been covered by online lectures. This will motivate students to learn and understand online learning materials and further digest knowledge through peer interactions (i.e., collaborative learning). Besides, it is also possible to have pre-lecture group activities, which may get students well-prepared for

face-to-face lectures. Furthermore, group activities incorporating reflective learning may reduce students' workload. In short, we need to optimize online and offline activities to better engage students and facilitate their learning.

Despite the limitations of the preliminary positive evaluation findings and several challenges in implementing the blended "Service Leadership" course, the present study represents a pioneering effort in putting blended service leadership education into practice and examining its educational effects through multiple strategies. In conclusion, the blended mode can be regarded as an effective pedagogy to involve more students with diverse backgrounds and to provide them with flexibility in learning.

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Ethical compliance

The authors have stated all possible conflicts of interest within this work. The authors have stated all sources of funding for this work. If this work involved human participants, informed consent was received from each individual and it was conducted in accordance with the 1964 Declaration of Helsinki. If this work involved experiments with humans or animals, it was conducted in accordance with the related institutions' research ethics guidelines.

References

- [1] Garrison DR, Kanuka H. Blended learning: Uncovering its transformative potential in higher education. *Internet High Educ* 2004;7:95-105.

- [2] Okaz AA. Integrating blended learning in higher education. *Procedia Soc Behav Sci* 2015;186:600-3.
- [3] Halverson LR, Graham CR, Spring KJ, Drysdale JS. An analysis of high impact scholarship and publication trends in blended learning. *Dist Educ* 2012;33:381-413.
- [4] Bliuc A-M, Goodyear P, Ellis RA. Research focus and methodological choices in studies into students' experiences of blended learning in higher education. *Internet High Educ* 2007;10:231-44.
- [5] Duhaney DC. Blended learning in education, training, and development. *Perform Im* 2004;43:35-8.
- [6] Vaughan N. Perspectives on blended learning in higher education. *Int J E Learn* 2007;6:81-94.
- [7] Meyer KA. Face-to-face versus threaded discussions: The role of time and higher-order thinking. *J Asyn Learn Netw* 2003;7:55-65.
- [8] Owston R, York D, Murtha S. Student perceptions and achievement in a university blended learning strategic initiative. *Internet High Educ* 2013;18:38-46.
- [9] Rahman NAA, Hussein N, Aluwi AH. Satisfaction on blended learning in a public higher education institution: What factors matter? *Procedia Soc Behav Sci* 2015;211:768-75.
- [10] Kaur M. Blended learning-its challenges and future. *Procedia Soc Behav Sci* 2013;93:612-7.
- [11] Bernard RM, Borokhovski E, Schmid RF, Tamim RM, Abrami PC. A meta-analysis of blended learning and technology use in higher education: From the general to the applied. *J Comput High Educ* 2014;26:87-122.
- [12] Liu Q, Peng W, Zhang F, Hu R, Li Y, Yan W. The effectiveness of blended learning in health professions: Systematic review and meta-analysis. *J Med Internet Res* 2016;18:1-19.
- [13] Aspden L, Helm P. Making the connection in a blended learning environment. *Educ Media Int* 2004;41:245-52.
- [14] Boyle T, Bradley C, Chalk P, Jones R, Pickard P. Using blended learning to improve student success rates in learning to program. *J Educ Media* 2003;28:165-78.
- [15] Melton BF, Bland HW, Chopak-Foss J. Achievement and satisfaction in blended learning versus traditional general health course designs. *Int J So T L* 2009;3:26.
- [16] Hughes G. Using blended learning to increase learner support and improve retention. *Teach High Educ* 2007;12:349-63.
- [17] López-Pérez MV, Pérez-López MC, Rodríguez-Ariza L. Blended learning in higher education: Students' perceptions and their relation to outcomes. *Comput Educ* 2011;56:818-26.
- [18] Martínez-Caro E, Campuzano-Bolarín F. Factors affecting students' satisfaction in engineering disciplines: Traditional vs. blended approaches. *Eur J Eng Educ* 2011;36:473-83.
- [19] Stacey E, Gerbic P. Success factors for blended learning. URL: <http://www.ascilite.org/conferences/melbourne08/procs/stacey.pdf>.
- [20] Harris P, Connolly J, Feeney L. Blended learning: Overview and recommendations for successful implementation. *Ind Commer Train* 2009;41:155-63.
- [21] Rose R, Ray J. Encapsulated presentation: A new paradigm of blended learning. *Educ Forum* 2011;75:228-43. DOI: 10.1080/00131725.2011.576804
- [22] Saltan F. Blended learning experience of students participating Pedagogical Formation Program: Advantages and limitation of blended education. *Int J High Educ* 2017;6:63-73. doi: 10.5430/ijhe.v6n1p63
- [23] McNamara JM, Swalm RL, Stearne DJ, Covassin TM. Online weight training. *J Strength Cond Res* 2008;22:1164-8. doi: 10.1519/JSC.0b013e31816eb4e0
- [24] Delialioglu O, Yildirim Z. Design and development of a technology enhanced hybrid instruction based on MOLTA model: Its effectiveness in comparison to traditional instruction. *Comput Educ* 2008;51:474-83. doi: 10.1016/j.compedu.2007.06.006.
- [25] Jaffee D. The general education initiative in Hong Kong: Organized contradictions and emerging tensions. *High Educ* 2012;64:193-206. doi: 10.1007/s10734-011-9487-y.
- [26] University Grants Committee. The Blended & Online Learning & Teaching (BOLT) Project: Collaborative professional development for capacity building in blended and online learning and teaching in HK. URL: <https://www.ugc.edu.hk/doc/eng/ugc/activity/teach/PolyUI.pdf>.
- [27] Chung PPY. Service leadership definitions. URL: <http://hki-slam.org/index.php?r=article&catid=1&aid=11>.
- [28] Shek DTL, Lin L. Core beliefs in the service leadership model proposed by the Hong Kong Institute of Service Leadership and Management. *Int J Disabil Hum Dev* 2015;14:233-42. doi: 10.1515/ijdh-2015-0404.
- [29] Shek DTL, Lin L, Liu TT. Service leadership education for university students in Hong Kong: Subjective outcome evaluation. *Int J Disabil Hum Dev* 2014;13:513-21. doi: 10.1515/ijdh-2014-0349.
- [30] Shek DTL, Lin L, Liu TT, Law MYM. Service leadership education for university students in Hong Kong: Qualitative evaluation. *Int J Disabil Hum Dev* 2014;13:523-9. doi: 10.1515/ijdh-2014-0350.
- [31] Shek DTL, Yu L, Ma CMS. The students were happy, but did they change positively? *Int J Disabil Hum Dev* 2014;13:505-11. doi: 10.1515/ijdh-2014-0348.
- [32] Krathwohl DR, Anderson LW, eds. *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. Boston, MA: Allyn Bacon, 2009.
- [33] Shek DTL, Zhu X, Zhu AYW. Conceptual background and the development of Service Leadership Knowledge Scale. *Int J Child Adolesc Health* 2018;11:395-404.
- [34] Ma CMS, Shek DTL, Chandra Y. Development of the attitude to Service Leadership Scale in Hong Kong. *Int J Child Adolesc Health* 2018;11:405-14.

