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From the Guest Editors...

State of Service-Learning and Community Engagement Around the World

Andrew Furco and Kateryna Kent

Across the globe, we are witnessing a rise in the integration of community engagement practices into primary, secondary, and higher education systems. At the center of this movement is the incorporation of service-learning as a primary means to advance this agenda. Much as it did in the evolution of the higher education community engagement movement in the United States, service-learning is serving as the entry point for making community engagement a more central feature of the academic culture of higher education institutions in different corners of the world.

This volume presents series of research articles, projects with promise, and reflective essays that bring to the fore the ways that service-learning is used in different countries to deepen higher education's efforts to institutionalize community engagement. The first set of articles reveals the rise in research efforts in Asia, Africa, Europe, and South America to understand more fully the impacts of service-learning within differing cultural contexts. These articles shed light on the varied set of impacts that service-learning is designed to accomplish in different parts of the globe. They also reveal how, within cultures and national borders, the construct of service-learning takes on a particular meaning that might not necessarily translate to other cultures or countries.

The second set of articles speaks to the mission of higher education and elevating higher education's third mission in the context of substantial social and cultural shifts across Africa, Asia, and Europe. These articles shed light on the growing worldwide effort to enhance the relevance, value, and societal impact of higher education through more thoughtful, mutually beneficial university–community engagement. They also speak to the challenges and promise of advancing this engagement agenda.

This collection of articles reveals the practice and progress of service-learning throughout the world:

1. Service-learning acts as a primary means to further broader community engagement in higher education.

2. Although a set of principles and elements establish the construct of service-learning, the ways in which these principles and elements are operationalized in different cultures and countries give service-learning a particular cultural or national brand.

3. There is a still a struggle across countries to codify best practices for service-learning, comprehensively measure service-learning outputs and outcomes, and effectively assess student learning from service-learning.

4. As service-learning gains momentum as a pedagogical tool, it is also catalyzing broader efforts to reconsider the role of higher education's third mission. The third mission, which focuses on higher education's outreach and extension efforts, speaks to the growing emphasis on reenvisioning the role of higher education outreach and engagement to better serve the public good.

We hope this issue will provide insights into different ways in which service-learning and broader community engagement are expanding and deepening in different parts of the world, as well as catalyze additional conversations and discussion on how this work can be further institutionalized across higher education.

About the Guest Editors

Andrew Furco *is the associate vice president for public engagement at the University of Minnesota, where he is professor of higher education in the Department of Organizational Leadership, Policy, and Development. His research focuses on investigating the impacts, implementation, and institutionalization of experiential learning, service-learning, and community engagement in primary, secondary, and higher education in the United States and abroad. He received his Ph.D. in educational policy and administration from UC Berkeley.*

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A Common Outcome Measurement for Service-Learning in Hong Kong

Carol Ma Hok Ka, Chad Chan Wing Fung, and Issac Tse Pak Hoi

Abstract

Use of service-learning is burgeoning among higher education institutions in Hong Kong and expanding in Asia. The positive student outcomes that have been reported in Western society, however, are not as widely recognized in Asian society. Asian institutions of higher education need a standardized measurement of outcomes that will help refine the practice of service-learning, increase government funding for this pedagogy, and encourage cross-institution collaboration. This article describes the development, testing, and verification of the common outcomes measurement (COM), a tool for generating reliable data on student learning outcomes achieved through different service-learning initiatives. With nine domains and 34 items, the COM contributes to both theoretical and practical aspects of service-learning. As a verified means of measuring service-learning outcomes in Asian circumstances, the COM encourages development of quality education that can yield community impacts in Hong Kong.

Keywords: outcomes measurement, service-learning, students' learning outcomes, higher education, cross-institution

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The use of service-learning as a pedagogy is burgeoning among many higher education institutions (HEIs) in Asia. HEIs are all keen to demonstrate positive learning outcomes through service-learning. Each HEI measures expected outcomes from its own perspectives. However, incompatible independent assessment practices make cross-institutional comparisons impossible. This article attempts to develop one common outcome measurement (COM) of service-learning for measuring students' learning impacts in order to foster the development of service-learning and cross-institution collaboration in Hong Kong.

Service-Learning in Asia

Service-learning has been implemented in Asia for more than 10 years. After the first Asia Pacific Regional Conference on Service-Learning organized at Lingnan University in 2017 in Hong Kong, more Asian universities from China, India, Indonesia, Japan, Korea, Myanmar, Vietnam, Singapore, the Philippines, and Taiwan have also explored various service-learning opportunities (Ma, 2018). The term *service-learning* was not new to many institutions, though it was introduced from Western society.

> Service-learning can be defined as a research-based teaching method where guided or classroom learning is applied through action that addresses an authentic community need in a process that allows for youth initiative and provides structured time for reflection on the service experience and demonstration of acquired skills and knowledge. (Kaye, 2010, p. 9)

Simply, many Asian HEIs acknowledge that "Service-Learning is a teaching method that combines academic knowledge and community service" (Ma, Chan, Liu, & Mak,

2018, p.3) yet we use different terminologies in different Asian contexts; hence, service-learning actions may be equivalent to "social concern," "community outreach," "community-based research," or "community engagement." They all embrace performing service-learning to meet community needs and to serve the community. Like many others, we believe that service-learning is a powerful and high-impact tool that combines rigorous academic study with community service. The service accomplished by students reinforces their academic learning through critical self-reflection (OSL, 2006). Positive outcomes of service-learning on students, including enhanced personal and social development, matured interpersonal and communication skills, realized life satisfaction, and enlightened academic and professional development, have been widely recognized in Western society (Astin, Vogelgesang, Ikeda, & Yee, 2000; Felten & Clayton, 2011; Steinberg, Hatcher, & Bringle, 2011; Vogelgesang & Astin, 2000). Many studies in Asia have also proven that service-learning can advance student development and help in developing students' academic knowledge, skills, and caring dispositions as well as civic learning and personal growth (Ma, Chan & Chan, 2016; Ma & Lo, 2016; Shek, Ma & Yang, 2019; Snell, Chan, & Ma, 2013). Different studies concurred that service-learning has positive impacts on students' development and learning.

At Lingnan University, service-learning is expected to be driven by the learning objectives of the contributing academic course in response to identified needs of the community through the eyes of participating students. Students have reported positive improvement in seven learning outcome indicators: subject-related knowledge, communication skills, organizational skills, problem-solving skills, social competence, research skills, and civic orientation (Chan, Lee & Ma, 2009; Ma & Chan, 2013). Continuous reflection serves as the bridge for participants to make connections between theory and service. New knowledge is generated from inside (Hargreaves, 2003); academic learning is enhanced (Astin et al., 2000; Vogelgesang & Astin, 2000), sparked through interaction, communication, and the collective formulation of new ideas (Harris, Jones, Sharma, & Kannan, 2013, p. 214). Furthermore, students' leadership skills (Snell et al., 2013) are improved, and civic engagement (Steinberg et al., 2011)

is encouraged through service-learning. Having demonstrated the strength of this pedagogy, Lingnan University has taken the lead to develop the COM in collaboration with other universities in Hong Kong.

Service-Learning in Hong Kong

The terms *social service*, *community service*, and *voluntary work* have been used interchangeably among nongovernmental organizations and schools. Service-learning was first adopted as a volunteering concept in Chung Chi College of the Chinese University of Hong Kong in 1995 (Ma, 2018). Not until Lingnan University set up the first Office of Service-Learning in 2006 did the term "service-learning" grow popular and widely accepted by the community and even in schools, where they tried to embed service-learning into the curriculum. With the extensive territory-wide education reform in 2012, more universities set up their own service-learning office or experiential learning center to promote "serving to learn" and "learning to serve."

Since universities need to be audited every 5 years, outcomes measurement becomes an important indicator to show the impacts of service-learning. Many HEIs, therefore, are trying to measure outcomes according to their own belief. Standardization of declared outcomes becomes an issue when comparing different service-learning programs in Hong Kong. Without a common and standardized measurement, it would be difficult for service-learning to win trust from people who are doubtful of its usefulness and worthiness in university education, especially in Asian education. The purpose of having a standardized measurement is to help to attune service-learning outcomes in Hong Kong, persuade the government to provide more funding for the development of service-learning education, and encourage cross-institution collaboration. Thus, reliable measurement of service-learning outcomes is important among HEIs. Especially, it can be a tool for administrators and faculty to generate reliable data on student learning outcomes through service-learning initiatives.

The Development of HESLN and the Need for a Common Outcome Measurement

In an interconnected world, university graduates are expected to care about their community. This global concern is universal among tertiary institutions. Service-

learning fills the gap between academic learning and practical service. Therefore, service-learning was adopted in universities in Hong Kong, and the Higher Education Service-Learning Network (HESLN) was formed in 2009 to provide a platform to share service-learning experience and resources among local universities.

Because service-learning was a new pedagogy, HEIs needed to provide reliable data on student learning outcomes directly related to service-learning; hence, "the administrators and faculty responsible for implementing this unique pedagogical approach to student learning seek effective and efficient assessment methodologies to measure discipline-specific student experiences" (Crowe, 2003, p. 1). However, different universities had their own measurement and studies in service-learning, which unfortunately hid a deficiency in service-learning research, namely, a "tendency to report specific findings, most typically from case studies (e.g., one class, one program, one institution) without making justified generalizations about practice, theory and policy" (Bringle & Hatcher, 2000, p. 73).

A standardized technique to measure and compare the effectiveness of various service-learning programs across different organizations is long overdue. The development of a common outcomes measurement of service-learning can make a significant contribution to the field. The common outcomes measurement, as a validated tool with nine domains and 34 items, represents a milestone of service-learning development in Hong Kong, as it is not only the first collaborative research on service-learning among institutions, but also a tool that fits into Asian circumstances. It also encourages the respective institutions to think further about creating quality education and community impacts together in Hong Kong.

Methodology

Inspired by the experiences of Campus Compact (a U.S. coalition of colleges and universities dedicated to promoting community service, civic engagement, and service-learning in higher education), representatives from 10 member universities and tertiary institutions1 of the HESLN explored opportunities for collaboration between local universities in service-learning development. In 2009, they proposed to

set up a large, common, cross-university, standardized database in Hong Kong to facilitate collaborative studies of the impacts of service-learning programs on students' learning outcomes.

Then, the research team looked into literature concerning the development of psychological scales (Morais & Ogden, 2011; Neff, 2003) to delineate a roadmap for generating one useful COM. Principles learned from the field of psychometrics in the development of scales were employed. The procedure was found consistent with the flowchart proposed by MacKenzie, Podsakoff, and Podsakoff (2011), except that "norm development" is not relevant to our case. Four phases were conducted from 2010 to 2012 for the development of the COM. They are, in tandem, mapping out the focus of inquiry (Phase 1), item pool generation (Phase 2), reducing and refining the scale (Phase 3), and pilot test (Phase 4).

Phase 1. Mapping out the Focus of Inquiry (Conceptualization)

HESLN enacted a panel discussion to define the boundary and focus of inquiry for research and then identified numerous items pertinent to the domains of students' learning efficacy for intended measurement. Based on this tentative database, the research team step by step reorganized and finalized questionnaire items as a recursive process, and finally built up the study framework underlying the questionnaire. With *conceptualization* as in MacKenzie et al.'s (2011) model completed, nine domains were identified based on the members' experiences: (1) self-understanding/confidence; (2) communication skills; (3) problem-solving skills; (4) civic engagement, social responsibility, and willingness to contribute; (5) team skills; (6) self-reflection; (7) general knowledge application; (8) caring for others; and (9) intercultural competence.

Phase 2. Item Pool Generation (Development of Measures)

A set of potential questionnaire items was generated based on face validity—*development of measures* in MacKenzie et al.'s (2011) model. Face validity means "quality of an indicator that makes it seem a reasonable measure of some variable" (Babbie, 2013, p. 191). By consolidating the contents of different previous studies in existing literature and questionnaires used by some local uni-

versities, the research team generated a set of scale items that were potentially useful in the COM questionnaire. A literature survey was made to locate the reference to each item in the set. Some modifications to the wording of the items were made according to the specifications of this exploration. If no reference underlying a particular item deemed indispensable was found, the item would be constructed according to our own theorizing. Through the panel discussion of several HESLN meetings, we accomplished face validity for the questionnaire items.

Phase 3. Reducing and Refining the Scale (Model Specification)

Phase 3 involves an item-reduction exercise (Larwin & Harvey, 2001)—*model specification* process in MacKenzie et al.'s (2011) model. In this phase, validity and reliability of the COM (Cabrera-Nguyen, 2010; Drost, 2011) became our genuine concern. In the process of reducing and refining the scale items, the research team followed two general principles:

1. Retain items that entail logical relevance to the cognition-attitude-behavior model and weed out those that do not.

2. Keep the number of items minimal by retaining only those most relevant to all domains of study (for the practical concern of students' ease of completing the survey).

Phase 4. Pilot Test (Scale Evaluation and Refinement & Validation)

Phase 4 involved a pilot run for the statistical validity of the scales—*scale evaluation and refinement* in MacKenzie et al.'s (2011) model. A tentative set of questionnaires was made after the eight member universities voted to elucidate expert judgment on content validity and face validity on the most appropriate few items in the scale domains in use. Questionnaires in English were then administered. Data obtained in this pilot test (Pilot 1) were used to perform statistical reliability tests for the development of a statistical model. Functionally it is an item grouping exercise (exploratory factor analysis) using data from Pilot 1 questionnaires (78 items). Pilot 1 was conducted in May 2011. This was followed by computing intercorrelations between all pairs of items and hence ascertaining the redundancy of similar items—scale evaluation, aimed at enhancing internal consistency through reducing the number of items. The reduced questionnaire (36 items) was subjected to Pilot 2 experimentation (from September 2011 to July 2012), followed by repeated statistical validity tests (concurrent, convergent, and discriminant). Reliability was further estimated using data from the SLRS Lingnan Model ABC (alternative forms, surveyed among Lingnan service-learning participants only) and validity checked. Confirmatory factor analysis was then completed. This article will focus on the result of Pilot 2.

Results

Data collection using the 36-item version with a pre- and posttest design was conducted from September 2011 to July 2012. We obtained a total of 193 valid sample pairs, out of 215 university students from five local universities. By institution, 44 (22.8%) students were from Lingnan University, 21 (10.9%) from the City University of Hong Kong, 40 (20.7%) from the Hong Kong University of Science and Technology, 23 (11.9%) from Hong Kong Shue Yan University, and 65 (33.7%) from the Education University of Hong Kong (formerly the Institute of Education). By gender, 136 (70.5%) respondents were female and 57 (29.5%) respondents were male. The majority of students were Year 1 ($N = 56$, 29%) and Year 2 students ($N = 74$, 38.3%). The majority of their study majors included education, ($N = 57$, 29.5%), business ($N = 53$, 27.5%), social sciences ($N = 51$, 26.4%), sciences ($N = 15$, 7.8%), and arts ($N = 13$, 6.7%). More information about their general demographics, including gender, area of study, and year of study can be found in Table 1. Their answers for the pre- and posttest questionnaires were received for analysis on consistency, scale reliability, and validity.

Internal Consistency Reliability Testing

For the 36-item questionnaire, reliability analysis was run to test the internal consistency of the overall scale and the nine domains separately. According to Nunnally (1967), Cronbach's alpha reliability coefficients above .80 are acceptable, those in the .70 range are marginally acceptable, and those below .70 are considered suspect and will underestimate the true relationship between two variables. Further, according to DeVellis (2003), the acceptable Cronbach's alpha coefficient of a scale should be above

Table 1. The General Demographics of Students (N = 193)		
Gender	**Frequency**	**%**
Male	57	29.5
Female	136	70.5
Total	193	100.0
Area of study		
Arts	13	6.7
Social sciences	51	26.4
Business	53	27.5
Sciences	15	7.8
Education	57	29.5
Others (e.g., exchange, foundation year)	4	2.1
Total	193	100
Year of study		
Foundation year	7	3.6
Year 1	56	29.0
Year 2	74	38.3
Year 3	38	19.7
Year 4	14	7.3
Exchange	4	2.1
Total	193	100.0

Table 2. Cronbach's Alphas of the Nine Domains (36-Item Version)		
	Cronbach's alphas	
	Pretest	Posttest
Overall	.95	.95
Self-understanding/confidence	.82	.82
Communication skills	.86	.86
Problem-solving skills	.80	.82
Civic engagement, social responsibility, and willingness to contribute	.87	.85
Team skills	.83	.83
Self-reflection	.80	.82
General knowledge application	.77	.84
Caring for others	.75	.67
Intercultural competence	.62	.49

.7. The Cronbach's alphas for the overall scale were .95 (pretest) and .95 (posttest), which show that the measurement is significantly reliable. Results also show that most of the domains are reliable (Table 2), with Cronbach's alphas ranging from .67 (caring for others, posttest) to .86 (communication skills, pre- and posttest), except for intercultural competence, whose Cronbach's alphas were .62 (pretest) and .49 (posttest). All items of the same constructs are interrelated, with coefficients larger than .35, except Item 36 (.15, intercultural competence, posttest). Further internal consistency reliability analysis of the 36 items in nine domains separately is charted in Table 3 for reference.

The 34-item version was consolidated through item reduction in terms of three selection criteria: (1) item-total correlation, (2) reliability if the item is removed, and (3) close relation to the domain topic (Table 4). Results show that most of the domains are reliable in Cronbach's alphas after the item reduction (eliminating Item 7 and Item 36; see Table 4).

Paired Sample *t*-test and Correlations

To ensure validity of the items measuring the differences of participants before and after taking part in service-learning programs, a paired sample *t*-test was run for the 34 items as well as the nine domains with a 10-point Likert scale. Results show that most participants experienced significant positive gains through their service-learning (Table 5).

Also, all nine domains were significantly correlated with each other, both pretest and posttest, with coefficients ranging from .38 to .75 (Table 6 & 7).

Discussion

Validity of the 34-Item Common Outcome Measurement

One classic model for measuring success in informal and cocurricular education is the cognition–attitude–behavior model; this serves to examine how students develop personal and social capabilities, civic responsibilities, and other areas concerned. The 34-item version of the COM adopted a variety of questionnaire items for each and every domain. The cognition-attitude-behavior model basically delineates the process of how certain expected behaviors of students are developed. People begin with beliefs and perceptions on certain issues on which they base their interpretation; on the cognitive level, they develop attitudes of what is favorable or unfavorable for them. Their attitudes end up guiding them to perform certain kinds of behaviors. Ideally, each domain should include at least one item asking about the cognition, the attitude, or the behavior aspect of achievements. Therefore, the validated 34-item COM can serve as a question bank to allow different institutions to measure their own learning outcomes through service-learning.

Significance of the Nine Outcome Domains

The entire scale evaluation and validation process started with expert focus groups examining possibilities of what they believed were attributes of whole-person development outcomes after completing service-learning projects. The experts came up with nine domains that are important for contemporary skillsets: (1) self-understanding/confidence; (2) communication skills; (3) problem-solving skills; (4) civic engagement, social responsibility, and willingness to contribute; (5) team skills; (6) self-reflection; (7) general knowledge application; (8) caring for others; and (9) intercultural competence. They then offered items borrowed from a questionnaire repository of their own work or from published psychometric instruments related to the nine agreed-upon domains. Our research team exercised caution by tracing publication sources or existing outcome instruments and also the areas of learning outcomes claimed in the original source. Subsequent reliability exercises trimmed down the number of items but would not shake the nine established domains. The research team further confirmed that certain items (civic engagement, social responsibility, and willingness to contribute) do belong to one statistical domain (1) despite different labels in common language.

Factor Analysis for Civic Engagement, Social Responsibility, and Willingness to Contribute

Maximum likelihood factor analysis with oblimin rotation (delta = 0) was conducted to assess the underlying structure for the scale "civic engagement, social responsibility, and willingness to contribute." The Kaiser-Meyer-Olkin (KMO) measure is .87,

Table 3. Internal Consistency Reliability Analysis of 36 items					
		Pretest (Alpha = .82)		Posttest (Alpha = .82)	
	Self-understanding/confidence	Item-Total Correlation	Alpha if Item Deleted	Item-Total Correlation	Alpha if Item Deleted
1.	I am aware of my personal strengths and weaknesses.	.60	.79	.66	.77
2.	I am open to new experiences and willing to take risks and accept challenges.	.68	.75	.67	.77
3.	I often seek out challenging opportunities that test my skills and abilities.	.66	.76	.64	.78
4.	I am confident in my abilities.	.62	.78	.62	.79
	Communication skills	Pretest (Alpha = .86)		Posttest (Alpha = .86)	
5.	I feel comfortable to present my ideas in front of others.	.74	.82	.76	.80
6.	I know how to communicate my ideas in a situation that is new to me.	.76	.81	.77	.79
7.	I understand the importance of participating in group discussion with others.	.61	.87	.53	.89
8.	I feel confident in communicating ideas precisely with people.	.76	.81	.77	.79
	Problem-solving skills	Pretest (Alpha = .80)		Posttest (Alpha = .82)	
9.	I feel confident in identifying a problem.	.68	.71	.73	.73
10.	I feel confident in tackling a problem.	.59	.76	.69	.75
11.	Before I solve a problem, I gather as many facts about the problem as I can.	.63	.74	.61	.78
12.	I go through the problem-solving process again when my first option fails.	.55	.78	.54	.82
	Civic engagement, social responsibility, and willingness to contribute	Pretest (Alpha = .87)		Posttest (Alpha = .85)	
13.	I am aware of the important needs in the community.	.62	.87	.61	.84
14.	I am or plan to become actively involved in issues that positively affect the community.	.78	.81	.73	.79
15.	I feel a personal obligation to contribute in some way to the community.	.76	.82	.69	.81
16.	It is my responsibility to help improve the community.	.75	.83	.73	.79

Table continued on next page

		Item–Total Correlation	Alpha if Item Deleted	Item–Total Correlation	Alpha if Item Deleted
	Team skills	Pretest (Alpha = .83)		Posttest (Alpha = .83)	
17.	I am able to remain calm and reasonable even when conflict among group arises.	.63	.81	.68	.78
18.	I cooperate successfully with other students in a variety of situations.	.71	.77	.68	.78
19.	I notice and compliment the accomplishments of others.	.65	.80	.60	.81
20.	I participate effectively in group discussions and activities.	.67	.79	.70	.77
	Self–reflection	Pretest (Alpha = .80)		Posttest (Alpha = .82)	
21.	I am assertive and independent.	.52	.79	.59	.81
22.	I am motivated to learn, participate and achieve in school.	.64	.73	.72	.74
23.	I believe self–reflection can improve myself.	.65	.72	.64	.78
24.	I will evaluate myself after completing a task.	.62	.74	.64	.78
	General knowledge application	Pretest (Alpha = .77)		Posttest (Alpha = .84)	
25.	I am aware of the importance of evaluation and outcome with knowledge learned in class.	.57	.72	.63	.81
26.	I feel confident in applying knowledge in my areas of study.	.59	.71	.70	.78
27.	I understand the need to adapt my theoretical knowledge in various real-life situations.	.67	.67	.74	.77
28.	I learn course content better when connections to real-life situations are made.	.49	.77	.62	.82
	Caring for others	Pretest (Alpha = .75)		Posttest (Alpha = .67)	
29.	I am aware of the thoughts and feelings of other people.	.41	.75	.37	.66
30.	I believe that the world would be a better place if prejudices no longer exist.	.57	.67	.45	.62
31.	I feel comfortable building relationships with people from different backgrounds.	.53	.69	.54	.56

Table 3. Internal Consistency Reliability Analysis of 36 items *continued*

	Table 3. Internal Consistency Reliability Analysis of 36 items *continued*				
		Item–Total Correlation	Alpha if Item Deleted	Item–Total Correlation	Alpha if Item Deleted
	Caring for others *continued*	Pretest (Alpha = .75)		Posttest (Alpha = .67)	
32.	I believe that taking care of people who are in need is everyone's responsibility.	.66	.62	.49	.59
	Intercultural competence	Pretest (Alpha = .62)		Posttest (Alpha = .49)	
33.	I am keen to learn more about people from other cultures.	.61	.41	.43	.35
34.	When I interact with people from other cultures, I try to understand their behaviors, perceptions or feelings in the context of their cultures.	.47	.55	.44	.35
35.	I believe that paying attention to the body language of those from other cultures would allow me to understand more about them.	.35	.60	.48	.32
36.	I am interested in making friends with people of different cultural background.	.39	.68	.15	.80

Note. Item 36 was reversed.

Table 4. Cronbach's Alphas of the Nine Domains (34-Item Version)		
	Cronbach's alphas	
	Pretest	Posttest
Overall	.95	.96
Self–understanding/confidence	.82	.82
Communication skills	.87	.89
Problem–solving skills	.80	.82
Civic engagement, social responsibility, and willingness to contribute	.87	.85
Team skills	.83	.83
Self–reflection	.80	.82
General knowledge application	.77	.84
Caring for others	.75	.67
Intercultural competence	.68	.80

Table 5. Paired Sample Test by Domain (*n* = 193)						
	Pretest		Posttest		Difference (%)	*t*–test
Domains	Mean	SD	Mean	SD		
1. Self–understanding/confidence	7.43	1.08	7.85	0.96	5.54%	5.98***
2. Communication skills	7.15	1.25	7.63	1.22	6.74%	5.64***
3. Problem–solving skills	7.37	0.99	7.71	0.97	4.66%	5.39***
4. Civic engagement, social responsibility and willingness to contribute	7.72	1.13	8.06	0.97	4.39%	4.39***
5. Team skills	7.59	0.95	7.92	0.93	4.41%	4.44***
6. Self–reflection	7.73	1.05	7.96	1.04	2.98%	3.01***
7. General knowledge application	7.64	0.98	7.87	1.03	3.03%	3.25***
8. Caring for others	7.97	1.06	8.21	0.90	2.97%	3.35***
9. Intercultural competence	7.99	1.18	8.30	1.00	3.88%	3.58***

***p < .001

and the Barlett's test of sphericity is significant, indicating a reasonable analysis for the scale. Four factors with eigenvalue larger than 1 were extracted. The first factor accounted for 42.5% of total variance, the second factor accounted for 5.4%, the third factor accounted for 5.5%, and fourth factor accounted for 4.2%. However, as the contributions of the second, third, and fourth factors to the total variance are trivial (Figure 1), it is indicated that one factor should be satisfactory.

These nine domains were supported by various literature on student learning outcomes measurement (Furco & Root, 2010; Payne & Edwards, 2010; Stafford, Boyd, & Lindner, 2003). In the service-learning arena, it is generic to include academic achievement, personal competence, interpersonal relationship development, and citizenship as the intended outcomes (Wang, Ye, Jackson, Rodgers, & Jones, 2005). Further justifications from literature for the nine domains of the COM are detailed below:

- *Self-understanding/confidence.* Positive impact of intervention programs has been reported on self-confidence and academic improvement (Keup, 2005). Goleman (1995) attributed increased self-confidence to feeling useful through meaningful legitimate service projects in the community.

- *Communication skills.* Pooling results of numerous research reports, Eyler, Giles, Stenson, and Gray (2001) summarized that "service-learning has a positive effect on interpersonal development and the ability to work well with others, leadership and communication skills" (p. 1).

- *Problem-solving skills.* Service-learning is seen as a platform for students to enhance thinking skills and knowledge application necessary for success outside academia. Students produce comprehensive projects and analytical reflective journals, and they demonstrate critical thinking and problem-solving skills in multiple contexts (Eyler & Giles, 1999).

- *Civic engagement, social responsibility, and willingness to contribute.* Cultivating social responsibility within Asian universities is the third mission of contemporary HEIs (Ma & Tandon, 2014). The civic orientation outcome has always been a major concern in community service evaluations (Reeb, Katsuyama, Sammon, & Yoder, 1998) and thus becomes one of the attributes for measuring university social responsibility.

Table 6. Correlation Among the Nine Domains (Pretest)									
Domains	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Self-understanding/ confidence	1								
2. Communication skills	.75**	1							
3. Problem-solving skills	.61**	.57**	1						
4. Civic engagement, social responsibility and willingness to contribute	.57**	.59**	.56**	1					
5. Team skills	.65**	.62**	.60**	.62**	1				
6. Self-reflection	.65**	.60**	.60**	.58**	.60**	1			
7. General knowledge application	.60**	.46**	.59**	.59**	.49**	.70**	1		
8. Caring for others	.48**	.35**	.44**	.63**	.56**	.53**	.57**	1	
9. Intercultural competence	.38**	.30**	.36**	.52**	.49**	.45**	.44**	.59**	1

**p < .01

Table 7. Correlation Among the Nine Domains (Posttest)									
Domains	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Self-understanding/ confidence	1								
2. Communication skills	.71**	1							
3. Problem-solving skills	.72**	.66**	1						
4. Civic engagement, social responsibility and willingness to contribute	.54**	.43**	.55**	1					
5. Team skills	.65**	.69**	.61**	.61**	1				
6. Self-reflection	.65**	.66**	.66**	.53**	.75**	1			
7. General knowledge application	.64**	.60**	.68**	.59**	.70**	.74**	1		
8. Caring for others	.44**	.42**	.46**	.61**	.59**	.51**	.58**	1	
9. Intercultural competence	.46**	.46**	.46**	.63**	.60**	.56**	.60**	.75**	1

**p < .01

Scree Plot
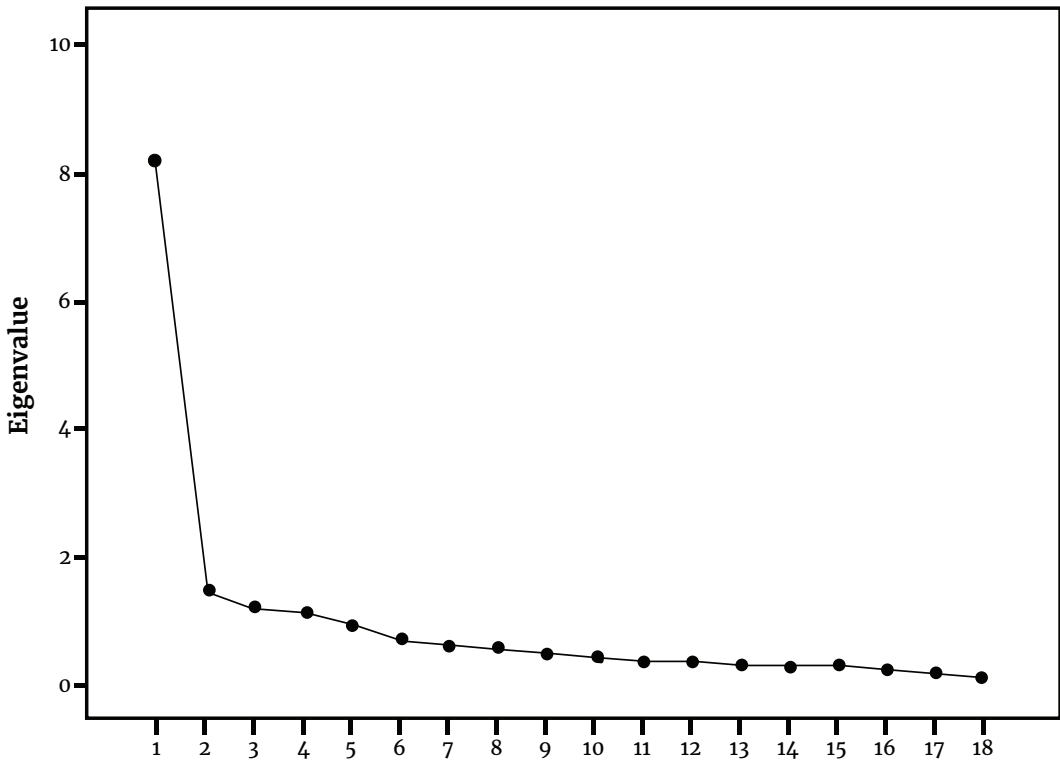
Figure 1. Scree Plot of the Factor Analysis for the Captioned Scale

- **Team skills.** Team skills captured the attention of group work learning trainers (Prichard, Stafford, & Bizo, 2006). To be a good team player is a necessary skill in future career development in a flat organization environment (Drucker, 1998).

- **Self-reflection.** Reflection is the process of engaging people to make meaning of their experiences. It constitutes a key stage of a transformative learning model (Kiely, 2005), and self-reflection is the trait with the most significant impact on leadership life skill development (Stafford et al., 2003).

- **General knowledge application.** It is important to motivate faculty members to consider using service-learning pedagogy, as students can use knowledge gained in service-learning experiences to make the world a better place (Miller, 1997).

- **Caring for others.** Students experience a sense of interconnectedness with others and their environ-ment through a service-learning program. They learn to open their hearts to others and become more empathetic through self and group reflection (Louie-Badua & Wolf, 2008). Service-learning is a peda-gogical tool for developing empathy and a conscientious reminder of the perspectives of people in the com-munity (Harding, 1991), and hence it is more likely that service-learn-ing participants will develop into sensible global citizens (Raysen & Katzarska-Miller, 2013) because of their care and compassion.

- **Intercultural competence.** Learning and serving outside Hong Kong is common among service-learning programs in HESLN member uni-versities and likewise elsewhere in other countries (e.g., Liu & Lee, 2001). Given the differences in the political system, social structure, and cultural aspects, cross-cultural contact is inevitable for participants in these programs. Crabtree (2008) postulated that by placing students

Table 8. Comparison Between COM and Other Scales		
Common outcome measurement	Seven domains of learning indicators (Ma & Chan, 2013)	Civic-minded Graduate (CMG) Scale (Steinberg, Hatcher, & Bringle, 2011)
Self-understanding/ confidence		Self-efficacy
Communication skills	Communication skills	Listening
Problem-solving skills	Problem-solving skills	
Civic engagement, social responsibility, and willingness to contribute	Civic orientation	Volunteer opportunities, contemporary social issues, valuing community engagement, social trustee of knowledge, behavioral intentions
Team skills	Organizational skills	Consensus-building
Self-reflection		
General knowledge application	Subject-related knowledge	Academic knowledge and technical skills
Caring for others	Social competence	
Intercultural competence		Diversity
	Research skills	

in a cross-cultural setting, hence combining academic study with international service experience, the synergistic scenario can have a positive impact on students' intercultural awareness, communication capabilities, and appreciation of cultural differences.

To measure the development of participants' intercultural competence, items were selected from the Cross-Cultural Adaptability Inventory (CCAI) and consolidated into intercultural adaptability (Paige, 2004). When the COM is compared with other scales (Table 8), it can be seen to include most of those scales' necessary domains in measuring students' service-learning outcomes.

The Ways Forward

The development of the COM provides a question bank to local institutions for measuring students' learning outcomes through service-learning. It also serves as a milestone of service-learning development in Hong Kong because it is the first collaborative research on service-learning among tertiary institutions. It contributes to the development of service-learning in

both theoretical and practical perspectives.

Our next ambition is to fine-tune the questionnaire items, keep a balance in each domain in response to the traditional cognition-attitude-behavior model, and make the COM incorporable to all stakeholders (e.g., faculty, service-learning coordinators, students, agencies, etc.) from all HEIs in Hong Kong, including universities, community colleges, and vocational training institutes.

The COM questionnaire would also allow for objective comparison between different service-learning programs, enable screening for more effective programs, empower improvements of service-learning administration, and support training for service-learning coordinators and agency coordinators, as well as encourage individual reflection on personal achievements for students. Investigations in this aspect could be enhanced through qualitative research such as focus groups or open-ended interviews of purposively sampled subjects.

Research literature on various claimed attributes of service-learning outcomes remains scarce. Most of the outcomes are intuitive links considered natural among service-

learning experts and also in accord with reasonable expectations of educators. More evidence on measuring students' learning outcomes needs to be created in Asia, as many HEIs start to adopt service-learning as a pedagogy and believe it can create positive impacts on students. Research related to service-learning should be encouraged among HEIs, and more funding from the university/government should be available for faculty and administrators. It is especially important to further construct a theoretical framework of pedagogy for service-learning and explore the causal flow between service-learning program logistics and the perceived reasons for successful learning.

With a theoretical framework in hand, COM exploration could be extended beyond Hong Kong, especially in the Asian context. In view of the emergence of service-learning education in Asia, some of the HEIs are investigating the possibilities of using COM for their institutions. For example, Taiwan Normal Teaching University is using the COM to compare the learning outcomes of students from Hong Kong and Taiwan before and after conducting service-learning. A validated Chinese version of the COM questionnaire has already been published by a Hong Kong and Taiwanese team (Chao, Liu, Ma, & Liu, 2018). Other countries, like the Philippines, Indonesia, and Vietnam, have also shown interest in using the validated versions. It is indeed encouraging that more research may be performed to study the feasibility of applying the COM in other countries/cities, while taking into consideration local culture differences and language interpretation variance. Although a similar questionnaire has been developed in Western society, it is important for Asia to develop its own based on cultural needs.

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Service-Learning Benefits for English Language Learners: A Case of China–Hong Kong Cross-Border English Teaching

Lindsey Gruber

Abstract

This study examines the burgeoning trend of Hong Kong university students conducting English language teaching as service-learning in mainland China, specifically in rural primary schools. The study reports the results of a questionnaire administered to Hong Kong undergraduate students after a series of such trips spanning a 4-year period. In particular, the study examines the students' perceptions of their own service orientation, cultural exchange experience, and language-learning outcomes. The findings allow for a broader qualitative discussion of the potential benefits for English language learners engaging in service-learning through teaching English. Recommendations focus on the potential for such trips to bolster the confidence and motivation of long-time English language learners, such as Hong Kong students.

Keywords: learning motivation, second language learning, service-learning

Over the last decade, the implementation of service-learning pedagogy in Asia has soared, staging a need for research in this context (Xing & Ma, 2010). In Taiwan, for example, a 2007 initiative by the Ministry of Education provided funding for service-learning projects and encouraged university students to improve civic responsibility and professional training (Yen & Yang, 2010). Similarly, Hong Kong universities have broadened their service-learning programs, taking advantage of a similar Ministry of Education initiative providing partial funding for Hong Kong and mainland Chinese university students to meet or work together for cultural exchange, learning, or service ("Ministry of Education Ten Thousand Student Interflow Programme," 2016; City University of Hong Kong, 2017). These institutions understand service-learning as a method to develop students' moral education and service orientation after graduation (Hok-ka, Wing-fung, & Cheung-ming, 2016; Powers, 2010); in some cases, service-learning is also used to bridge cultural divides (Al Barwani, Al Mekhlafi, & Neisler, 2010; Xing & Ma, 2010).

At its core, service-learning is a pedagogy grounded in Dewey's experiential learning model (Giles & Eyler, 1994), where formal study and reflection are paired with the performance of a service through volunteer work that meets a community need (Furco, 2001). Often, service-learning happens within the structure of a university credit-bearing course where students apply theoretical concepts to real-world problems; however, extracurricular service-learning activities may also be organized through university offices and colleges (Crabtree, 2008). Ideally, both the community and the student volunteers benefit mutually as the community's need is met and as the students increase their awareness of social issues, gain valuable practicum in their field, or learn about long-term social responsibility to local communities (Bowen, 2014; Cooper, 2014; Fullerton, Reitenauer, & Kerrigan, 2015).

Many existing studies on service-learning in English language learning contexts examine settings where English is the primary language spoken in the region (e.g., learning English in the United States) rather than settings where English is not the primary

language used in daily life (e.g., learning English in China). These studies often show the benefits of service-learning for students enrolled in college academic pathway programs (Miller, Berkeley, & Griffin, 2015; Perren, Grove, & Thornton, 2013). Service-learning in this setting aims to integrate, for example, students newly arrived in the United States into their new English language communities both linguistically and culturally through various volunteer activities, but not through the teaching of English as a service. A few studies do report on English teaching itself as service-learning, but do so for preservice English teachers during their teacher training rather than for students who are in the process of learning English. In these studies, the benefits of connecting hands-on practicum with service projects for teachers-in-training are the main areas of concern (Lin, Wu, Wu, Pan, & Liao, 2014; Su & Chi, 2016). However, no studies have yet investigated English language learners (ELLs) teaching English as service-learning.

Because university students in Hong Kong are now participating in English teaching as a service in mainland China, this study aims to investigate a new phenomenon in Hong Kong university service-learning by reporting on a series of non-credit-bearing service-learning trips wherein the researcher served as a coleading teacher. The service took place over four summers, initiated and led by the director of the university's unit for English language teaching. The trips were organized as extracurricular activities through a college of the university, and three of four successive trips received local and external funding through new Hong Kong and Chinese Ministry of Education initiatives. A Hong Kong university's Office of Academic Links states that the purpose of one such funding initiative, open to all Hong Kong universities, is to "promote exchange and collaboration among Hong Kong and mainland Chinese institutions and to enable local students to gain a thorough understanding of mainland China" ("Ministry of Education Ten Thousand Student Interflow Programme," 2016, para. 1). Within this funding source framework of cultural exchange, the financial support could be used for a variety of learning activities, including short-term study abroad programs, joint academic projects, or service-learning. The trip organizers were also free to set their own program agenda, themes, and learning ob-

jectives. The trips investigated in this study drew on this funding to organize service-learning experiences together with students from a mainland university in China. Each trip included English language teaching in a village primary school as the primary service performed by the university students (ELLs).

Herein, I examine the Hong Kong students' perspectives of their own personal goals for participating in these service-learning trips, and I set out to better understand how the students perceive the ways that the trips affected:

1. their public service orientations,

2. their cultural exchange in China, and

3. most importantly in this study, their perceptions of their own language learning development, given the linguistic focus of the service project.

The findings aim to inform service-learning organizers in Hong Kong as they consider best practices in arranging formats and developing curriculum for such student service-learning. With further research, the findings may also have implications for ELLs conducting service-learning English teaching in other contexts where cross-border service is possible or where there exists a community need for improved English language skills among pockets of linguistically diverse populations.

Review of the Service-Learning Literature

The Benefits of Service-Learning

Numerous studies have shown the benefits for all involved in service-learning programs in university settings. Engaging in service-learning can help students develop leadership expertise and professional competencies such as teamwork and communication skills (Fullerton et al., 2015; Hok-ka et al., 2016; Newman & Hernandez, 2011). A study by Markus, Howard, and King (1993) investigating service-learning in a university political science course found measurable academic benefits when the service was paired with formal classroom instruction and reflection. This pairing allowed students to apply theoretical concepts to real-world settings. That same study found that students in a service-learning course, when compared to students in a

traditional political science course, had higher final grades and reported rising to their maximum academic potential in greater numbers than students enrolled in the traditional course (Markus et al., 1993). In addition to career and academic benefits, when service-learning organizers prioritize reciprocity, service-learning can also result in benefits to the community (Giles & Eyler, 1994; Jacoby, 1996). When focused on social justice, as opposed to charity, service-learning projects can contribute to long-term solutions rather than temporary fixes (Bowen, 2014), helping to advance societal change (Cooper, 2014; Fullerton et al., 2015). A longitudinal study found that service-learning participants even grew in their appreciation for human diversity and experienced a long-term altering of their perception toward society for years after the service was completed (Fullerton et al., 2015). Finally, it has been found that students who participate in service-learning during university are more likely to continue volunteer work after graduation and maintain a service orientation toward society and their community (Astin et al., 2006).