- [35] Shek DTL, Chai WY. Psychometric properties of the service leadership attitude scale in Hong Kong. *Front Psychol* 2019;10:1070. doi: 10.3389/fpsyg.2019.01070
- [36] Shek DTL, Zhu X, Chan K-M. Development of service leadership behavior scale: Background and conceptual model. *Int J Child Adolesc Health* 2018;11:415-24.
- [37] Shek DTL, Dou D, Ma LK. Development and validation of a pioneer scale on service leadership behavior in the service economies. *Front Psychol* 2019;10:1770. doi: 10.3389/fpsyg.2019.01770.
- [38] Diener ED, Emmons RA, Larsen RJ, Griffin S. The satisfaction with life scale. *J Pers Assess* 1985;49:71-5. doi: 10.1207/s15327752jpa4901_13.
- [39] Shek DTL, Yu L, Wu FKY, Zhu X, Chan KHY. A 4-year longitudinal study of well-being of Chinese university students in Hong Kong. *Appl Res Qual Life* 2017;12: 867-84. doi: 10.1007/s11482-016-9493-4.
- [40] Shek DTL, Zhu X, Lin L. Evaluation of an intensive service leadership course in mainland China. *Int J Child Adolesc Health* 2017;10:223-31.
- [41] Shek DT, Liang J, Zhu X. Subjective outcome evaluation of a service leadership subject for university students in Hong Kong. *Int J Child Health Hum Dev* 2016;9:225-32.
- [42] Lin L, Shek DTL. Does service leadership education contribute to student well-being? A quasi-experimental study based on Hong Kong university students. *Appl Res Qual Life* 2018. doi: 10.1007/s11482-018-9644-x.
- [43] Shek DTL, Lin L. Changes in university students after joining a service leadership program in China. *J Leadersh Educ* 2016;15:96-109. doi: 1012806/V15/I1/A2.
- [44] Norberg A, Dziuban CD, Moskal PD. A time-based blended learning model. *Horizon* 2011;19:207-16.
- [45] Dziuban C, Hartman J, Moskal P, Sorg S, Truman B. Three ALN modalities: An institutional perspective. In: Bourne JR, Moore JC, eds. *Elements of quality online education: Into the mainstream*. Needham, MA: Sloan Consortium, 2004:127-48.
- [46] Graham CR. Emerging practice and research in blended learning. In: Moore MG, ed. *Handbook of distance education*, 3rd ed. New York: Routledge, 2013:333-50.
- [47] Siemens G, Gašević D, Dawson S. Preparing for the digital university: A review of the history and current state of distance, blended, and online learning. URL: <http://linkresearchlab.org/PreparingDigitalUniversity.pdf>.
- [48] Dringus LP, Seagull AB. A five-year study of sustaining blended learning initiatives to enhance academic engagement in computer and information sciences campus courses. In: Picciano AG, Dziuban C, eds. *Blended learning: Research perspectives*. New York: Routledge, 2013:122-40.
- [49] Graham CR, Robison R. Realizing the transformational potential of blended learning: Comparing cases of transforming blends and enhancing blends in higher education. In: Picciano AG, Dziuban C, eds. *Blended learning: Research perspectives*. New York: Routledge, 2013:83-110.
- [50] Jin L, Cortazzi M. Changing practices in Chinese cultures of learning. *Lang Cult Curric* 2006;19:5-20. doi: 10.1080/07908310608668751.
- [51] Sit HH. Characteristics of Chinese students' learning styles. *Int Proc Econ Dev Res* 2013;62:36-9.
- [52] Manwaring KC, Larsen R, Graham CR, Henrie CR, Halverson LR. Investigating student engagement in blended learning settings using experience sampling and structural equation modeling. *Internet High Educ* 2017;35:21-33. doi: 10.1016/j.iheduc.2017.06.002.
- [53] Meyer KA. *Student engagement in online learning: What works and why*. San Francisco, CA: John Wiley Sons, 2014.

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