Due to the number of benefits observed, service-learning programs have been embedded in a variety of contexts around the world. Briefly reviewing the research on service-learning across English language learning settings and Hong Kong university settings in particular allows for consideration of the potential benefits of service-learning English teaching as performed by the Hong Kong undergraduate ELLs in this study.

Service-Learning for U.S. ELLs

The incorporation of service-learning for ELLs in college and university pathway programs in the U.S. has been shown to produce various benefits. By participating in community service to low-income communities, international students develop a greater understanding toward issues of race and class in America. Interacting in communities through service also encourages better cultural cohesion, lends exposure to volunteer work, and improves awareness of the mutual benefits of service-learning (Miller et al., 2015). Beyond these social and personal benefits, studies indicate that participation in service-learning creates opportunities to raise international students' English language proficiency, especially

when the service involves interacting in the community and is paired with reading, writing, and reflection (Askildson, Kelly, & Mick, 2013; Heuser, 1999; McCarthy, 1996). Indeed, service-learning activities align well with a communicative approach to language learning. When international students must interact in authentic and unscripted English language environments, as is common for much service-learning outreach, they are prompted to focus on and improve their own English fluency and intelligibility (Miller et al., 2015). In other words, these studies highlight how ELLs in the United States can benefit linguistically through service-learning; however, they do not perform English language teaching as a service.

Service-Learning for Hong Kong ELLs

Substantial research on service-learning at universities in Hong Kong is beginning to emerge. The first longitudinal study on the impact of service-learning was published in 2016 and looked across 425 Hong Kong students. In that study, researchers from Lingnan University, first to establish a service-learning office in Hong Kong, found that positive outcomes for students included workplace preparation, academic growth, and social development of long-term civic responsibility awareness (Hok-ka et al., 2016). These benefits were echoed by Ngai (2006), a professor of sociology, who found that students participating in a service-learning course at the Chinese University of Hong Kong benefited from increased self-efficacy and the ability to care for vulnerable groups in Hong Kong. Other Hong Kong–based studies report on university students' service to the elderly as part of a community psychology project (Chan, Ng, & Chan, 2016) and to needy children and new migrants from China (Ngai, 2006). However, no research in the Hong Kong context specifically examines service-learning through English language teaching conducted by ELLs.

Service-Learning Through English Language Teaching

Studies of service-learning within English language teaching (ELT) contexts remain focused, understandably, on teacher training programs (Lin et al., 2014; Rueckert, 2013; Su & Chi, 2016), not on ELLs. The impetus for teachers in training to engage in service-learning is the opportunity to

gain professional experience in real-life contexts. One study of community English language teaching in the United States found that teachers-in-training, when given the chance to participate in service-learning teaching during their MA program, reported greater levels of confidence to teach English postservice; those teachers also self-identified as professionals more strongly than prior to the service-learning teaching (Rueckert, 2013). Another study found that preservice teachers developed deeper reflective teaching abilities after service-learning teaching (He & Prater, 2014). Overall, teacher training programs turn to service-learning to improve professional preparedness and confidence in teaching.

Despite the growth of service-learning, research on ELLs teaching English as a service is lacking. The closest example may be a study on a service-learning course at the Hong Kong Institute of Education, which paired students to help the elderly at a community center. Although English tutoring is mentioned as one of the many services performed, in addition to teaching computer skills, dance, singing, and cooking, no specific details about the English teaching outcomes or preparation are given (Tam, 2014). Indeed, few reports also specifically engage service-learning trips happening between Hong Kong and China or give focus to ELLs teaching English in Asia (Su & Chi, 2016). However, recent service-learning trips to mainland China urge investigation. University ELLs in Hong Kong can now participate in English language teaching as service in mainland China, and the presence of new financial support from the Chinese and Hong Kong governments to build cross-border relationships among students expands such possibilities, again underscoring the need for scholarly examination.

The Hong Kong–China Service-Learning Context

Sociopolitical Context

Before introducing the research methodology and results, it is likely useful to briefly review the sociopolitical context as well as the English language learning context in China and Hong Kong. In 1997, after 150-plus years of British colonial rule, Hong Kong's sovereignty was passed to Beijing. Hong Kong is currently designated a Special Administrative Region of China. Given Hong Kong's distinct legal, social,

and economic structure, China instituted its "one country, two systems" policy to ensure high levels of autonomy for Hong Kong until 2047; nevertheless, Beijing's leadership is committed to the unification of all regions of China (Hartnett, Keränen, & Conley, 2017; So, 2011). As a result, the current leadership of the Chinese government deploys a domestic policy largely centered on a Confucian-inspired notion of national "harmony," which can be understood as "an explicit discourse on the rationalization, maintenance, and enforcement of stability and order by the State in reaction to the rapid economic–political changes and sociocultural diversifications" (Wang, Juffermans, & Du, 2016, p. 301). Amid this policy and discourse focused on the need for development and change, or "what ought to be" (Wang et al., 2016, p. 302), the Hong Kong and mainland China governments actively fund cross-regional projects designed to pave the way for harmonious social relations and integrations (Kuah-Pearce & Fong, 2010; Wu & Siu, 2017; Zhao, 2015). The English language learning context is included insofar as schools and universities are offered government funding to ensure that ongoing partnerships and relationships are formed between Hong Kong and mainland China.

The service-learning trips examined herein were partially funded through mainland and Hong Kong government sources presumably established to promote cultural exchange and implement long-standing policy (Kuah-Pearce & Fong, 2010; Wu & Siu, 2017; Zhao, 2015). However, the purpose of this study is not to build critical cultural insights about the relations of power forged through such government funding but, rather, to examine the Hong Kong ELLs' own perceptions of service-learning through teaching English in China and, primarily, to explore potential benefits to their language learning and their public service orientation. Nevertheless, sociopolitical considerations of the trip are not easily divorced from students' perceptions, and the research instrument, accordingly, captures responses about students' perspectives toward this cross-cultural exchange. The discussion and recommendations sections, therefore, recognize and evaluate the sociopolitical context but do so in reference to and in conjunction with the student-respondents' comments.

English Learning and Testing

Although Cantonese is the primary language used by Hong Kong people, Hong Kong, as a former British colony, has maintained English as one of its official languages since the handover in 1997. English plays a role in Hong Kong such that it has a greater curricular focus in the education system than in mainland China, where the British colonial legacy does not exist, though the focus on English training in China has been increasing in recent years due to its perceived links to the modernization of China, financial wealth, and personal well-being (Nunan, 2003). With respect to the service-learning trips investigated in this article, most Hong Kong university ELLs attending had already taken at least 12 years of English classes starting in elementary school, if not earlier. Further, after entering university, most Hong Kong students are required to take additional English classes to better prepare them for university-level academic English.

Since 2001, the mainland Chinese government has required all primary and secondary school students to learn English, but the number of years and the intensity of study are still significantly less than in Hong Kong (Nunan, 2003). Additionally, Chinese students participate in a number of provincial and national exams that include assessment of their English language proficiency for entry to junior high and high school as well as university, and it is widely recognized that these exams directly impact the educational, career, and life paths of Chinese students (Cheng, 2008). However, as education is funded locally, educational inequality has been found between schools on coastal cities in the east and those of rural areas in the west of China, which often have fewer resources for attracting highly trained English language teachers or for purchasing educational technology and supplemental learning materials (Yang, 2005). To further complicate matters, the English language has almost no significance in the daily life of rural schoolchildren, yet the chance of upward mobility relies, at least partially, on their ability to do well on China's national exams (Hu, 2003).

In light of this context, English language teaching became a salient mode of service to a rural Chinese elementary school. Indeed, the lack of educational resources in rural schools has been linked to lower proficiency in English, and poor performance on English exams is recognized as one of the factors that prevent Chinese students from entering university or finding well-paying jobs (Hu, 2003). Because service-learning strives for reciprocal benefits in meeting community needs and enhancing students' education, Hong Kong universities, such as the one connected to this project, have identified service-learning through English teaching as an effective way to meet an obvious need in a location a reasonably short distance from Hong Kong. By collaborating with a mainland university, Hong Kong ELLs would potentially benefit from cultural exchange, and by reaching out to a rural school, they would have an opportunity to grow in service orientation, while the rural schoolchildren would, in turn, benefit from the Hong Kong ELLs' more advanced level of English. It should be noted that this research focuses primarily on understanding the gains related to language learning, as perceived by the Hong Kong ELLs, as possible benefits of this service-learning outreach.

The Service-Learning Trip

From 2013 to 2016, a prominent university in Hong Kong arranged four service-learning trips to rural China, using the mainland government's subsidy for partnering with a mainland university for cultural exchange and colearning through joint service outreach. Hong Kong university ELLs of all majors joined the program to participate as teachers of English to elementary school students in rural China. Prior to departure, the Hong Kong ELLs prepared for several weeks, planning lessons and receiving training under the guidance of the leader, the language unit director at the university, and coleading teachers who were English language lecturers at the university. Each trip was attended by 7 to 15 Hong Kong university participants (ELLs) and one to three English language lecturers.

Upon arrival in China, the team traveled with its mainland university counterpart to a rural area where students worked together to teach English at a primary school. Teams of three to four university ELLs per classroom served as English teachers and stayed with the same class for five school days in the format of a week-long English camp. Lessons were theme-based and tailored to each group's level. The lead teachers rotated between classes to assist and oversee the teaching. Regular feedback was given to the university ELLs to improve the teaching

and the learning experience of the children. During the service, several meetings were arranged for students and leaders to share their reflections, sometimes conducted in Mandarin to better accommodate the mainland university students who did not speak Cantonese and were less proficient in English. These reflections were often structured by sharing classroom highs and lows from the day followed by recommended solutions to troubleshoot problems. After each service trip, students were required to complete various reflection projects. For example, after one trip, students collaborated in groups to produce a multimodal reflective piece in English or Cantonese. Using a digital storytelling format, the university ELLs gave an open-ended reflective summary of their learning as it related to cultural exchange and service outreach.

Methods

The Participants and Questionnaire

The researcher collected data through an online questionnaire from 13 Hong Kong students who participated in the aforementioned service-learning trips from 2013 to 2016. An invitation was sent in 2016 to all previous participants of the service-learning trips, and 13 volunteered to participate. Prior to questionnaire dissemination, research ethics clearance for surveying human subjects (Institutional Review Board) was formally obtained through the university's Survey and Behavioral Research Ethics Committee. A participant information sheet was distributed and consent was obtained from the participating university students. The questionnaire was designed to collect students' perceptions of their personal experiences on the study tour through quantitative and qualitative responses. The following research questions guided the investigation.

Service Orientation Questions

> Why did students join the service-learning trip?

> What did students perceive as the main outcomes of the trip?

> How did students perceive the service trip to influence their thinking about future involvement in volunteer work?

Cultural Exchange Question

> Did students make personal goals for cultural exchange in mainland China, and did they perceive that these goals were achieved as an outcome of the trip?

Language Learning Question

> How did students view their English abilities prior to the trip, and did they perceive any linguistic or language learning benefits from the experience of becoming a teacher of English for elementary school students?

To identify perspectives, the online questionnaire was distributed after the service trip per the example of Ngai's (2006) post-service investigation of a service-learning course; however, the questionnaire also utilized the attitudinal ranking questions composed by University of Central Florida researchers in their study of nine student participants of cross-border service-learning (Cox, Murray, & Plante, 2014) since the purpose of their trip, aim of their research, and scope of their study reasonably correlated with this one. Accordingly, the questionnaire in this study sought to capture numerical ratings to help interpret students' open-ended comments, overall seeking to qualitatively understand the student experience of service-learning English teaching.

The questionnaire used in this study consisted of 15 questions and three question types paired with write-in sections for collecting more detailed responses and explanations. In the first section of the questionnaire, yes/no questions were used to collect demographic data such as past volunteer work or service-learning experience. Next, multiple choice questions were used to identify students' main motivations for joining the trip, for capturing their perceptions of the main outcomes of the trip, and for detailing their reasons for believing that the service did or did not help them to improve their own English skills. In each case, participants were asked to choose one to three reasons for each answer, with the option of adding any unique reasons that were not listed. Finally, three Likert-scale ranking questions were used to capture students' perceptions of their pretrip levels of confidence using English and to understand

the frequency of their English communication with their mainland counterparts compared to the amount of English used with their Hong Kong counterparts. Since students could skip any question, the number of responses as well as the percentage are reported for each result.

Questionnaire Dissemination

An online questionnaire was sent to Hong Kong ELLs who had participated in any of the four service trips between 2013 and 2016. The questionnaire was not sent to the mainland university students as this research exclusively investigated the outcomes and benefits for the participating Hong Kong university students. Responses were collected anonymously and on a voluntary basis. The sample was limited by the small size of the service-learning trips (each trip ranging from 7 to 15 participants). Some students participated in more than one trip, and some students who had since graduated could not be reached — further limiting the possible sample size. Responses were collected from 13 participants, and roughly equal numbers of participants from each trip responded (2013 N = 3, 2014 N = 4, 2015 N = 4, 2016 N = 3), capturing a meaningful cross-section sample of student perspectives on this new service-learning program across 4 years.

Method of Analysis

As a qualitative study of student perspectives on language learning in a unique service-learning context, this research has followed the iterative approach of grounded theory, first developed by Glaser and Strauss (1967). As Charmaz (2006) has noted, this method depends upon sorting and making comparisons across collected data while consulting sources and one's own experience in an iterative way. Doing so creates "an open-ended study" that adopts the premise that the researchers are not neutral but "possess stocks of knowledge" and can "be reflexive about it" (p. 15).

Accordingly, for each question type, numerical data were gathered and calculated, offering a baseline from which to develop ideas about student perceptions. Relative percentages in conjunction with the actual number of responses serve as a starting point for thinking through the aforementioned research on service-learning and motivation. However, open-ended responses also inform an iterative inter-

pretation, that is, they offer another point from which to consider the effects of the service-learning trips. Thus, for each question type, open-ended follow-up questions were added and examined, giving nuance to this researcher's own interpretations of any numerical outcomes.

In cases where students responded in an unexpected way or in a majority, open-ended answers were listed as part of the analysis (see following sections). As evidenced in the discussion, open-ended questions were content analyzed for overarching themes, following recommendations by Charmaz (2006). Such methods proved useful, as they also align with past work on service-learning, such as that conducted by Ngai (2006) and Nickols, Rothenberg, Moshi, and Tetloff (2013), both studies turned to the principles of grounded theory to explore student development. Accordingly, the subsequent discussion is informed by my own experience of the service-learning trip, knowledge of the context, and understanding of the service-learning literature, deepening the interpretation of trends present across the numerical and qualitative data.

Findings

Service Orientation Goals and Outcomes

The questionnaire data show that students perceive themselves as having some service awareness prior to this trip. Ten students, or 77%, previously participated in volunteer work, such as working in homes for the elderly or orphanages. The data also show that a strong service orientation was a contributing motivator for the participants to join the service-learning trips. Nearly all students (N = 12, or 92%) reported that they wanted to "do good/help others" as one of their three primary motivating factors. The next most common motivation was to "learn more about volunteer work," chosen by nearly 70% (N = 9) of the student volunteers. The third most common motivating factor, chosen by nearly 31% of students (N = 4), was to "gain leadership experience for job/scholarship/society applications."

When given a similar list of factors, including helping others and gaining leadership experience, the reasons that students recalled for choosing to participate in the trip often matched the outcome that they perceived to have achieved at the end of the service. After the service trip, 92% (N =

12) felt that they did indeed "help others" through the service trip, and almost 70% (N = 9) "developed a desire to do more volunteer work in the future" because of service-learning. The numbers on leadership had more variation. Nearly 54% (N = 7) felt that they "gained leadership experience for job/scholarship/society applications" through the service experience.

When asked if they would like to participate in more volunteer work in the future, the majority answered "yes" in their open-ended comments. One student expressed a hope to perform "service similar to this one because I believe education can change one's future." Another wrote, "Yes, we can contribute our knowledge and talents in improving others' conditions."

Cultural Exchange Goals and Outcomes

Given that the trips were funded in part by government subsidies that link Hong Kong and mainland university students in joint projects, participating students were surveyed about their cultural perceptions of the trip. Out of three choices describing motivating factors related to cultural exchange, nearly 40% of respondents (N = 5) wanted to "exchange ideas with mainland students" as a primary motivating factor in volunteering, whereas only 23% (N = 3) chose "learn more about the mainland"; fewer participants, about 15% (N = 2), indicated a desire to "achieve a greater personal connection to the mainland" as a main motivating factor. One open-ended response suggested another motivating factor for joining the trip: "making friends with mainland and Hong Kong students."

Because the motivating factor "exchange ideas with mainland students" is often used in university materials to promote the exchange learning trips, the researcher aimed to better elucidate and isolate the meaning of that phrase. Thus, after selecting motivating factors, as reported above, the participants were asked to identify what they best achieved during the service. Among these options, students could choose cultural exchange outcomes: They could select that the trip allowed them "to learn more about the mainland" or to "achieve a greater personal connection to the mainland." Students could also choose "Other" and write in any response. Overall, 31% (N = 4) chose "to learn more about the mainland," and 15% (N = 2) felt that they

had achieved a "greater personal connection to the mainland" as a primary result of their joint service. In other words, when asked to describe the cultural exchange outcomes, compared to their own starting goals for attending the trip, more students selected "learn more about the mainland," but no additional students chose "achieve a greater personal connection to the mainland." No students chose to write in a new answer for "Other."

Language Learning Goals and Outcomes

The data show that improving English was the least motivating factor behind the students' choice to participate in English language teaching as a service; only one student identified with this language improvement goal. When asked to describe their levels of confidence in using English before the trip, one student (8%) felt "very confident" using the English language, and seven (54%) described themselves as "confident." Five students, or 38%, felt "only a little confident" in English. No students reported a total lack of confidence in their English ability. However, these "less confident" students (N = 5) provided additional written responses about their own confidence levels:

> "[I am] not fluent English at all time."

> "I believe I can do much better in writing and reading part."

> "I lack vocab in my mind and my speaking skill is not good enough but I think I handle the daily conversation."

> "Even [though] I got into university, I still feel a little bit afraid of speaking English."

All comments on confidence in English gave a specific self-assessment and focused on a weakness in one particular linguistic area: fluency, writing, reading, vocabulary. One comment focused on a feeling—fear of speaking. One comment focused on a strength, daily conversation, while contrasting that with a weakness.

After having taught English as a service for one week, 46% (N = 6) felt that their perspective of their own English ability had changed, although the other 54%

(N = 7) did not have a change in perception. A student comment illuminates this change and defines it as "attentiveness": "I became more attentive to my own pronunciation and writing skills." Another student perceived a change in confidence level: "I am more confident to communicate with others using English." Twenty-three percent (N = 3) felt that their English had improved as a result of teaching English. Finally, 53% (N = 7) reported feeling more motivated to continue improving their own English skills after returning from the service teaching. Some students' comments explain a little more about their improved motivation to study English:

> "English teaching makes me more interested in the language."

> "[I want to improve my English] to ensure that I really have the ability to teach English to the children."

> "[The elementary school] students . . . enjoyed learning English and gave me motivation [to improve]."

For those students who did not perceive an improvement in their English skills, they commented, understandably, on the low level of English teaching that they performed, the short time spent teaching (just one week), and the high frequency of Mandarin and Cantonese spoken between teammates throughout the trip. Indeed, when asked about the primary language spoken between teammates, for those students who attended a joint trip with a mainland university, 75% (N = 9) "rarely" spoke English to their mainland counterparts, and 25% (N = 3) "sometimes" spoke English with them. When asked the same question about the language of communication between Hong Kong team members, 23% (N = 3) "sometimes" spoke English with each other, 54% (N = 7) "rarely" spoke English, and 23% (N = 3) "never" spoke English with their Hong Kong peers. In other words, all Hong Kong students remember speaking at least some English with the mainland students, but 23% (N = 3) of Hong Kong students responded that they "never" spoke English with their Hong Kong peers.

For those students who did sense an improvement in their language skills (23%, N = 3), when asked to choose up to three supporting reasons, they focused primarily on speaking to elementary school students in English during daily lessons (100%, n = 3), receiving feedback on lessons from the lead teachers (67%, n = 2), and casually speaking with the lead teachers in English throughout the trip (67%, n = 2).

Quantitative data in questionnaire results, such as that reported here, help to focus the researcher in the process of developing a better understanding; yet in accordance with the dedications of grounded theory to sort through multiple depictions of the social world and to uphold reflexivity and personal experience (Charmaz, 2006), the quantitative data serve as one part of a broader qualitative reading. Thus, the following section advances a discussion organized around three considerations that arise from reviewing the numerical and open-ended questionnaire responses as well as from thinking through the researcher's familiarity with the service-learning trips and the Hong Kong context: the service orientations reported, the cultural exchange experiences, and the language learning outcomes. Subsequently, recommendations for ELLs conducting service-learning and, more specifically, for Hong Kong universities ELL programs are suggested.

Discussion

Service Orientation Considerations

One of the initial findings of this study suggests a positive impact of service-learning on students' service orientation, which accords with previous studies (Astin et al., 2006; Fullerton et al., 2015). The questionnaire data collected on service orientation demonstrate that many of these students would like to do more service work in the future. These responses, and others like them, reflect one of the Hong Kong government's priorities in education: to develop students' charitable inclination and whole-self education (Xing & Ma, 2010).

The idea of engaging in service work in the future was often tied to the idea of leadership in students' open-ended responses, including comments expressing a desire to provide education and improve others' conditions in the future. These comments, combined with the finding that students perceived that they learned more about leadership than they expected to, might suggest that this service-learning trip influenced students' perceptions about their

own future roles in society. Since students expressed a view that they received this personal benefit of leadership training by participating in the service trip, organizers may be able to strengthen this outcome by exploring the research on how to organize effective and ethical service-learning leadership structures. Heuser (1999), for example, proves pertinent, as he cautioned organizers about the leadership structure of volunteer service, suggesting that unchallenged hierarchical structures can unintendedly uphold negative or false stereotypes and disadvantage the poor. Service-learning participants might explore such sources, investigating the importance of reciprocity, ensuring that all parties benefit from the service. Mueller and Lee (2010), to take another example, suggested that service receivers work mutually with service-learners to identify the needs that the service will address. Perhaps including this step at the student leadership level while organizing the service, in addition to academically exploring concepts of reciprocity, hierarchy, and power, could prove beneficial for students' leadership training. Overall, service-learning is promising for its contribution to students' whole person development, but organizers must recognize that service-learning is most successful when following guidelines of best practices from the literature, such as considering the reciprocal nature of the service (Giles & Eyler, 1994).

Cultural Exchange Considerations

According to the data, the partial funding by government initiatives to help Hong Kong students learn more about the mainland and to connect through exchange with mainland university students both did and did not influence the participating students' perceptions toward the mainland. Although students do express an interest in learning more about China and sharing ideas with mainland students, most of those students do not primarily seek nor perceive to benefit from a greater feeling of connection to the mainland. This raises questions regarding the Hong Kong students' reasons for seeking greater knowledge and exchange of ideas. As other scholars have urged, more research into this issue can be conducted to better understand how this funding ultimately influences students' cultural identity (Kuah-Pearce & Fong, 2010). Curiosity about life in China or a desire to express their own identities as "Hong Kongers" could,

of course, be a factor here; future research could detail how regional and cultural identities and national discourses intersect with service-learning motivations and outcomes.

Understanding the cultural implications of service-learning amid the complicated geopolitics of the Hong Kong–China context proves especially difficult. Perhaps there is a balancing of concerns when evaluating the cultural exchange aspect of the trip. On the one hand, some activists and lawmakers indicate a political motive embedded in the available funding sources from the Chinese and Hong Kong governments in light of recent political and cultural tensions in Hong Kong. To them, the growing number of funded exchange opportunities for Hong Kong students on the mainland can be likened to the proposed national education curriculum that was shelved after protests in 2012, revealing a government motivation to strengthen the Hong Kong students' Chinese identity (Wu & Siu, 2017; Zhao, 2015). As noted across recent scholarship on China, the Chinese government remains dedicated to improving unification and national harmony across its regions (Hartnett et al., 2017), and these multiple funding sources likely play a role in this integration process.

On the other hand, taking advantage of such funding to initiate service-learning offers benefits to students, as documented in this article. Unlike a recent policy proposal from a top Hong Kong university, which was believed to require student exchange in the mainland by 2022 (Lam, 2015), the service-learning activities investigated in this article are not compulsory for students, and the funding sources are transparent. Additionally, improving relationships among students in a delicate geopolitical situation is itself an important social action and one that can productively ease political and cultural tensions and lead to mutual, cross-cultural understanding. Educators in Hong Kong all too often see a negative division between mainland and local students at Hong Kong universities and would likely support breaking down stereotypes and increasing students' open-mindedness; one interpretation of the data collected in this study suggests that joint service holds the potential to make a positive impact on Hong Kong university students, to promote open dialogue, and to strengthen students' intercultural sensitivity in addition to service orientation as documented in other studies (Al Barwani et al., 2010; Fullerton et al.,

2015; Xing & Ma, 2010).

Language Learning Considerations

Improving Hong Kong students' English was never a stated goal of the service trip, but this exploratory study reveals some unintended language learning benefits that suggest the value of investigations. Nearly half of the students reported a change in perception of their own English ability after the service teaching. This reported change in language ability, of course, is less likely to reflect an improved proficiency or accuracy than to represent benefits in other crucial areas of language learning development. First, one student comment reported a greater awareness (or "attentiveness") of their own language use, a comment perhaps demonstrating how teaching a subject can hone understanding of that subject in new ways. Next, there is some evidence of increased confidence resulting from the service-learning teaching. Most significantly in this study, a small majority of the participants surveyed perceived a feeling of greater motivation to improve their English as a result of the service-learning trip.

One possible explanation for this new motivation lies in the students' increased service orientation and care for the service recipients, as found in Ngai's (2006) service-learning study in Hong Kong. One student explained that her reason for wanting to improve her English after the service was "to ensure that I really have the ability to teach English to the children." Students' desires to address the community need and improve their own service skills might herein grow simultaneously. These student comments may also affirm the findings of Yihong, Yuan, Ying, and Yan (2007) by linking these Hong Kong students' new motivation for improving their English (helping the service recipients) with a consequential identity change because of their new relationship to the language (as a teacher of English), further propelling their interest in the language. Alternatively, perhaps this increased motivation can be explained by pedagogical research on power and learning; when power and autonomy are given to learners, and when everyone teaches and everyone learns, motivation increases (Kohn, 2010; Richard-Amato 2002). To allow Hong Kong students to teach English in a semiformal setting offers them a greater level of autonomy in the language than they have likely experienced during their 12-plus

years of language study, and perhaps this new identity as an expert of the language could increase students' motivation.

Motivation, language awareness, and confidence, recognized as benefits by some students on this trip, have all been shown to contribute to the acquisition of a second language (Clément, Dörnyei, & Noels, 1994; Gardner, 1985; Kennedy, 2012; Little, 1997). Yihong et al. (2007) argue that research on these nonlinguistic outcomes of language learning, such as language identity, distinguished by Gardner (1985) from linguistic outcomes, have not been given enough attention by teachers and researchers in English as a foreign language (EFL) settings compared to English as a second language (ESL) settings. Indeed, the potential of service-learning to increase these nonlinguistic language learning elements is documented in ESL settings (Heuser, 1999; Miller et al., 2015), but teaching English through service-learning, if students' language enhancement is prioritized as a goal, could improve language awareness, confidence, and motivation. The reported comments from students to this effect, as noted, provide good cause for further research.

Recommendations for ELLs Teaching English as Service-Learning

Language of Leadership and Reflection

If increasing Hong Kong students' language learning outcomes through service English teaching is deemed a goal, then the comments given by those participants who did perceive an improvement in their English ability should be considered when organizing such service. Those participants who reported language improvements pointed to interactions in English with the lead teachers and to receiving feedback on their lessons from the lead teachers in English. The finding suggests that the leadership of the trips and the language that those leaders use to engage with the students may be important components to reaching any language learning goals. The finding provides assurance that daily feedback after student lessons as well as highly engaged leadership likely will improve outcomes.

To extend the reported benefit gained through interacting in English with the lead teachers, specific strategies for sharing experiences in English could be developed for future trips across a series of

integrated group activities. Indeed, Hong Kong students seem to fall back on speaking in Cantonese in joint trips with mainland students. Other service–learning trips have reportedly been organized with a goal of encouraging ELLs to speak more English outside the classroom (Miller et al., 2015); consequently, if this goal is to be pursued, then finding ways to support and enhance Hong Kong students' own reported moments of using English during the service trip proves vital.

Heuser (1999) found that the potential for language learning was maximized when students communicated in English about their experiences after performing a community service. Other studies found that the learning outcomes of service increased when reflection was added to the structure of service–learning (Perren, 2013). Drawing from the literature on the link between (1) reflection and service–learning outcomes (Perren, 2013), (2) communicating in English about the service–learning experience and increasing English language skills (Heuser, 1999), and (3) pairing service–learning with formal instruction (Markus et al., 1993), a path for maximizing the language learning benefits for Hong Kong ELLs becomes clearer. To aim for improved English language outcomes, service organizers should consider increasing the amount of reflective content shared in English both during and after the trip and could consider embedding English language teaching service in a formal course of English study. To date there have been no reported cases of service–learning English teaching embedded in an English language course, and Hong Kong provides a context where this may be possible.

Concerns About Teaching Quality

Part of developing recommendations is recognizing that there could, understandably, be concerns about the quality of English language teaching performed by English language learners who are not undergoing formal training in the subject. After all, as revealed in the questionnaire results, nearly 40% of the student participants reported feeling "only a little confident" in English prior to the service. However, the concern must be balanced with the reality of the English teaching context and with the benefits to the student teachers themselves and to the recipients of the teaching, primary school learners in rural mainland China.

Three observations from these Hong Kong–China service–learning trips bear on the quality of the service component and its impact on students and on the elementary school learners. First, the English teaching objectives were simplistic and graspable for the student teachers. As some rightly acknowledged in their questionnaire responses, "the English we used was not that much" and "only simple English words are taught." Some student teachers even acknowledged the simplistic teaching objectives as a main reason why they did not perceive an improvement in their own language proficiency. Second, set against a context of teaching in rural village schools that have limited English and teaching resources (Yang, 2005), the student teachers had a higher English proficiency level than the elementary school students and could provide more communicative English lessons than what was typically offered at the school. Lastly, keeping in mind principles of reciprocity in service–learning (Giles & Eyler, 1994), the organizers believe the Hong Kong students gain valuable service and leadership skills while the service may also benefit the children of rural China by making English studies more relevant. Despite these rationales, the organizers recognize that there may be a danger if professionalism in teaching is not ensured. The leaders of these trips thus played an active role in the service planning and execution. Lead teachers reviewed lesson plans, observed classes, and gave feedback to the student teachers throughout the service period.

Limitations

In pursuing recommendations, the limitations to the study should be kept in view, especially given the exploratory nature of the research. Because of the small sample size—owing to the small number of students in service–learning trips—the claims are limited. Further, this study investigates Hong Kong learners and their involvement in service–learning projects in a rural primary school in China; the expansion of these results and recommendations to other contexts is promising but requires further research. Furthermore, for such service–learning initiatives to be effective in any context, several factors limiting student growth in English during these trips need to be recognized. These include the short length of the service, the high frequency of other languages spoken throughout the

service, the complex regional identities and sociopolitical contexts that may limit language use and project sharing, and the need for strong, research-based leadership to ensure reciprocity through proper training and support before and during service.

Conclusion

Hong Kong university ELLs have begun teaching English in rural China through service-learning programs funded by government initiatives to unite students in cross-border service for the sake of cultural exchange and increased knowledge of the mainland. Since no prior studies have investigated ELLs teaching English as service-learning in China, this article addresses a gap in the literature by reporting on a series of four cross-border service-learning trips to China in which the participating university students of all majors taught English in a rural school as their primary service. Findings on service orientation benefits align with prior research showing that students perceive an increase in a desire to help others and to participate in future volunteer work after joining such trips. Although cultural exchange was a perceived outcome for some students, building a "greater sense of connection to the mainland" was not clearly articulated by the sampled students. Consequently, although cultural unification seems to be a persuasive motivator for the funding source of such service-learning trips, organizers might foreground mutual understanding between students as pursued in other service-learning projects that seek to build students' tolerance and intercultural sensitivity (Al Barwani et al., 2010; Xing & Ma, 2010).

The greatest concern for this study is the perceived language learning outcomes, and there is evidence to suggest that this type of service-learning could boost nonlinguistic features of language learning, especially when made a goal of the service-learning project. When the English teaching objectives are tailored to the university students' competencies and the service recipients' needs, such service-learning could effectively increase language awareness, confidence in using the language, and motivation to improve language skills. Student reporting of these benefits combined with the literature indicate possible ways to increase outcomes: including additional reflective communication about the service in English, pairing the service with formal study, and ensuring highly engaged leadership and feedback throughout the service teaching. Ultimately, undergraduates teaching English as a service are likely to reap benefits as the research in this area continues and as universities work together to reflect upon student and teacher experiences. Looking across 4 years of service-learning in the China context, and taking questionnaire results into account, the potential for teaching English as service-learning offers a new dimension to the educational experience for university ELLs in contexts where English language teaching proves salient as service.

Acknowledgments

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Faculty Experience of Service-Learning Pedagogy at a Hong Kong University

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Abstract

Given the development of Service-Learning (SL) in Hong Kong, it is important to study the experience and impact of S-L on faculty members, the challenges and the professional development they need to successfully integrate S-L into teaching. This study adopts the Faculty Engagement Model to conceptualise the factors affecting faculty engagement in SL at Lingnan University in Hong Kong. Forty faculty members completed the online survey and 17 faculty participated in individual interviews. Over 80% of faculty members indicated that SL had a positive impact on student learning and community engagement. Only 28% of faculty members indicated that SL had little influence on faculty research, promotion and tenure. Similar research could be conducted at other universities to solicit further faculty responses. Experts in the field and university management committed to S-L should explore ways to facilitate faculty member's integration of SL, research and teaching, which could also influence their career paths.

Keywords: service-learning, faculty engagement, teaching and research

S ervice-Learning (SL) has been practiced in Hong Kong for more than a decade. Following the research agenda suggested by Giles and Eyler (1998), many institutions at first focused on how SL could impact student learning and then extended it to faculty's experience with SL. Research on the impact of SL on Hong Kong students has suggested that SL enhances students' learning with respect to various skills/attributes, including subject-related knowledge, communication skills, organizational skills, problem-solving skills, research skills, social competence, service leadership, and civic orientation (Chan, Lee, & Ma, 2009; Ma & Chan, 2013; Ma, Chan, & Chan, 2016; Ma & Lo, 2016; Snell, Chan, Ma, & Chan, 2013). Compared with research on students, research on the impact of SL on Hong Kong SL teachers (i.e., faculty members) has been very limited (Cooper, 2014; Lambright & Alden, 2012; Shek & Chan, 2013). Little is known about the processes and practices faculty members have used to incorporate SL into their courses, the challenges they have encountered, and the professional development needed to successfully integrate SL into teaching. Such information is essential to adopting SL pedagogy and sustaining SL development in the university.

To address the above gaps in the literature and practice, a study was conducted to investigate the faculty's experience with and ideas about integrating SL into their teaching and its impact on their teaching, research, and professional development. There were two specific objectives:

1. determine the factors that affect the adoption and implementation of SL into teaching and

2. investigate the impact of SL on faculty members with respect to teaching, research, service, and professional development.

To achieve the above objectives, this study adopted a mixed methods approach to probe faculty members' experiences and ideas on integrating SL into their teaching. The following research questions guided the study:

1. What are the things that motivate or demotivate faculty members to integrate SL into their courses?

2. What are the challenges/difficulties faculty encounter when integrating SL into their courses?

3. What are the impacts of SL on faculty members in relation to their (1) teaching, (2) research, (3) service, and (4) professional development?

Literature Review

The term *service-learning* was first used by Oak Ridge Associated Universities for a tributary development project in 1966 (Harkavy & Hartley, 2010). Over two decades later, it was still on the periphery of academia. By the late 1980s, however, SL began to gain currency after the National Society for Internships and Experiential Education decided to focus attention on it and Campus Compact was founded. SL was developed based on principles that have historical and philosophical foundations. Historically, American colleges and universities have been actively committed to serving the community and preparing young people to become leaders of their local communities, states, and the nation. Philosophically, the link between education and civic aims owes much to the work of John Dewey, who viewed education as a means of promoting an ethical society based on social justice. He encouraged students to become active contributing democratic citizens (Dewey, 1997).

Undoubtedly, SL is a powerful instructional strategy that effectively provides contextual learning and real-world application of theory (Ma & Tandon, 2014). The instructor's role is very important because students are given more autonomy to make decisions and construct their own knowledge than in traditional classroom teaching. Students actively develop their own knowledge and theory from the service experience. Instructors are the facilitators of students' learning throughout the process. Thus, faculty engagement in SL is crucial to its success.

Faculty's Views of Service-Learning

O'Meara and Niehaus (2009) offered a discourse on the purpose and significance of SL based on interviews with 109 faculty members. The authors explored (and interviewees provided information on) four dominant discourses about SL: as a model for teaching and learning; as an expression of personal identity; as an expression of institutional context and mission; and on its embedment in a specific community partnership. The vast majority of the respondents (97/109) stated that the purpose of SL was to help them achieve certain disciplinary goals. This was particularly true of those who worked with knowledge and skills in their field. Nearly all of the respondents agreed that SL helps students understand the relevance and significance of theory and in-class learning. Around half (53%) of the respondents said that SL was a way to shape civic and moral dispositions by taking students from perceived lethargy to awareness of some virtues. One third of the faculty found that SL promoted exposure to diversity and revealed the real world to students by unveiling myths and stereotypes. In the discourse on personal identity, 45% of the respondents described SL as an outgrowth of personal experience. They said it further embedded students' individual identities and experiences through new experiences. Additionally, 29% of the faculty members said they viewed SL as being derived from a personal commitment to a social cause. For instance, students could establish long-term commitments and make it their personal mission to respond to certain social issues in the community. However, less than one fifth (18%) of the faculty members discussed the relationship with community partners in their discourse.

Hesser (1995) studied the opinions of 48 faculty members. Most respondents recounted that SL and field study fostered learning outcomes for liberal arts learning, including the capacity to deal with a broad range of knowledge, critical thinking, cross-cultural diversity, and the tools and commitment needed for life-long learning. Banerjee and Hausafus (2007) probed a group of faculty members from human sciences, asking whether SL was a value-added teaching strategy. On a scale from 7 (strongly agree) to 1 (strongly disagree), the mean score was 6.08, and the mean scores for groups of SL faculty and non-SL faculty were 6.32 and 5.73, respectively. This result shows that the faculty strongly perceived SL

as helping students understand the critical problems in society and instilling in them a sense of responsibility and empowerment.

Conversely, there have been myths about SL among faculty members. For example, faculty often believe SL can be easily achieved by adding community service to a traditional course; SL is essentially the same as community service and cocurricular SL; SL subjects are not as rigorous as other academic subjects; the workloads of faculty members are substantially increased for SL subjects; and SL subjects are not appropriate for all disciplines (Shek & Chan, 2013). However, most of these studies were conducted in the West and little is known about the situation in Chinese society. Shek and Chan's (2013) study was one of the rare projects to investigate the faculty's views of SL at a Hong Kong university where it had existed for only one year. The faculty members in their study generally supported SL and were aware of its benefits to both teachers and students. However, there were mixed views on implementing SL in that university. Some faculty members were very active and passionate about incorporating it into their teaching. Others said they had reservations and viewed SL as extra work. Thus, more studies on faculty engagement in Hong Kong are needed.

Factors Affecting the Adoption of Service-Learning in Faculty Members' Work

A number of studies have examined the factors that motivate or hinder the implementation (Abes, Jackson, & Jones, 2002; Hou & Wilder, 2015) and sustainability (Cooper, 2014; Lambright & Alden, 2012) of SL engagement. These studies have suggested that faculty engagement is affected by an array of variables or factors that are grouped into five dimensions based on Demb and Wade's (2012) faculty engagement model. It should be noted that these factors are not mutually exclusive but work together to influence the faculty's level of SL engagement.

Institutional dimension. The institutional dimension includes factors like the mission of an institution, institutional policy, budget and funding, organizational structure, leadership, and an institution's tenure and reward system. The faculty members are committed to supporting the mission of the university and want to connect with the community.

A university's mission and leadership play a significant role in explaining faculty engagement. Institutional commitment to community engagement has a positive effect on scholarship. The SL literature recognizes that administrative support for service results in a greater likelihood that faculty will participate in SL activities (Hinck & Brandell, 2000; Ward, 1998). Bringle and Hatcher (2002) emphasized the institutional mission in their work, and O'Meara (2002) found that university–level service missions influenced the adoption of service as scholarship. Internal funding has been important to institutionalizing SL (Ward, 1998). Holland (2005) suggested that if the institutional funding process is closely related to the institutional mission of engagement, engagement will dominate.

There have been some debates on the significance of a centralized organizational structure, such as a specialized office or institute for public service or SL, to support faculty engagement. Creating a campus unit, such as an SL center, has been viewed as a powerful tool, necessary to a sustained or expanded SL effort (Antonio, Astin, & Cress, 2000). Such a center could provide practical assistance, raise visibility, offer the legitimacy conferred by a formal unit, and provide a venue for interdisciplinary partnerships across departments. However, if these centers are viewed as being fully responsible for creating and sustaining SL and other engagement activities, they may be judged as inhibiting the interests of other university members based on the notion that they create a "that's what they do over there' mentality" (Demb & Wade, 2012). Thus, it is essential to maintain a critical and delicate balance between support and control (Holland, 1997).

A faculty reward system compatible and consistent with institutional expectations for service involvement increases the faculty's incentive to participate in SL. Because SL has been treated as something "extra" and time consuming, the lack of an institutional reward system and recognition of SL has hindered faculty commitment to it and has greatly reduced the amount of time faculty members have allocated to it (Colbeck & Michael, 2006; Fairweather, 2005; Hou, 2010; Hou & Wilder, 2015). Other factors causing SL to fail have included changing and inconsistent leadership, unresponsive administration, undermining of organizational structures, and a decline in resources

that support its implementation (National Center for Service-Learning, 1990). Even though faculty have faced many logistical obstacles to adopting SL, institutions' political barriers have often been more difficult to overcome than logistical problems (Giles & Eyler, 1998).

Communal dimension. The communal dimension takes into consideration the influence of academic departments, the disciplinary community, the professional community, and the public. According to Wade and Demb (2009), the socialization of faculty members helps build disciplinary norms that affect personal beliefs and motivation. These disciplinary norms define the key concepts underpinning acceptable practices and extrinsic rewards. Thus, they determine the way faculty members carry out their service work (Antonio et al., 2000) and SL engagement. Disciplines or departments with a service orientation (versus status orientation) tend to be more committed to service. Several studies (e.g., Abes, Jackson, & Jones, 2002; Banerjee & Hausafus, 2007) have found that encouragement from faculty members inside or outside one's own department is an important impetus to implement SL. However, lack of logistical support and excessive departmental workload discourage faculty members from conducting SL. Further, SL is accompanied by many time-consuming tasks such as liaising with community partners and developing assessment mechanisms (Hou & Wilder, 2015).

The importance of community buy-in and involvement in developing outreach and engagement agendas should not be underestimated (Holland, 1997). Bringle and Hatcher (2002) emphasized that external expectations from the community are the primary factors influencing engagement. Social commitment is an intrinsic force in which faculty members connect with the community through their discipline. Their passion for community engagement and the desire to contribute to society motivate them to work on SL and connect with the community (Hou & Wilder, 2015). Faculty members have found that when they help their students complete projects that benefit the community, they learn something new about the community from their community partners (Hou & Wilder, 2015).

Professional dimension. The professional dimension accounts for the influence of professional status, such as the rank, tenure, and status of a faculty member, on his or her engagement with SL. SL is often underappreciated by tenured and high-ranking faculty members because it is perceived as less scholarly. The higher the faculty rank, the less likely the faculty member is to become interested in participating in SL. Unfortunately, senior faculty are often perceived as leaders that their junior colleagues aspire to emulate (Antonio et al., 2000). For example, nontenured faculty members face a lot of frustration when their high-ranking colleagues pressure them about academic publications. SL involvement has been perceived as damaging one's advancement opportunities (Antonio et al. 2000; Baldwin, 1990; Hou & Wilder, 2015; O'Meara, 2004a).

There have been mixed results on junior faculty's engagement with SL. In the study by Antonio, Astin, and Cress (2000), commitment to service was highest among faculty members with less status. Faculty in lower academic positions were more likely to support pedagogical innovations such as SL because they had nothing to lose or gain (Wade & Demb, 2009). However, Abes, Jackson, and Jones (2002) found that junior faculty and nontenured faculty were the least likely to start SL. Offering another perspective, Jaeger and Thornton (2006) connected rank to motivation by showing that faculty acted on their intrinsic, personal motivation to undertake public service once their extrinsic motivation (tenure) had passed. The next section discusses this and other personal factors in greater detail.

Personal dimension. Personal characteristics such as gender, race/ethnicity, personal values and motivation, epistemology/beliefs about teaching and learning, plus previous experience are all grouped under the personal dimension. As several studies have reported (e.g., Abes et al., 2002; Antonio et al., 2000), female faculty of color have tended to engage more in SL. This supports other research findings in which personal values and beliefs have been a strong motivating factor driving commitment to SL (Hou & Wilder, 2015; Jaeger & Thornton, 2006). In Hou and Wilder's (2015) study, most of the faculty respondents expressed an intrinsic passion for better student learning outcomes, social commitment, or a desire to connect with the community through their discipline and a passion for contributing to community improvement.

The constructivist approach to epistemology suggests a stronger commitment to SL (Colbeck & Michael, 2006). An individual

who believes knowledge is constructed through experience (with an emphasis on multiple ways of knowing and sources of knowledge, including community), rather than objectively, may be more likely to participate in service-oriented activities (Strand, Marullo, Cutforth, Stoecker, & Donohue, 2003). Previous experience with participating in SL and community engagement has been found to be related to a sense of civic agency and a commitment to future community engagement (O'Meara & Niehaus, 2009).

Student dimension. Demb and Wade's (2012) faculty engagement model does not include a student dimension. However, a considerable amount of literature has stressed the importance of student feedback and improved learning outcomes to faculty initiating (Abes et al., 2002; Banerjee & Hausafus, 2007; Holland, 1997; Hou & Wilder, 2015) and sustaining (Cooper, 2014; Lambright & Alden, 2012) SL. Improved student learning outcomes have provided the strongest motivation for SL faculty (Abes et al., 2002; Bulot & Johnson, 2006; Hesser, 1995). Teachers have found increased course-based understanding (Abes et al., 2002), developed social bonds with service targets (Bulot & Johnson, 2006), increased personal development (Banerjee & Hausafus, 2007), and enhanced understanding of social problems. Among the improved learning outcomes, improved student understanding of course materials and personal development have been the most influential factors (Abes et al., 2002; Banerjee & Hausafus, 2007). Indeed, student improvement is one of the greatest rewards of teaching SL and motivates teachers to continue their engagement with it. It brings faculty members lasting joy and satisfaction even though these rewards are intangible (Hou & Wilder, 2015).

Notwithstanding the foregoing, faculty members have found it difficult to control the time for classroom learning while working on an SL course (Cooper, 2014). In addition, some teachers have found it more difficult to assess student learning in SL courses than in traditional ones (Hou, 2010).

How Do Faculty Members Integrate SL Into Their Work?

As mentioned, there are various factors influencing faculty members' engagement with SL, but how do they engage in SL in reality? There are a few ways: through teaching, research, and professional services.

Incorporating SL into teaching. Service-learning is a curricular or course-based learning experience for students involving community-based experiences or service opportunities in which students apply their course knowledge. According to Campus Compact, academic SL courses are broadly classified into six categories: (1) "pure" SL, (2) discipline-based SL, (3) problem-based SL, (4) capstone courses, (5) service internships, and (6) community-based action research (Heffernan, 2001). Within these academic SL courses, faculty members can arrange service opportunities for students in the form of direct SL, indirect SL, research-based SL, or advocacy SL.

Linking SL and research. Community-based research is a common form of scholarly work that meets societal needs while fulfilling faculty members' research objectives. It is applied research that involves collaboration with community members to address community needs. According to Strand et al. (2003), community-based research is defined as a "collaborative enterprise" between professors, students, and members of the community that "validates multiple sources of knowledge and promotes the use of multiple methods of discovery and dissemination" with an eye toward "achieving social justice" (p. 8). The aim is to produce information that empowers the community and helps it solve problems. Faculty members can involve students in community-based research projects. This kind of research offers them both a research context and the opportunity to use their research skills and knowledge in projects that directly benefit their community partners and the community. It encourages engaged scholarship through which faculty can fulfil the multiple demands of teaching, research, and service (Chapdelaine & Chapman, 1999; Stocking & Cutforth, 2006).

Connecting SL and service. Faculty members can use their academic expertise to directly address or respond to real-world problems, issues, interests, or concerns. When they do, it contributes to the public welfare or common good. It also links SL with faculty members' service requirements. Examples of such community services include program evaluations, community development, program development, program evaluations, and policy analysis.

Impacts of SL on Faculty

Teaching. SL also influences faculty members' teaching in different ways. Driscoll, Holland, Gelmon, and Kerrigan (1996) suggested a list of variables affecting the potential impact of SL on faculty teaching. These included teaching methods, faculty–student interactions, and the philosophy of teaching and learning. Pribbenow's (2005) study provided a detailed account of SL impacts on faculty related to teaching and learning. First, the faculty had a stronger commitment to teaching and a greater understanding of students because the teacher's role in community–based teaching was strengthened. Second, the relationship between the students and faculty members deepened and became more holistic, with enhanced faculty–student interactions. The relationship changed from merely one based on intellectual acumen to a relationship between learners and individuals. Third, the faculty members became more aware of the students' learning processes and outcomes through interactions with them. With a deeper understanding of the students' learning needs, teachers tried more constructivist teaching and learning approaches. SL helped them rethink how knowledge is constructed. It enhanced and enlivened faculty members' teaching experience, "injecting new life into an other–wise over–taught course" (Bulot & Johnson, 2006, p. 641–642). The faculty members in Bulot and Johnson's study reported that they could better illustrate the connection between theories of aging and real life and show students gerontological theory in action. In other words, SL helps faculty engender course content that is more relevant to the students' life experience.

Research. Driscoll et al. (1996) found that SL promotes the enhancement of scholarship because it opens a research area in community–based learning. Eyler, Giles, Stenson, and Gray (2001) reviewed studies on the impacts of SL and found that faculty members who implemented SL reported a stronger commitment to research and said SL provided them with new avenues for research and publication. Cooper (2014) also found that SL informed faculty scholarship. However, a research gap has remained in terms of studying the influence of SL on altering the scope of faculty research interests and the quality and quantity of research.

Service and community engagement. SL may enhance faculty involvement with community, awareness of community (e.g., its history, strengths, and problems), and the level of volunteerism (Driscoll et al., 1996). Bulot and Johnson (2006) provided empirical support for the impact of SL on faculty service and the community. The faculty respondents who were engaged in intergenerational SL reported the following rewards: increased awareness of community issues; more involvement in the community and local aging network; opportunities to work with community agencies to develop the focus of their courses; and going out into the community to work side by side with students, community partners, and the public.

Professional and career development. Professional development has two aspects. First, it refers to faculty members' career development or advancement in terms of promotion and tenure. Second, it includes the enhancement of professional knowledge and the establishment of networks and connections to professional bodies in the faculty member's own discipline. In a recent study, Cooper (2014) found that engagement in SL impacted faculty tenure and promotion in both positive and negative ways. Positively, SL integrated teaching, research, and service and increased the institution's and the faculty member's visibility. However, it was important that faculty members should balance teaching, research, and service; include other traditional forms of scholarship; and be aware of the disciplinary constraints and support provided by colleagues, the department, and university management. SL is still not widely treated as a serious pedagogy in tenure and promotion decisions (Morton & Troppe, 1996). Senior faculty on campuswide retention, tenure, and promotion committees may not fully understand SL and its application to teaching and research (Fairweather, 2005).

Research Framework

Based on the literature review, a research framework was developed for this study, as illustrated in Figure 1. The framework incorporates the factors that may have explanatory power in faculty engagement with SL and the impact of SL on faculty's teaching, research, service, and professional development. Double arrows are used to demonstrate the complicated and interdependent relationships among the factors relating to engagement in SL, faculty experiences in SL, and the impacts of SL on
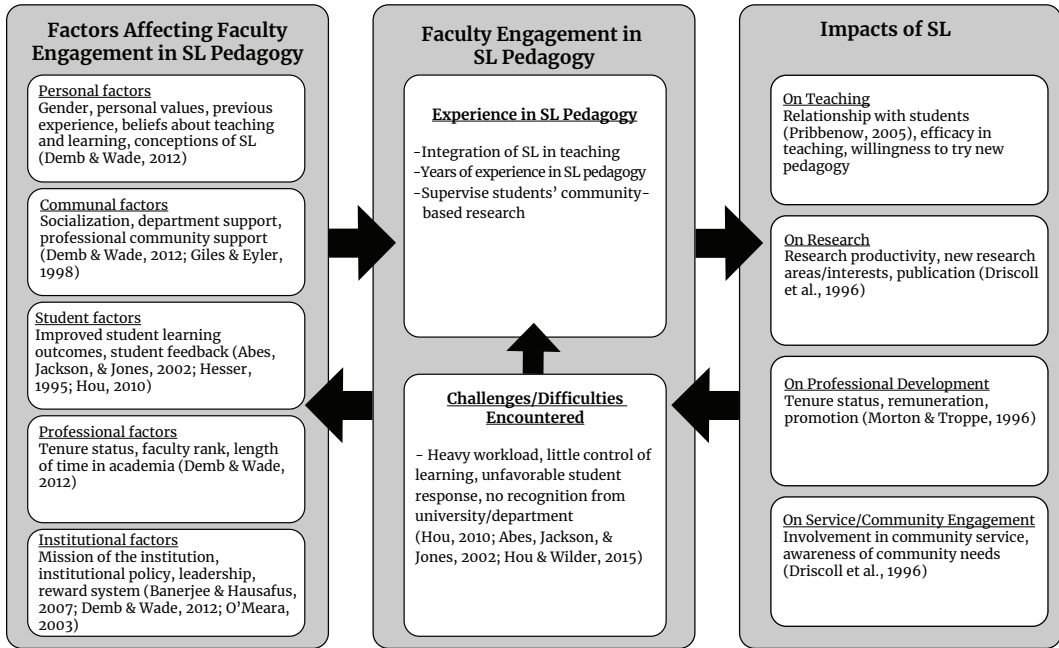
Figure 1. Research Framework

faculty. The model is drawn from Western literature. Thus, to what extent does it fit the situation in Hong Kong?

Methodology

This study adopted a mixed methods approach. An online questionnaire survey was used for the quantitative research, and individual faculty interviews were used for the qualitative research. The use of mixed methods was premised on the idea that a better understanding of the research problems would result. Combining quantitative and qualitative research methods offers strengths that offset the weaknesses of each method being separately applied. It encourages the collection of more comprehensive evidence and helps answer questions that quantitative or qualitative methods alone cannot answer. In this study, quantitative research provided an overall picture of the faculty experience of SL pedagogy and the related challenges. Qualitative research added details and depth to obtain a complete portrait of the processes involved and how various factors and challenges affected the implementation of SL pedagogy.

The Quantitative Part

The instrument: Faculty survey on SL. Based on an extensive review of the literature on faculty involvement with SL, the faculty survey was designed to investigate areas related to faculty views and experience of SL.

Sampling, data collection, and data analysis. As shown in Table 1, Data were collected from October 6, 2015 to January 5, 2016. All academic staff with and without SL teaching experience were invited via e-mail and reminders to respond to the online survey. In total, 40 faculty members completed the online survey for a response rate of 17.6% (40/227). Among the respondents, 58% were male and 42% were female. Two thirds were at the rank of assistant professor or above. Over 90% were full-time employees. One third were tenured and about 60% were contract-based. Half of the respondents had been teaching at Lingnan for 7 years or more, and 45% had taught at least one credit-bearing course with an SL component.

Due to the small sample size, advanced statistical analyses, such as factor analysis and regression analysis, were not feasible. Descriptive statistical analysis was conducted and presented.

The Qualitative Part

The instrument: Faculty interview protocol. As shown in Table 2, the interview protocol was designed as a guideline for the semistructured interviews with faculty to probe their

views of and experience with SL in relation to six aspects: (1) faculty experience in SL pedagogy, (2) faculty conceptions of SL, (3) impact of SL on faculty, (4) factors affecting faculty engagement in SL, (5) background information, and (6) beliefs about teaching and learning.

Sampling, data collection, and data analysis. Semistructured interviews were conducted with 18 faculty members from 15 December 2015 to 13 April 2016. Purposive sampling was used. Targeted faculty members (T) were selected based on their experience teaching SL courses and the faculty they belonged to. The aim was to collect a wide range of opinions and perspectives from different participants to gain a more comprehensive understanding of the faculty's experience with and views of SL. Selected individuals were invited to participate in the interviews through e-mail invitation and follow-up by phone call (refer to Table 3 for details).

All individual interviews were hosted by the project investigators and supported by a note-taker. Written informed consent was sought before the interviews began. Sixteen out of 17 interviews were audio recorded and transcribed verbatim by student helpers (one respondent requested that the interview not be audio recorded). The transcripts were checked by the researcher and read repeatedly to identify themes/patterns. A constant comparative method was used to identify and categorize the subthemes and patterns from the broad themes introduced to the participants (Merriam, 2009). The individual responses were compared across each of the broad areas discussed by the other respondents. The themes and patterns that emerged from this analysis are presented herein.

Table 1. Demographic Information of the Survey Respondents		Count	%
Gender	Male	23	57.5%
	Female	17	42.5%
Job title/rank	Chair professor/honorary professor/emeritus professor/professor/adjunct professor	7	17.5%
	Associate professor/adjunct associate professor	11	27.5%
	Assistant professor/adjunct assistant professor	9	22.5%
	Senior lecturer/lecturer	5	12.5%
	Senior language instructor/language instructor	5	12.5%
	Other	3	7.5%
Employee status	Full-time	37	92.5%
	Part-time	2	5.0%
	Other	1	2.5%
Employment status	Tenured	13	32.5%
	Contract-based but applying for tenure	3	7.5%
	Contract-based	23	57.5%
	Other	1	2.5%
Faculty	Faculty of Arts	21	52.5%
	Faculty of Social Sciences	9	22.5%
	Faculty of Business	8	20.0%
	Other	2	5.0%

Table 2. Faculty Survey's Investigation Areas and Targeted Respondents		
Investigation areas	Targeted respondents	
	SL faculty	Non–SL faculty
Experience with teaching and community engagement	√	√
Faculty views of SL	√	√
Impact of SL on faculty	√	
Challenges/barriers	√	
Reasons for not using SL		√
Resources and support for SL pedagogy	√	√

Table 3. Number of Faculty Members Who Participated in the Interviews				
	Experience of SL pedagogy (number of times that faculty members integrated service–learning (SL) into their courses)			Total
	Experienced (more than 3 times)	*Little SL experience (1–3 times)*	*No SL experience (None)*	*Total*
Faculty of Arts	2/5	2/3	1/4	5/12
Faculty of Business	2/4	2/3	2/3	6/10
Faculty of Social Sciences	2/3	2/3	1/3	5/9
Common Core and General Education Unit	0/0	0/0	2/2	2/2
Total	6/12	6/9	6/12	18/33

Results and Findings

Faculty Views of and Experience With SL

Overall, the faculty participants understood quite well the philosophy of SL. Results from the faculty survey indicated that more than two thirds of the respondents "agreed" or "strongly agreed" with the following statements:

- I can explain the concept of SL to my colleagues ($M = 3.85$; $SD = 0.95$; $N = 40$, where 1 = Strongly disagree; 3 = Neutral; 5 = Strongly agree);

- I understand the role that reflection has in the practice of SL ($M = 3.85$; $SD = 0.83$; $N = 40$); and

- I am able to explain the ways in which SL is distinct from other forms of community engagement ($M = 3.73$; $SD = 0.91$; $N = 40$).

Consistent with the findings from the individual interviews, the faculty participants highlighted essential elements, such as connecting to the course objectives; reflection; partnership with the community; and the commitments of teachers, partners, and students. All of the interview respondents acknowledged the value of SL for enhancing students' learning and bringing positive impact to the community. Similarly, most survey respondents (more than 80%) indicated that SL enhanced students' social, civic, and personal development.

Barriers/challenges. The interview respondents who had integrated SL into their courses said that they encountered the following major difficulties/challenges: (1)

Finding suitable service opportunities and community partners; (2) course design and schedule, including connecting SL into course objectives; (3) students' unfavorable behaviors and attitudes; and (4) time demands and heavy workload in terms of logistics, supervising students, and liaising with partners. The survey results were consistent with the respondents' remarks on the time constraints and the lack of support and recognition from administrative leaders. Faculty promotion and tenure policies were also among the top barriers/challenges SL faculty encountered.

SL is a time-intensive process. Turning a course into an SL course is not simply a matter of adding an additional element to the course. Faculty members are required to spend considerable time and substantial effort planning and designing the course. For example, they must connect service with the learning objectives, schedule the service period, match teaching sequences with service to ensure students can learn the content before their service, and design appropriate assessments, rubrics, and guidelines for students. One faculty member's comments are set forth below:

> The difficulty was that I had to match the teaching schedule and service schedule seamlessly. . . . I tended to do it in this order. First, teach students some topics. Then, students visit/serve the agency. Next, we discuss in the classroom. By doing so, students would consolidate what they learned through intellectual/experimental learning step by step. (T05)

The above excerpt vividly reflects the challenges of seamlessly matching the teaching schedule with service. In this case, the course instructor needed to rearrange the teaching sequence and/or even cut down teaching content to leave space for SL-related instruction such as consultation and reflection.

Factors That Motivate or Demotivate Faculty Engagement in SL

Motivators of SL engagement. In the faculty survey, 83% of the SL faculty members indicated that they were "likely" or "very likely" to continue to incorporate SL into their teaching in the future. The top three most important motivating factors were (1) increase in students' academic learning, (2) increase in students' civic and moral development, and (3) providing useful and meaningful service in the community. These findings were in line with the interview respondents' statements, that student factors, including evidence of enhanced student learning outcomes and student support, were the most significant factors motivating their engagement in SL, as illustrated by the excerpt below:

> First, I will consider how much the SL will impact students. If it was only my wishful thinking and students did not learn or gain from it, that would be meaningless. Hence, my first and foremost consideration is whether students learn from doing the SL. (T04)

The interview respondents also mentioned their personal passion to serve the community through SL, as seen in the following statement:

> If all you are doing is sitting behind the screen, writing words that will be read by just other academics, life is somewhat meaningless, right? So, this way, you really see the positive implication of what you are doing. You can use this leadership theory and you make a positive difference to the community, right? So it's kind of a society I want to be involved in and contribute more to and it's great. (T08)

Deterrents to SL engagement. The results seemed to suggest that limited access to community partners, concerns over logistics, coordination issues related to arranging service in a course, and lack of time and knowledge were the major roadblocks to faculty members considering SL. In the faculty survey, the top three reasons the non-SL faculty did not use SL in their teaching were

1. I anticipate having (or have had) difficulty establishing community partners (M = 3.71; SD = 0.99; N = 17);

2. I anticipate having logistical problems coordinating the community service aspect of the course (M = 3.56; SD = 0.98; N = 18); and

3. I have not been given and/or do not anticipate being given release time

to develop a service–learning course (*M* = 3.44; *SD* = 0.98; *N* = 18).

The interview respondents echoed the above, particularly the lack of support and recognition from the university and department. Two faculty members explained this:

> No one in the department supports me. Everyone says, "Focus on your research. Why do you spend so much time on it"? Everyone is like this, honestly speaking. (T09)

> At the moment, it seems that research counts more for your renewal of contract because you have to . . . In the business faculty, you have to reach the . . . you have to get a certain number of publications, right? Certain level of publications. Whereas they are not equivalent requirements to teaching, so it's quite clear to most people that they think . . . they think research is more important. (T13)

The above excerpts reflect the reality that SL was not counted for promotion, tenure, or contract renewal decisions, even though the university was explicit in its long-established mission and motto of "Education for Service." This misalignment of the university's espoused mission and its actions regarding SL generated frustration and distrust among faculty members. The respondents said they felt threatened if they did not concentrate their time and effort on research to survive in academia. This was underscored by a faculty member who said, "Even if you like teaching very much, you cannot spend too much time on it; otherwise, you will not survive" (T02).

Impact of SL on Faculty

Regarding SL's impact on faculty, the interview respondents most frequently reported on the benefits SL had brought to their teaching. For example, they said it increased their teaching repertoires and satisfaction, enriched their teaching content, and enhanced faculty–student relationships. Two teachers recounted their experiences:

> It [SL] helps a lot in terms of your teaching methods. You will create more new directions for your students, making your lesson more alive. In return, you can enhance your course. (T07)

> Sometimes I've gone to Central seeing them [students] there on a Sunday afternoon. . . . I saw this student at this outreach thing that they had at Causeway Bay and they were all there doing stuff for the Indonesian community. That was really nice, and they saw me there. It was kind of a good teacher–student thing. (T01)

Similarly, in the faculty survey, 80% of the respondents "agreed" or "strongly agreed" that "I was able to develop a good relationship with the students in my Service–Learning course(s)" (*M* = 4.11; *SD* = 0.83; *N* = 18).

The impact of SL on faculty service/community engagement was emphasized more by the survey respondents than by the interview respondents. Among the top five SL outcomes (i.e., items with highest mean ratings), four items with over 80% "agree" or "strongly agree" were related to SL impacts on faculty service/community engagement, as listed below:

1. I learned something new about the community from my community partners (*M* = 4.28; *SD* = 0.89; *N* = 18);

2. The service my students completed was beneficial to the community (*M* = 4.22; *SD* = 0.55; *N* = 18);

3. I value working with community partners to structure and deliver the SL experience for students (*M* = 4.11; *SD* = 0.68; *N* = 18); and

4. SL helped me to become more aware of the needs of my community (*M* = 4.06; *SD* = 0.94; *N* = 18).

Apparently, as a result of their involvement with community partners, SL enhanced faculty members' knowledge of community partners and awareness of community needs.

The faculty survey and interviews had consistent findings on the limited or non-existent impact of SL on faculty research and professional and career development. Only a few of the interview respondents said SL directed them to a new research area or publications. None of the interview respondents said SL engagement was beneficial to their career progression with respect to promotion, tenure, and contract renewal at the university. This was supported by the

survey results, in which only 28% of the SL faculty indicated that SL had a positive impact on their research publications or presentations, and only 17% of the SL faculty "agreed" or "strongly agreed" that SL was tied to the advancement of their research. These findings pose a great concern and a call for action.

Discussion

Motivators and Deterrents to SL

The faculty members generally held positive views of SL and considered it to be a valuable pedagogy that benefited both the students and the community. Our findings showed that there were a number of positive and negative factors relevant to institutional, communal, and professional status and personal and student dimensions that influenced faculty decisions to start or sustain SL engagement. Among these factors, the most significant motivators were the students' improved learning in their academic studies and personal development, and the personal passion of faculty to enhance their teaching and engage with the community. This was consistent with the findings of previous studies (Abes et al., 2002; Bulot & Johnson, 2006; Hesser, 1995). Lingnan University already had a centralized organizational structure (Office of Service-Learning) that facilitated and encouraged faculty engagement in SL. There is evidence in this study that faculty members found support from the OSL to be essential and vital to their successful adoption of SL in their teaching.

The results suggest that there were discrepancies between university SL policy and practices, specifically misalignment of the university mission and its actions regarding SL. Lingnan's long-standing motto and stated mission is "Education for Service." Faculty engagement in SL has been viewed as a way to actualize the university's motto and mission. However, the faculty members did not receive proper recognition and rewards through promotion, tenure, or contract renewal, or acknowledgment and awards from the department or the university. Some were even penalized due to the lack of time they spent on research and publications. The faculty members were frustrated by the inconsistent institutional actions and polices, and distrust was pervasive on campus. As Holland (1997) stressed, this institutional confusion and anxiety over the role of service inhibited further devel-opment of SL courses and activities. We are in accord with Holland and the faculty respondents in this study and contend that it is critical for the university to send a clear message. It should acknowledge the link between SL and its motto and mission and establish a faculty reward system compatible and consistent with the institutional expectations for SL involvement.

Limited Impact of SL on Research and Professional Development

There is strong evidence in this study that SL contributed to faculty members' enhanced teaching practices, including increasing teaching repertoires, enriching teaching content, and enhancing faculty–student relationships. However, SL has had a very limited impact on faculty research and professional development, especially career advancement. SL has not helped faculty much in terms of promotions and tenure. Some SL faculty members have even viewed it as an obstacle to research and promotion. Several reasons may account for these difficulties. First, as at other universities, Lingnan faculty members experience pressure to publish due to the high expectations for research productivity. Hence, faculty members must focus on research and publications to "survive." In practice, the university emphasizes and values research but discounts the value of research for teaching and learning. Faculty members therefore would rather concentrate on research in their own discipline than on teaching and learning. Second, some faculty members or teaching staff may be assigned to teach courses that do not match their research interests or expertise. In such cases, even in courses with an SL component, SL is disconnected from faculty research and expertise. It is difficult for faculty members to turn SL into community-based research when there is a disconnect between their teaching and research. Third, those whose teaching is integrated with their research areas and expertise may be unaware of the potential connection between SL and research and the possible ways to combine SL teaching with research. For these faculty members, adopting SL may not be too difficult once they recognize the link and acquire the relevant information and ideas needed to integrate SL with research.

Community-based research may be a possible way to connect SL and faculty research. Community-based research is an emerg-

ing form of SL that has shown promising outcomes for meeting societal needs and the multiple demands placed on faculty to teach, publish, and engage in service (Chapdelaine & Chapman, 1999; Stocking & Cutforth, 2006). Faculty members can adopt community-based research as a form of SL in their courses and involve students and community members in the research process to help address important community issues and empower the community. This not only fulfils the faculty's need to teach, conduct research, and perform service, it encourages both the faculty and students to develop a lifelong habit of civic engagement. It also contributes to the development of engaged scholarship (Boyer, 1996) and an engaged campus (Butin & Seider, 2012).

Implications of the Model

This study presented a comprehensive model that explored factors impacting faculty participation in SL and the relationship of SL to faculty members' teaching, research, service, and professional development. As a synthesis, this model helps to identify a research agenda related to SL engagement and creates a context within which institutional leaders can consider policies and programs that enhance faculty involvement in SL (Wade & Demb, 2009).

Implications for research. First, the model supports a holistic approach to the dynamics of faculty engagement in SL. It considers the factors, faculty members' SL experience and challenges, and SL impacts on faculty. Second, it highlights the interconnected and interdependent relationships between and among the factors in different dimensions. This serves as a starting point to further explore the dynamics that lead to faculty reactions. As with any model, the completeness and accuracy of the elements and their interactions may be challenged by researchers and practitioners. Thus, it forms a systematic basis for discussion and further research. The fruitfulness of future research requires more precise definitions and measurement parameters for "engaged scholarly work."

Implications for practice. The model can become a new basis for institutional conversations about the motivators driving faculty engagement in SL. Institutional leaders can use the model to explore the institutional factors that can bring about change, such as organizational structure, funding, and university policies and procedures. Such an exploration can be performed by assessing changes in faculty participation with respect to (1) more access to a campus office where faculty can receive SL support, (2) more readily available funding or grants for SL, and (3) more value being assigned to SL in promotion and tenure decisions.

The model can also be used as the basis for designing and planning faculty development programs. The model demonstrates that faculty engagement in SL and the impacts of SL are affected by the interplay between personal, communal, institutional, professional, and student factors, in addition to the actual experiences and challenges encountered. Faculty development programs should adopt a multitrack approach to building faculty capacity for SL and tailor their activities to reach faculty members who are involved in different types of SL at different career stages (Glass, Doberneck, & Schweitzer, 2011). These faculty development activities could be offered by different units such as centers for teaching and learning, service and civic engagement centers, and offices of knowledge transfer.

Limitations

The main limitation of this study was the self-selected sample that participated in both the survey and the interviews. These respondents participated in the study voluntarily without any financial incentives. This form of sampling can result in self-selection bias that can raise concerns about whether the respondents had more positive views about SL than the overall faculty population of the university. Indeed, the researchers took measures to include non–SL faculty in the study (e.g., inviting non–SL faculty members to interview). Another limitation was the small number of respondents ($n = 40$) from the same institution, although reminders were sent through mass e-mails and personal e-mails, in addition to face-to-face interactions with researchers and SL coordinators from the Office of Service-Learning. Arguably the low response rate could be attributed to the timing of the survey, when faculty were busy with teaching and filling in their appraisal forms at year end. In addition, as reported in the literature, the type of institution could have affected the level of faculty engagement with SL. At institutions with a heavier focus on research, or a different setting, faculty

might make different choices. Thus, the reader is reminded that the findings from this study may not be generalizable because the data were collected at only one university in Hong Kong. Future research that relies on similar instruments and methods at other local and overseas universities may yield more fruitful understandings of the institutional factors that affect faculty SL engagement.

Conclusion

This study has both practical and theoretical value. Practically, it enhances our understanding of how to facilitate faculty adoption of SL. Theoretically, it helps to build a more comprehensive model of faculty engagement with SL pedagogy. The results showed that enhanced student learning outcomes were among the major considerations of faculty members' decisions to use SL. However, this was not included in Demb and Wade's (2012) faculty engagement model. Indeed, our findings echo those of Abes et al. (2002), in which improved student learning outcomes provided the strongest motivation for SL faculty. Arguably, a student dimension should be added to the model to more fully account for the factors that influence faculty engagement in SL.

To conclude, from this study we learned that faculty members, at least those in our sample, are willing to adopt SL and are already involved with it. However, they are still seeking legitimacy and support from within the university and their departments to pursue this endeavor. It is vital to promote engagement of faculty members in SL because they are the key components in the ecological system of SL. Some universities in Taiwan, the Philippines, and Singapore are interested in testing the faculty model based on their local contexts. With limited research on SL pedagogy from the faculty's perspective, we should encourage more universities to take part in similar research. Research outcomes can inform future practice and facilitate further development of SL practice and theory. We are optimistic that if such research can be conducted in the region, it will help ease the barriers and challenges faculty are facing and support the development of both engaged scholarship and engaged campuses.

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Dilemmas in Service-Learning: (Missed) Opportunities for Transformative Partnership

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Abstract

Although there have been growing concerns on how service-learning can accentuate the power differences between the server and the served, service-learning can foster transformative partnership by recognizing the contributions each can offer for a better society. Using participant observation and discourse analysis, this case study examines the perceptions of third-year undergraduate students of a health-related degree in a Philippine-based Jesuit university about their school-community collaboration in a primary healthcare setting. Despite apprehensions at the start of service-learning, students saw themselves confronted with the challenge to overcome personal barriers from authentically encountering the urban poor, whom they served in the community. However, establishing transformative partnership in service-learning was not without its share of dilemmas. Such findings can contribute to discourses on service-learning, informing practitioners how to support social transformation in university-community collaboration.

Keywords: service-learning, experiential learning, transformative learning, critical reflection, social transformation

Institutions of higher education in North America and some parts of the world have increasingly used service-learning as a method of teaching to prepare students for their chosen profession as well as to promote the practice of community service. Defined by Kaye (2004) as "guided or classroom learning . . . deepened through service to others in a process that provides structured time for reflection on the service experience and demonstration of the skills and knowledge acquired" (p. 7), service-learning has gained the interest of a number of faculty and academic institutions due to its idealistic goals and practical uses (Harkavy & Hartley, 2010). While "making unique contributions to addressing community, national, and global needs," service-learning not only cultivates critical thinking among students but "the combination of community service, academic knowledge, and reflection can [also] help students develop an understanding of the root causes of social problems" (Jacoby, 2003, pp. 1–2).

In developing countries, such as the Philippines, where a fifth of its 110 million population live in poverty, service-learning has gained momentum as a method of teaching among institutions of higher education. Many in academe have regarded service-learning as a strategy to take part in community engagement and fulfill their role in society. In fact, this method of teaching, for some institutions of higher education, has become integral to the implementation of Republic Act No. 9163, otherwise known as the Act Establishing National Service Training Program, which mandates undergraduate students to render service to indigent communities in the country (Anorico, 2019; Custodio et al., 2016).

In contrast to volunteering and other forms of experiential learning, reciprocity is essential in the way service-learning is carried out. Herein both the university and community mutually benefit from the community service rendered (Jacoby, 2003). That is, the students are able to better appreciate

their chosen discipline as they apply classroom learning to real-world situations, and the community gains in return for having their identified needs met and their untapped assets utilized (Bringle & Hatcher, 1995; Lieberman, 2014). Ideally, the voice of the community is heard throughout the planning and implementation of service-learning. This would signify the university's intent to form and build a reciprocal partnership with the community.

Transformative partnership happens when there is "a deeper and sustained commitment" between the community and university, as represented by students and faculty (Enos & Morton, 2003, p. 24). Growth is nurtured and new relationships, identities, and values may develop because of shared goals and openness to collaborative efforts (Clayton, Bringle, Senor, Huq, & Morrison, 2010; Enos & Morton, 2003). From this partnership, not only are individuals but also the wider society is transformed (Enos & Morton, 2003).

Unfortunately, not all service-learning can lead to transformative partnership. Enos and Morton (2003) suggest that most service-learning initiatives are transactional, whereby there are mutually rewarding exchanges between the university and community. Such service-learning takes place within existing structures and is rather task-oriented. Commitments among the students and the community are usually limited and, as a result, not much has changed. Additionally, service-learning, as Clayton et al. (2010) point out, can likewise demonstrate "one-sided relationships that fall short of transactional and in some instances are even exploitative" (p. 8). Such relationships are characterized by the incurring of more costs than benefits either for the university or the community because decisions are made in isolation and without consideration of the other. Change may happen for the worse and a sense of dissatisfaction may arise.

For this reason, there have been growing concerns on how service-learning can accentuate power differences between the server and the served. The university, in many instances, is seen to occupy the realm of solution, whereas the community is relegated to the domain of problem (Yappa, 1999). Instead of focusing on the strengths of a community, the university is looked to not only to fill in the deficits of the community it serves but also to fix what is perceived as broken (Lieberman, 2014). A paternalistic relationship and dependency ensue and these, in turn, disempower the people in the community from contributing to a transformative partnership.

Most research on service-learning has highlighted best practices in community engagement, often glossing over the challenges and issues encountered in such university–community partnerships. Thus, this study aims to fill this gap by examining how undergraduate students, as part of the university, are hindered from forming a transformative partnership with individuals in a given community. Using Mezirow's (1991) transformation theory as a lens to understand students' perceptions of their experiences, we specifically looked into the process by which their perspectives (i.e., habits of mind and points of view) are challenged during service-learning. We hypothesize that transformative learning, which is essential for transformative partnership in service-learning, can occur if critical reflection is facilitated among the students and if they are guided properly by their teachers as they confront the unfamiliar. However, dilemmas in service-learning can arise if there is resistance to transformative learning, which can come from participants' being unprepared to undergo changes in their perspectives. As we point out dilemmas encountered in service-learning and examine missed opportunities for transformative partnership, this study aims to draw up recommendations that will enable service-learning to be true to its nature of reciprocity and to live up to its potential for personal and social transformation.

Literature Review

Transformation theory can provide a model to understand the process by which adults learn in different cultural settings (Cranton 1994; Mezirow, 1991, 1994, 1996). Influenced by the works of Habermas, Siegal, Freire, and Gould, Mezirow's (2009) transformation theory can make sense of adult learning, particularly in "cultures experiencing rapid social change in which old traditional authority structures have been weakened, and in which individuals must be prepared to make many diverse decisions on their own" (p. 222).

Transformative learning, as defined by Mezirow (2009), is a "learning that transforms problematic frames of reference to

make them more inclusive, discriminating, reflective, open, and emotionally able to change" (p. 22). It involves a "process of effecting change in a frame of reference . . . [or] structures of assumptions through which we understand our experiences" (Mezirow, 1997, p. 5). These frames of reference "selectively [shape] and [delimit] perception, cognition, and feelings by predisposing our intentions, expectations, and purposes" (Mezirow, 1996, p. 163). They essentially filter the way we understand what we experience, influencing "the way we define, understand, and act upon our experience" (Mezirow, 1991, p. 61). They consist of habits of mind, which are "habitual ways of thinking, feeling, and acting influenced by [cultural, social, educational, economic, political, or psychological] assumptions" and points of view, which are specific articulations of our habits of mind in the form of concepts, beliefs, values, judgments, feelings, and attitudes (Mezirow, 1997, p. 6). Habits of mind "refer to the structure of assumptions within which one's past experience assimilates and transforms new experience" (Mezirow, 1991, p. 42), whereas points of view constitute and represent one's habits of mind (Mezirow, 1991, 1997). In contrast to points of view, habits of mind are more durable and less accessible to feedback and awareness-raising (Mezirow, 1997).

Adult learning occurs when existing points of view are elaborated, new points of view are established, points of view are changed, or habits of mind are changed (Mezirow, 1990, 1991, 1996, 1997). Rote learning or learning within the structure of acquired frames of reference and preexisting categories of meaning can occur when existing points of view are elaborated or further differentiated. Rote learning also somewhat takes place when new points of view are established because this form of learning does not involve change of perspectives and such learning is still consistent and compatible with prevailing frames of reference. However, emancipatory learning can happen when points of view are changed as a result of reflecting upon the premise of deeply held assumptions. Transformative learning, on the other hand, can come about when premise reflection triggers a change in habits of mind (Cranton, 1994). These transformations in frames of reference, as Mezirow (1997) points out, can take place through "transformation of a habit of mind, or they may result from an accretion of transformations in points of view" (p. 7). However, transforming a habit of mind in an instant is more difficult to achieve and therefore less common to occur (Mezirow, 1997). It may take severe dissonance or discrepancy from one's experience and existing habit of mind for transformative learning to occur (Robinson & Levac, 2018).

Frames of reference can be transformed, according to Mezirow (1997), "through critical reflection on the assumptions upon which our interpretations, beliefs, and habits of mind or points of view are based" (p. 7). Critical reflection is usually prompted when there are discrepancies between one's beliefs and experiences (Mezirow, 1994), because we tend to "make a tacit judgment to move toward a way of thinking or behaving that we deem more appropriate to our new situation" (Mezirow, 1998, p. 191). This involves looking back at one's own experience, taking into consideration different points of view, and imagining alternative perspectives (Mezirow, 1998) so as to challenge deeply held assumptions of one's prior learning (Mezirow, 1990) and to change one's structures of meaning (Mezirow, 1991). It entails validity testing through making taken-for-granted situations problematic (Mezirow, 1991), such as making preconceived notions explicit and questioning the sources and validity of these assumptions previously held by individuals or by groups (Cranton, 1994; Naudé, 2015).

Perspective transformation starts with a disorienting dilemma, then proceeds to self-examination, evaluation of previously held assumptions, recognition that others likewise undergo similar discontent, exploration of options, planning a course of action, acquisition of competencies to carry out one's plan of action, provisional trying of new roles, (re)negotiation of relationships, building of self-confidence in new roles and relationships, and reintegration of the new outlook into one's life (Mezirow, 1994, 2009). However, this process leading to transformative learning may not necessarily be sequential or stepwise. Backsliding or getting stalled in one phase may also happen (Mezirow, 1978a). Nevertheless, changes in attitude and behavior often indicate that transformative learning has occurred (Mezirow, 2000).

In service-learning, a disorienting dilemma, as Naudé (2015) observed in her study of five cohorts of postgraduate psychology students assigned to a rural community

in South Africa, involves boundary crossing, such as when the students faced a new environment, a new community or culture, new linguistic requirements, or new roles and responsibilities, and it entails going through dissonance; for the students, this meant their "existing worldviews and beliefs [were] inadequate to explain puzzling or surprising experiences" (p. 86). Most of these students were unprepared for transformative learning during the initial stage of service-learning, and a significant number of them seemed self-absorbed as they showed little interest in understanding the situation of those in the community. However, in the end, the majority of them were able to change their habits of mind and form relationships with those from the rural community they were assigned to, realizing, through the process of reflective sharing, that they were the same in many aspects.

In Kiely's (2005) longitudinal study of undergraduate students deployed to Nicaragua to examine health and social problems in resource-poor communities, encounters of boundary crossing also preceded experiences of dissonance during service-learning. However, as shown by these students from New York, experiences of dissonance or disorienting dilemmas tend to vary. Dissonance from adapting to a new environment and unfamiliar conditions seemed to fade immediately, whereas the disorienting dilemma from witnessing severe forms of hunger seemed to persist and evoke powerful emotions, which led most of them to reexamine and change their previously held assumptions about poverty, among others.

Experiencing of disorienting dilemmas seemed also to vary based on where the service-learning took place and what sort of service was rendered to the community. Furthermore, questioning of deeply held assumptions and changes in habits of mind were most likely to occur if a personal relationship was established with those in the community. These findings were reported in the study of Shor, Cattaneo, and Calton (2017) on the essays of 41 students participating in service-learning either at a homeless shelter or a tutoring facility as part of the course "Community Engagement and Social Change."

As shown above, personal transformation can arise if there is self-critique of taken-for-granted assumptions (Taylor, 2009). This involves posing and solving problems

as well as negotiating one's purpose, values, and meanings (Mezirow, 1996) through critical evaluation of psychological or cultural assumptions that constitute an individual's beliefs and experiences (Mezirow, 1998). Personal transformation can turn into social transformation if critical reflection includes one's own and other's beliefs, values, judgments, and feelings; collective frames of reference are recognized; and best judgments are collaboratively arrived at for contested assumptions (Mezirow, 1997). This is also likely to happen when perspectives of others are taken (Mezirow, 1978b), when personal assumptions and the social structures that support these are examined (McNaughton, 2016), and when critical reflection is more oriented toward ideological critique, where individuals, as Taylor (2009) suggests, "develop an awareness of power and greater agency (political consciousness) to transform society and their own reality" (p. 5).

For transformative partnership to come about in service-learning, we argue that transformative learning has to be fostered during the teaching–learning process. That is, students have to be supported in examining the premise of their deeply held assumptions so that points of view and, most importantly, habits of mind, that hinder them from relating authentically with individuals in the community, can be transformed. As seen in the study of Adarlo (2017) on students assigned to birthing clinics for their service-learning, this involves teachers providing prompts for journal writing, instructional guidance through mentoring, and opportunities for dialogue through reflective sharing, among others. In doing so, transformation, as observed by Kiely (2004), as well as by Bamber and Hankin (2011) in their study about the kinds of transformative learning in service-learning, can ensue in the political (expanded sense of social responsibility), moral (mutual respect, care, and solidarity in relationships), intellectual (questioning of origin and nature of assumptions), cultural (questioning of Western thinking), personal (rethinking of self-concept and lifestyle), and spiritual (deeper understanding of self, purpose, society, and greater good) domains in order to disrupt students' taken-for-granted understandings of self and society.

However, resistance to transformative learning can take place while students are participating in service-learning. As

observed by Jones, Gilbride-Brown, and Gasiorski (2005), this stems from a "perceived threat to the [students'] position of privilege and power and the subsequent need to maintain these positions" (p. 9). When these students come across discrepancies and inconsistencies between their experience and existing frames of reference, they are usually ill-prepared to undergo the process of examining and changing their previously held assumptions (Jones, 2002). Most often, they are unwilling to go out of their comfort zone as they encounter the unfamiliar (Jakubowski & McIntosh, 2018). However, these claims need to be supported by further studies since little literature exists on why students resist undergoing perspective transformation during service-learning.

Methodology

To examine the barriers to perspective transformation among undergraduate students taking part in a service-learning initiative within a primary healthcare setting, a qualitative research methodology was applied in this study because it can be appropriate for exploring a group or population in which variables cannot be easily measured (Creswell, 2013). It can be suitable as well to inquire about "life-worlds" where "researchers focus on naturally emerging languages and the meanings individuals assign to experience," such as those in service-learning (Lune & Berg, 2017, p. 20).

Research Design

Specifically, a case study was employed to understand a social phenomenon within important circumstances and to "look for the detail of interaction with its context" (Stake, 1995, p. xi). This research design allowed us, as described by Yin (2009), to look into "a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between the phenomenon and context are not clearly evident" (p. 18). Typically, a case study starts with identifying a specific case, which may be an individual, a group, an organization, a community, a partnership, a decision process, or a project (Creswell, 2013). As service-learning can be considered an educational intervention that student participants were exposed to, this case study design somewhat resembles a preexperimental research inquiry with one-group-only posttest design wherein, as Edmonds and Kennedy

(2017) illustrate, "there is only one designated observation with no comparison groups or multiple observations within subjects" (p. 121). A case study can suggest cause-and-effect relationships through observational data despite having no control group or pretest evaluation (Creswell, 2009; Edmonds & Kennedy, 2017). However, this research design cannot entirely rule out plausible alternative explanations since the study participants were self-selected and nonrandomly assigned to an educational intervention (Edmonds & Kennedy, 2017).

Setting and Study Participants

This particular case study was set in a Philippine-based Jesuit university and its partner community in Marikina City. The university aims to contribute to nation-building through teaching, research, and service to the community. It seeks to form its students not only as experts in their chosen profession but also as life-long learners who are critically rooted in their culture, proactive in the global context, imbued with the scientific spirit, and strongly oriented to faith and justice. Its partner community, Marikina City, is one of the cities comprising the capital of the Philippines. It is a first class, highly urbanized city with approximately half a million population of which 12% live in poverty. It has 17 healthcare centers that cater to the healthcare needs of the indigent population for free (Marikina City, n.d.). Its programs for a healthy population include maternal and child healthcare, communicable disease control, noncommunicable disease control, environmental health and sanitation, oral health, disaster management, and health education and promotion (Marikina City Health Office, n.d.).

After obtaining ethical approval and institutional clearance to carry out this research, study participants were recruited and approached face-to-face from the 78 third-year undergraduate students who were taking service-learning in a primary healthcare setting in Marikina City from January to May 2016 as part of their curriculum for a health-related degree from the above-mentioned university. They were purposively sampled for this study because, as Tong, Sainsbury, and Craig (2007) remark, they "share particular characteristics and have the potential to provide relevant and diverse data pertinent to the research question" (p. 352). All students

gave their informed consent to be part of this research, and no one eventually withdrew their participation. Hence, no student was excluded from the study.

The service-learning initiative mentioned above formed part of the discipline-based formation program that the university seeks to provide its students, making concepts discussed in classes such as "The Health Professional as Scientist or Investigator" and "Philosophy of the Human Person" more meaningful and relevant because of its practical approach. Specifically, weekly classroom sessions for "The Health Professional as Scientist or Investigator" were geared toward rational inquiry into events, phenomena, and interventions in the health sector, whereas "Philosophy of the Human Person" provided opportunities for students to reflect on the various aspects of being human. By assigning 78 students to render community service in 14 healthcare centers in Marikina City during the second semester of school year 2015–2016, the service-learning, according to the faculty responsible, not only was meant to prepare students for the role of healthcare professionals in public health but also aimed to give students the opportunities to contribute to the delivery of primary healthcare to the urban poor. Their once-a-week community service involved retrieving medical records, taking the vital signs of patients from their designated healthcare centers, and getting medical histories, among other tasks.

Data Gathering and Analysis

To get familiar with this service-learning situated in a primary healthcare setting, the three researchers carried out participant observation in several instances as student participants attended weekly classes and went to the healthcare centers for community service. Social events (i.e., interactions, discussions, and group presentation) that were directly observed were recorded as field notes (Yin, 2016) to provide context to this study, because any aspect of the context can affect the meanings ascribed to one's experience (Gee, 2011a). To make the process of observation uniform among the three researchers, an observation protocol was used wherein descriptions of the events were recorded as descriptive notes, whereas insights, learnings, and hunches about the events that transpired were logged as reflective notes. To limit omission of details from the participant observations, we filled out the field notes, which contained the descriptive notes and reflective notes, immediately after the observation. We also conferred with one another to bring together our field notes and, in effect, we were able to increase the use of findings and gather a comprehensive understanding of the events that occurred (Creswell, 2013; Patton, 2002). To limit misinformation, details about what had been observed were verbally and informally provided to the student participants through conversational interviews (Patton, 2002).

To systematically analyze the observational data, we initially read the field notes together so that, as Lune and Berg (2017) explain, any themes or hypotheses developed during data gathering could be reinforced and themes or hypotheses previously unrealized could be generated. This process of open coding was then followed by axial coding, wherein data coded were organized through finding patterns and developing category systems that best described the information gathered (Creswell, 2013; Lune & Berg, 2017; Patton, 2002).

To support the data gathered from participant observation, the reflection papers submitted by student participants during their service-learning were collected after they were graded so that more insights could be gathered on how these students perceived their service-learning experience. We particularly reviewed the volumes of submitted reflection papers because, as Mezirow (1991) points out, words may represent one's frames of reference, and meanings can be created and shared through language. To examine the barriers to a transformative partnership with a given community and to look into the process by which students' perspectives (i.e., habits of mind and points of view) were challenged during service-learning, the submitted reflection papers underwent discourse analysis, which can be useful in studying the use of language to convey situated meanings (Gee, 2011a, 2011b). We, as multiple coders, employed discourse analysis in this study by writing memos (i.e., key concepts and ideas that occurred to the researchers) along the margins of the submitted reflection papers, organizing the gathered data into text units using a tabulated form, and manually describing, classifying, and interpreting these data into codes. In some instances, the codes were prefigured from related literature (i.e., a priori coding). But there were

also instances when codes were derived from the exact words of the student participants so as to better reflect the views of the study population (i.e., in vivo coding). The process of coding and recoding was carried out by the three researchers until the texts were coded the same way (i.e., intercoder agreement) and until data saturation or no new meanings were observed from the data (Creswell, 2013). Before reporting the findings, the analytic coding was shown to the student participants for their comments and feedback (Richards, 2005).

To ensure the reliability and internal validity of this study's findings, we followed several steps that Creswell (2013) and Lune & Berg (2017) suggested. First, data were gathered from a variety of sources, such as from observation notes and submitted reflection papers (i.e., data triangulation). Second, data, as shown above, were gathered and analyzed by three researchers (i.e., investigator triangulation). Third, a master list of data gathered was developed so that information could be easily located and identified. Fourth, member checking was performed to solicit the student participants' views on the interpretation of gathered data. Fifth, reported findings included details that researchers expected to find before the study as well as information that was not expected and was unusual or interesting. Sixth, selected texts were quoted from the submitted reflection papers in order to support the assertions of this study. Finally, findings were presented in coding tree and tabulated form to create a visual image of the information. To maintain confidentiality and anonymity, findings from this case study of students taking part in service-learning within a primary healthcare setting were reported using pseudonyms.

Representation and Reflexivity

Recognizing that researchers should be "conscious of the biases, values, and experiences that [they bring] to a qualitative research study" (Creswell, 2013, p. 216), we need to disclose who we are and what we represent. All of us are experienced researchers and service-learning practitioners from the university being researched in this study. The first researcher is female and has completed the degrees doctor of medicine and doctor of philosophy in education. The second researcher is also female and has a graduate degree in community develop-

ment. The third researcher is male and holds a doctor of medicine degree. Both the first and second researchers were teachers of the student participants for their class "The Health Professional as Scientist or Investigator," whereas the third researcher was these students' program director. We demonstrated an emic perspective, which may have influenced how we gathered and analyzed the data from this study. Nonetheless, this insider perspective does not discredit the trustworthiness of our findings since, similar to the study of Adarlo and Marquez (2017), voluntary participation of the student participants did not have a bearing on their final grades for the classes being studied, and the trusting relationship between the researchers and students was likely to elicit candid responses from these student participants as they wrote their reflection papers. We also underwent debriefing from impartial peers so that, as Lune and Berg (2017) emphasize, we could come to understand that we are part of the life-worlds we seek to investigate. Such self-awareness is important in helping us position ourselves as researchers of a qualitative study (Patton, 2002).

We also acknowledge that "writing a qualitative text cannot be separated from the author, how it is received by readers, and how it impacts the participants and sites under study" (Creswell, 2013, p. 215). That is why we held ourselves accountable as we proceeded with the study. We were careful in informing the student participants about details of the study when we got their informed consent, and we exercised reflexivity by member checking (Creswell, 2013; Tong, Sainsbury, & Craig, 2007). When necessary, we also wrote in the first person, active voice so that we would be more conscious of our role in the inquiry. We were likewise mindful to provide rich description, organize our writing in thoughtful sequencing, use appropriate texts to support our findings, and be clear on our role as researchers so that we would not disenfranchise our study participants and our readers (Creswell, 2013; Patton, 2002).

Findings

All of the 78 students enrolled in the classes "The Health Professional as Scientist or Investigator" and "Philosophy of the Human Person" for the second semester of school year 2015–2016 were included in this study. The age of these student participants

ranged from 19 to 21 years. By sex, 46% (36) of them were male, whereas 54% (42) were female. Most of them came from upper middle to high-income families, meaning that they held a position of power and privilege relative to those in their service-learning community. Furthermore, 29% (23) of these 78 student participants were expected to graduate with academic honors. None of them were new to rendering community service. In fact, they were familiar with Marikina City, as all of them during their second year in undergraduate education had their National Service Training Program in one of its neighborhoods. Based on their performance for this compulsory civic welfare training service as described by their teacher, only 10% (8) were able to reflect thoroughly about their personal experience in this particular school–community collaboration. Almost all of them had difficulty in relating their experience in community engagement to bigger issues faced by the Philippine society. They also struggled in coming to terms with how they will continue benefiting from their unearned privilege and how these privileges can (un)wittingly marginalize those who do not have the same privileges.

Findings from the analysis of field notes and submitted reflection papers revealed not only several dilemmas that were encountered in service-learning but also (missed) opportunities for transformative partnership in service-learning. These aspects are explored in detail below.

Dilemmas in Service-Learning

Days before deployment to the healthcare centers, students were oriented about the purpose and nature of their service-learning. Most, if not all, were anxious about what their service-learning would entail from them. Reactions included feeling apprehensive of what would lie ahead, but also feeling excited because, according to Sophia, "[they will] be able to apply what [they have] learned from the past semesters. At the same time, [they] can enrich [their] previous learnings by learning new things." Some students felt overwhelmed because it appeared they would "have to allot so much of [their] time for the healthcare center." Since service-learning does not seem to be among their usual academic requirements, students, such as Isabella, also felt "pressured knowing that [their responsibilities for service-learning] are quite a lot and

are heavy." These responsibilities involve taking the vital signs of patients; delivering lectures to promote health and wellness; retrieving, filing, and arranging patients' records; and measuring the length and weight of infants for vaccination, among other tasks. As a result, Emma, for instance, sensed there is more for them to learn so that they can "be able to greatly contribute to the community."

This perceived need to acquire certain competencies for service-learning is an understandable reaction among the students. However, we did not want them to let their overwhelmed feelings take hold of them and incapacitate them from engaging with those from the community they were assigned to. Based on reflective accounts of students about their orientation to service-learning, we have also identified a number of barriers that may hinder students from undergoing transformative learning and building transformative partnerships with the community. These include the students' tendency to become self-centered and their notion that people from the service-learning community are different from them in many aspects (Figure 1).

Such egocentrism among students was made apparent when their teachers asked the class to group themselves for the service-learning. In general, students chose to be with the peers they considered familiar and "useful" to them. Caitlyn, for example, chose to be in a group where she could have a "sense of security as well as comfort." Similarly, many students chose to be with those they are comfortable with, with whom they would not encounter any difficulties. In the case of Matthew, he would rather belong to a group of students who "can do a great job and be able to work in any kind of conditions" because "[his] grades depend on [them]." Ava, on the other hand, would prefer someone who has a car as part of her group so that "[they] can all comfortably travel" to the healthcare center.

Because some groups had more individuals than the required size, the teachers requested the students to regroup themselves. However, a number of students, as described by Ryan and Sarah, did not want "to step out of [their] comfort zone" and "were adamant that they assembled themselves first, and thus, were unyielding and unwilling to rearrange themselves." For Ava, she even volunteered as one of the 14 leaders so that the group she and her friends formed would
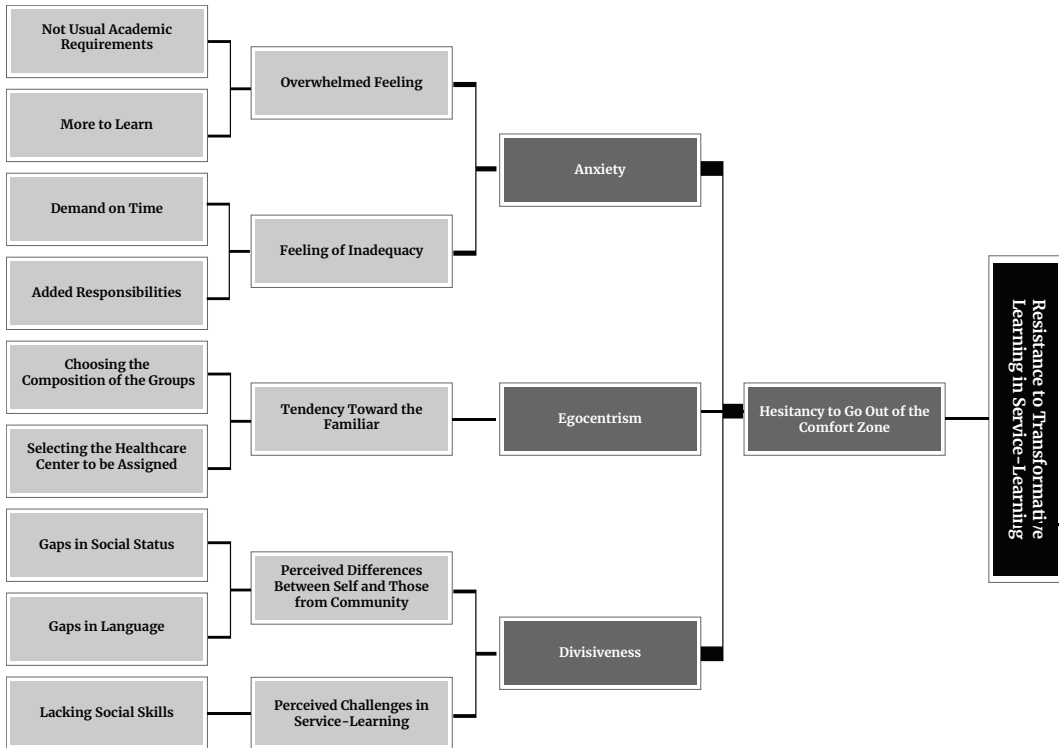
Figure 1. Barriers to Transformative Learning in Service–Learning

remain together. This self–centeredness can be a hindrance to transformative relationships because, as Sophia realized, it prevents them from being sensitive to others and being "open to working with people who are not in [their] circle of friends."

When the groups were then asked by their teachers to decide which healthcare center they would be assigned for their service-learning, "everyone," as Hannah observed, "tries [again] to put their own interests first." Most students, like Mia, would "want to be assigned in the nearest and most accessible venue of all." "Some groups," according to Sarah, "were plainly keen on avoiding the hassle of a long commute." As for Ryan, among others, they took into account the time they have "to wake up to be at the healthcare center by eight in the morning and the time it would take for [them] to get back to school so [they] would have enough time to study for [their] other classes."

Eventually, some students, with the instructional guidance from their teachers, learned to negotiate their preferences and give way to others. As their teachers guided them to take into account the standpoints of others (i.e., probing the students to reveal the reasons for choosing a particular healthcare center) and challenged them to go beyond themselves (i.e., encouraging the students to put others first by being sensitive and showing empathy), they came to understand the importance of considering the circumstances of other groups and the welfare of the class. For example, two groups gave way for another group when they learned most of the students from the latter resided far from Marikina City and it would therefore be practical for them to be assigned to the nearest healthcare center. In listening to others and, as termed by Hannah, "setting selfishness aside," resistance to transformative learning can be overcome.

Perspective transformation and, in effect, transformative partnership can likewise be hindered by perceiving that there are divisive differences between oneself and the people from the service–learning community. As explained by Lauren, "[they] feel that [service–learning] will be more challenging when it comes to communication because the people, who are there are not the usual people that [they] talk to." In fact, the thought of interacting and conversing with unfamiliar people made Anna, among others, nervous because they were asked "to go out of one's comfort zone."

Table 1. Range of Adult Learning in Service-Learning		
Level of Adult Learning	**Characteristics**	**Findings**
Rote learning	New points of view are established.	New points of view were gained from current understanding as student participants interacted with others from different backgrounds, experiences, and realities.
	Existing points of view are elaborated.	Existing points of view about those in the community were elaborated as previously held assumptions of student participants were reinforced.
Emancipatory learning	Points of view are changed.	Points of view were modified as the taken-for-granted assumptions of student participants about those from the community were challenged during their service-learning.
Transformative learning	Habits of mind are changed.	Habits of mind were disrupted as a number of student participants made personal resolutions to be in solidarity with the less privileged.

However, such a disorienting dilemma prompted some students, like Samantha, to "allow [themselves] to 'be one' with the community . . . [and] to go beyond [their] comfort zone in terms of communicating with others and building relationships." This would include, as Sarah suggested, "[having] to improve [their] social skills in order to successfully build relationship with all the diverse people that [they] will be interacting with." In doing so, not only would transformative learning be facilitated but transformative partnership would also be made possible.

Opportunities for Transformative Partnership in Service-Learning

As students spent their Wednesdays in their respective healthcare centers, service-learning provided them opportunities, according to Sophia, "to know more of the society [they] seek to create a difference in." New points of view were established (See Table 1) as they were "able to interact with mothers, who have different backgrounds and experiences." Rachel, for example, "was able to open [herself] to new perspectives because of [their service-learning] encounters." This is because, as Victoria narrated:

> It's not just the one-time encounter where [they] get the length and weight of the babies then never see them or their parents again. [We] actually remember them, [we] recognize their faces and sometimes even recall their names. [We] share stories with them, especially when they're waiting in line for their turn.

New points of view were also formed (Table 1) as students got to interact with the healthcare workers. They learned, as stated by Julia, how "to build rapport with the healthcare workers, to be in good terms, and to work comfortably with each other." Ryan and Mia, among others, were given opportunities to gain insights about the healthcare workers' personal experiences in the Philippine health sector as well as their "dreams and aspirations in life."

Most students also found the classroom sessions helpful in making sense of their service-learning experiences. They were able to gather new points of view (Table 1) since their Saturday sessions, as pointed out by Sarah, "provided an opportunity where the students can synthesize their experience by sharing amongst themselves what happened during their [service-learning] . . . and seeing the similarities and differences among the different healthcare centers." These reflective sharing sessions on Saturdays, as Michelle remarked, "opened [her] mind to the problems that the healthcare centers in their country usually face. It showed [her] different realities of the healthcare centers and how work in a healthcare center was harder than it seemed."

There were likewise opportunities for emancipatory learning as some students' points of view were changed during service-learning (Table 1). Hannah, for instance, realized that she "can never really judge something at first glance since service-learning was not merely something [they] were 'obliged' or required to do." It essentially entailed a choice from them because "how [they] treated the patients was up to [them], how open [they] allowed [themselves] to others was up to [them], and how they integrate [themselves] to the community was up to [them]." Jen and two other students initially thought that they would not make an impact on the community, but they were soon shown otherwise. As Jen recounted:

> When [they] got out of the tricycle, one mother recognized [them] immediately. . . . She even went out of her way to greet [them] and chat with [them] before [they] headed back to the healthcare center. [They] didn't expect that the mothers [they] interact with actually remember [them]. . . . [They] didn't expect these mothers, who only stayed in the healthcare center for around 15 minutes or so would remember the faces of students, who measured the length and weight of their babies.

At that point, she came to realize those "small talks" can be a step toward "a relationship, which was deeper and more personal."

Although not as common, opportunities for transformative learning were documented as well in this service-learning (Table 1). A number of students demonstrated changes in their habits of mind, as they were able to come up with personal resolutions on how they should proceed from here onward. For example, Emma at first saw service-learning as "a requirement that would make [her] wake up at six in the morning just to commute to the healthcare center." But, later on, her perspective about service-learning changed, wherein "little by little, dreadfulness became excitement and requirement became service." Similarly, Ryan no longer considered service-learning a task to accomplish but a form of service for the community. As a result, he has planned "to join sector-based organizations [in school] because [he wants] to interact more with marginalized sectors of society." As for Mia, she has resolved to "make an effort to know about the community more" by focusing less on self-fulfillment and more on "how the people in the community feel." Hannah, on the other hand, has decided to carry on "everywhere, especially in the future when she [becomes] a doctor," the attitude of reaching out and establishing relationships with the less privileged.

Such perspective transformations, for the most part, involved the political (expanded sense of social responsibility), moral (mutual respect, care, and solidarity in relationships), and spiritual (deeper understanding of self, purpose, society, and greater good) domains of these student participants. Perspective transformations of intellectual (questioning of origin and nature of assumptions) and personal (rethinking of self-concept and lifestyle) domains occurred occasionally. Perspective transformations of the cultural (questioning of Western thinking) domain were rare.

Nonetheless, there were missed opportunities for transformative partnership in service-learning despite instructional guidance from the teachers (i.e., posing questions to students and challenging them to reflect on their taken-for-granted assumptions, put on hold their judgment about others, and be open to the unfamiliar). Instead of taking on a different attitude toward service-learning, students' existing points of view were elaborated. In the case of Michelle, there "was no Wednesday that [she] didn't find [herself] having a hard time to wake up since it was the earliest activity [she] had

for the whole week." This predisposition for personal convenience was also evident in Ava, who frequently complained of the commute to and from the healthcare center using the public transportation system:

> On the way to [the healthcare center], it was not yet that hot and there were less people commuting. But on the way back to [school], it is already almost noon and it is just so hot and all the [public utility vehicles] are full so it's very tight inside.

Another student, James, was not able to have meaningful and relevant experiences in service–learning as he continued to perceive the patients in the healthcare centers as "not so glamorous" and the tasks he had to perform on Wednesdays as "very monotonous."

Furthermore, most reflective accounts of these student participants did not consider the differences in power and privilege between themselves and those from the community they served. As a result, their efforts in service–learning may have fallen short of bringing about social transformation.

Discussion

Such missed opportunities, for the most part, have stemmed from unresolved dilemmas in service–learning: Participants put self–preservation and self–interest first instead of taking into consideration the common good, and differences rather than similarities were emphasized when relating to others.

These missed opportunities for a transformative partnership in service–learning occur due to distorted assumptions or premises that direct an individual, according to Mezirow (1991), "to view reality in a way that arbitrarily limits what is included, impedes differentiation, lacks permeability or openness to other ways of seeing, or does not facilitate an integration of experience" (p. 118). These are, as Cranton (1994) describes, errors of learning since "what we have learned, how and where we grew up, and how we see ourselves" have remained unquestioned and unexamined (p. 30). Resistance to transformative learning in the context of service–learning can bring about such errors of learning.

Distorted assumptions or premises take place because individuals, for the most part, are unaware how certain social norms legitimize the distribution of power and privilege in society (Cranton, 1994). Furthermore, individuals have the tendency "to reject ideas that fail to fit our preconceptions, labeling those ideas as unworthy of consideration— aberrations, nonsense, irrelevant, weird, or mistaken" (Mezirow, 1997, p. 5). Thus, we usually block out unwanted aspects of our realities, or we simply do not focus on them so as not to get anxious about the changes that accepting them may bring to us (Cranton, 1994).

In this study, lack of critical awareness and an inclination to adhere to the familiar may account for the unresolved dilemmas and missed opportunities in service–learning. In many ways, these factors may have limited some of the students' openness to personal and social transformation (Cranton, 1994). Instead of transformative learning, existing points of view about themselves and others were elaborated further in some student participants. However, for most students, new points of view were established and existing points of view were changed because of their service–learning. A number of student participants also exhibited an incremental change in their habits of mind as a result of accumulated changes in their points of view.

There are likewise several factors that can affect transformative learning. A trusting relationship between a teacher and a student, value–laden course content, intense experiential activities, occasions for journal writing and premise reflection, mature cognitive development, and recent experiences of critical incidents are more likely to bring about transformative learning. Theoretical orientation of the educator and prior life experiences of the learner are likewise contributory to transformative learning, inasmuch as temporal constraints and emotional issues are unfavorable to perspective transformation (Taylor, 2009).

Because various factors were at interplay, differing degrees of transformative learning were seen among the students included in this case study. Course contents were value–laden, journal-writing time was allotted in class activities, and reflective sharing was provided on several occasions in class; however, teacher–student relationships, maturity of students, capacity for reflection, experiences at healthcare centers, and biographies of these students varied. As also

shown in this study, not all personal transformation can turn into social transformation, as implications to society were not prominent among the students' reflections.

Thus, there has been a growing need to intensify opportunities for critical reflection during the teaching–learning process. These opportunities include prompting students to go beyond self-critique and to examine, as Smith (2011) points out, "the uniqueness of our 'individual' positionality within social systems" (p. 213). Educators, as Mezirow (1991) points out, should "encourage learners to choose freely from among the widest range of relevant viewpoints" (p. 225), not only so that alternative perspectives are taken into consideration but so that distorted frames of reference can also be further challenged. Additionally,

> the [teaching–learning process during service–learning] should be purposeful and heuristic, power should be confronted, differences should be taken up, imagination should be involved, learners should be led to the edge, and teachers and other persons supporting the [teaching–learning process] should be aware that they function as models. (Illeris, 2014, p. 93)

However, it is important that educators gently prompt students to step out of their comfort zone because resistance may happen when students are forced to confront the unfamiliar. As seen in how Jakubowski and McIntosh (2018) carried out their service–learning, educators should meet the students "where they are" (p. 50). They should be able to create a safe space for students to be open and willing to undertake transformative learning during their service–learning.

To facilitate perspective transformation and uphold a transformative partnership in service–learning, reflective writing and reflective sharing are essential components of the teaching–learning process. Reflective writing can challenge "learners to both recall from memory and verbally articulate [their] reflective moments" (Taylor, 2009, p. 9), and reflective sharing can "validate commonly held meanings" (Mezirow, 1991, p. 63). Educators should emphasize to the students at the outset the purpose of reflective writing and reflective sharing: that is, to decenter oneself and to engage with

the world. This would involve reflecting not only on one's thoughts and actions but also on interaction with others and the ethical, social, and political contexts (Smith, 2011).

Because students in a class do not necessarily have the same prior experiences, cognitive development, and reflective ability, educators also have to take into account these diverse needs of learners in carrying out service–learning. Timely scaffolding, as Ryan (2013) suggests, is vital to guide students to take a proactive rather than a reactive stance to their experiences, as transformative learning entails both a decision and an action for personal and social change. Doing so requires educators to provide an atmosphere of acceptance and support so as to nurture a trusting relationship between themselves and their students (Cranton, 1994). This kind of support would also have to involve the educator joining students as a learner during the teaching–learning process (Marmon, 2013).

Conclusion

Transformative partnership is essential in service–learning. There are, however, barriers that hinder transformative partnership taking place during service–learning. This study examines how undergraduate students, as part of the university, are held back from forming a transformative partnership with individuals in a community. Based on field notes from participant observation and discourse analysis of students' reflection papers, barriers to transformative partnership in service–learning include students' tendency to become anxious and self-centered when they encounter the unfamiliar and their tendency to perceive those from their service–learning community as different from them in many aspects. But through reflective writing about experiences in service–learning and through instructional guidance from their teachers, some students were able to become aware of these tendencies and were able to establish new points of view, alter their existing points of view, or change their prevailing habits of mind. Nevertheless, a number of students did not undergo perspective transformation during their service–learning in a primary healthcare setting. Resistance to transformative learning occurred because of unresolved dilemmas. As a result, their existing points of view or habits of mind persisted despite teaching–learning opportunities to examine distorted assumptions

and premises. Such resistance to transformative learning may require not only timely scaffolding but also a differentiated approach from teachers.

These findings can represent the contextual richness of educational settings such as service-learning, since case studies allow researchers to "get as close to the subject of interest as they possibly can, partly by means of direct observation in natural settings, partly by access to subjective factors (thoughts, feelings, and desires)" (Bromley, 1986, p. 23). However, findings from this study should be considered in view of a number of limitations that were encountered. First, these findings may be specific to the situational context of this study. Further research in a similar setting is needed to confirm the findings reported in this case study. Second, one academic semester may not be enough for transformative learning to take place. A longitudinal study may be warranted to examine transformative learning in detail. Third, student participants might have given socially desirable responses, knowing that their reflection papers would be graded and that they were observed by their teachers while in service-learning. This study (and similar studies) would have benefited from an extended and in-depth interview of student participants so that accounts from their reflection papers could be verified and multiple meanings could be gathered from triangulation of data. Fourth, issues of reflexivity are typical of qualitative research. Studies of this kind require researchers to be mindful of certain assumptions that they may have and how these assumptions may have affected the research approach. Member checking and peer debriefing were carried out to minimize these issues of reflexivity.

Despite these shortcomings, this case study not only offers "an experiential understanding of action and context" (Stake, 2010, p. 48); it can also provide "the views and perspectives of study's participants" (Yin, 2016, p. 9). Its findings have implications for educational practice, as barriers to and teaching-learning opportunities for transformative partnership in service-learning were examined. Findings from this study can inform educators on how to proceed with service-learning as a method of teaching and as a form of university-community collaboration: That is, not only should critical reflection be deliberate and purposeful but instructional guidance should also meet the students where they are by addressing their different and various learning needs.

Declaration of Conflicting Interest

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How Do Academic Agriculturalists Engage in and View Outreach? The Case of Faculties of Agriculture in State Universities of Sri Lanka

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Abstract

This study aims to fill in the gap in literature on the state of academic engagement in Sri Lanka by investigating types of outreach engagement activities, outreach mechanisms, and attitudes of academic agriculturalists toward outreach. An online questionnaire survey was conducted among the academics (stratified random sample of 257) across eight faculties of agriculture in the state universities of Sri Lanka. According to the results, the average number of outreach activities per academic per year was 2.9, and the majority spent less than 5% of their working time on outreach activities, indicating low involvement in outreach by the academics. However, they held positive views on outreach engagement. Generally, the academics engaged in outreach activities through personal or informal individual contacts. Findings help provide guidelines for strategies to improve outreach engagement by academics at department, faculty, university, and national levels in Sri Lanka.

Keywords: outreach, academics, faculties of agriculture

Status of Outreach of the Faculties of Agriculture in the State Universities of Sri Lanka

The state university system in Sri Lanka consists of 15 national universities situated in different parts of the country. There are eight faculties of agriculture attached to the Universities of Peradeniya, Ruhuna, Rajarata, Wayamba, Jaffna, Sabaragamuwa, Uva Wellassa, and Eastern University, offering agriculture-related degrees. The eight universities are located in different geographical areas of the country belonging to eight provinces out of nine. These provinces vary in terms of geography, crop and livestock production, human resources, industries, and other socioeconomic conditions. According to Wolfe (2005), universities must be an important part of regional development. Therefore, all the faculties of agriculture have the opportunity to engage in national-level and regional-level outreach activities that will contribute to the improvement of regional agricultural and rural development as well as the development of the country as a whole.

The role of faculties of agriculture in the national agriculture extension service has not been defined and recognized. According to Sivayoganathan (1999), the Sri Lanka Council for Agricultural Research (SLCARP) had attempted to develop a national policy for agricultural extension, but it had not been successful. There is no formal system or mechanism to include and obtain the participation of faculties of agriculture in the agricultural extension system of the country. Unlike the more basic sciences, the faculties of agriculture should have more deliverable research outputs and knowledge for the community and industry. Outreach engagement or the extension activities of the faculties are an important conduit to disseminate the research output

to the public. The outreach activities of the agricultural universities may include educational programs for communities, community-oriented research, and various kinds of services to the community such as technical assistance and agricultural and rural planning (Bor, Shute, & Moore, 1989).

According to Crowder, Lindley, Bruening, and Doron (1998), agricultural education institutions play an academic role and also a community development or outreach role that allow them to understand local knowledge and combine it with modern agricultural science. It is emphasized that higher agricultural education institutions need to engage more directly and more effectively with local educational institutions such as schools that provide primary and secondary education, and their surrounding communities (Atchoarena & Holmes, 2005). However, traditionally, many agricultural universities in developing countries have defined their primary mission as training of human resources (Hansen, 1989), which is provided by offering academic degrees. Academic staff of the universities are mainly responsible for teaching, research, and outreach activities. Therefore, engagement in outreach activities by academics is an important aspect of higher education in agriculture as well as the agricultural development process of the country.

Ecklund, James, and Lincoln (2012) stated that there are no nationally representative studies to determine which scientists are engaged in outreach, or what types of outreach scientists do, and also that little is known about the views of scientists' outreach efforts across a broad variety of institutions and disciplines in the United States. He also claimed that there is a lack of knowledge about what strategies could be most effective in creating better outreach efforts. This research gap is evident in the Sri Lankan context as well.

Different countries have adopted different strategies to link agricultural faculties with national research, innovation, and extension systems and have achieved various levels of success. The recent direction of the University Grants Commission (UGC) in Sri Lanka giving more attention to improve university–industry linkages, community-based learning, and outreach activities are a positive trend. The UGC has identified outreach as a mandate of universities. Therefore, community engagement, consultancy, and outreach activities have

been included in the evaluation criteria in reviewing higher education institutions in Sri Lanka. Outreach has also been identified as an important indicator in quality assurance, along with nine other criteria (Warnasuriya, Coomaraswamy, Silva, Nandadewa, & Abeygunawardena, 2015). Despite the fairly new and growing interest of the Sri Lankan government, policymakers, and educational specialists in university outreach engagement, only a few research studies have been conducted on university outreach activities (sometimes referred to as the university–industry linkage) to facilitate policy formulation in Sri Lanka (Esham, 2008). Harankaha (2013) examined the innovations by university academics in relation to law and a legislative view. Nisansala et al. (2014) studied the commercializing of university research outcomes in Sri Lanka and stated that there is a lack of research in related topics. Furthermore, there has been no full investigation of academics' views on present engagement, mechanisms of engagement, and factors hindering the active participation of Sri Lankan universities with special reference to faculties of agriculture in utilizing available research outcomes, knowledge, and expertise to address the needs and problems faced at the stakeholder level. Identification of the factors that affect engagement in outreach activities by academics as viewed by them would be helpful for policy implications and for designing guidelines and procedures to promote university outreach activities in Sri Lanka, but such knowledge is lacking.

Although at present the UGC has identified outreach as a mandatory function of universities, no detailed study has been performed to determine how academics view outreach, which is an important determinant of the involvement of academics in outreach. Such knowledge is necessary to better analyze the current situation and thereby develop more appropriate strategies and plans that will enable the achievement of the goals determined by the university system in relation to outreach. Therefore, the objectives of the present study were to investigate outreach engagement, outreach mechanisms, and views of academics on outreach engagement with special reference to the faculties of agriculture in state universities of Sri Lanka.

Working Definition of the Term "Outreach"

Traditional definitions of the term *univer-*

sity mainly focus on teaching and research as the primary functions of a university. However, scholars have also identified the role of the university as focusing on different aspects important for higher learning and the development process of the country to meet societal needs. This function of a university is known as "outreach" in general. According to Fear and Sandmann (1995), university outreach is one of the six types of public service, along with inreach, university service, professional service, community/civic service, and consulting. Further, Fear and Sandmann consider outreach part of the academic core, which cuts across teaching, research, and service. The definition of outreach for Michigan State University is "a form of scholarship that cuts across teaching, research and services. It involves generating, transmitting, applying, and preserving knowledge for the direct benefit of external audiences in ways that are consistent with university and unit missions" (Provost's Committee on University Outreach, 2009, p. 1). Poliakoff and Webb (2007) define university outreach as any scientific communication that engages an audience outside academia.

According to Bor, Shute, and Moore (1989), the outreach or extension tasks of an agricultural university consist of the more direct contribution of higher agricultural education to agricultural and rural development. Outreach activities may include educational programs for communities beyond the university campus, the conduct of policy initiatives, industry-and community-oriented research on issues identified by the consumers themselves, and offering various kinds of services to the community such as technical assistance and agricultural and rural planning. This definition is more relevant and provides the basis for the present study, as it directly defines outreach tasks of agricultural universities. The derived working definition for the term *outreach* for the present study was the process of active participation with community partners (government, industry, and community) to effectively apply and utilize the university academics' knowledge, resources, and expertise to address the partners' needs and problems. Schools, farmers, farmer or community organizations, and the general public were considered the community. Such outreach activities as educational programs, trainings, workshops, consultancies, and development projects were taken as units of analysis in this study.

Methodology

Study Sample

All the faculties of agriculture (*n* = 8) in the state universities of Sri Lanka offering agriculture and related degrees were selected for the study. A stratified random sample was selected for the study. Faculties of agriculture were considered the different strata. The sample consisted of two thirds of randomly selected academic staff members from each faculty (67%; *N* = 257). Department heads and the heads of the outreach units and programs were selected as the key informants.

Data Collection

A self-administered questionnaire was used as the instrument for data collection. The questionnaire was constructed using the following subheadings: personal profile, professional profile, outreach activities, and suggestions. Views of the academics were investigated mainly on (1) outreach engagement, (2) factors that would hinder outreach, (3) supportive and approving nature from others, and (4) satisfaction. Extent of outreach engagement was measured through numbers of outreach activities engaged in within the last 3 years. The questionnaire was piloted with 10 academics and necessary improvements were made. Then the questionnaires were sent by post and also e-mailed to the selected respondents. Survey recipients were sent reminders three times to encourage responses to the survey. A total of 126 filled questionnaires (49% response rate) were returned after three reminders. Two returned questionnaires were not used due to incompleteness.

Structured interviews with potential key informants were conducted by visiting all eight faculties of agriculture to collect data from existing centers/units and programs of the agriculture faculties involved in outreach activities. Interviews were conducted with the directors of the Agriculture Education Unit (AEU), Agribusiness Centre (AbC), and Agricultural Biotechnology Centre (AgBC) of the Faculty of Agriculture, University of Peradeniya.

Primary data were collected between the period 1 May 2014 to 30 July 2016. Both quantitative and qualitative data were collected using closed-ended and open-ended questions through the abovementioned methods of data collection. A mixed method

of research design was adopted for the study.

Data Analysis

Data were analyzed using descriptive and inferential statistics. Descriptive statistical analyses were used to summarize data and explain the basic characteristics of the respondents and other findings related to outreach activities. Primary data gathered from key informant discussions were qualitatively analyzed.

Results

Background of the Respondents

The sample adequately represented all levels of academics in terms of their grade of employment, namely, professors (20%), senior lecturers (55%), and lecturers (25%). Among the respondents, 56% were male academics and 44% were female academics. Therefore, the sample represented both male and female academics adequately.

In the study sample, 79 academics out of 124 of the total sample (61%) had a Ph.D. degree, and 98% of them had obtained their degrees from foreign universities. An additional 35% of the responding academics held a master's degree, and only 4%, who were probationary lecturers, had only the basic degree. This result shows the higher level of academic qualifications of the respondents, which can be useful in engaging in outreach activities. Only 30% of the academics in the study sample had low experience (less than 5 years). Among those with more than 5 years of experience, 18% had experience of more than 20 years.

Established Universities and Newly Established Universities

Universities were divided into two categories, well-established universities and newly established universities, based on the year of establishment, to see whether there is a difference in outreach engagement in terms of the length of time a faculty had been functioning as an indicator of their resources and experiences. Accordingly, faculties established before 1985—namely, faculties in the Universities of Peradeniya and Ruhuna—were considered to be in well-established universities. Although the University of Jaffna and Eastern University were established quite early—in 1986 and 1990 respectively—their functionality had been disturbed due to 30 years of civil conflict in the country. Therefore, these two faculties were also considered under the category of newly established faculties. Accordingly, the faculties of agriculture established after 1985 in Eastern University and universities in Jaffna, Rajarata, Wayamba, Sabaragamuwa, and Uva Wellassa were considered newly established.

How Do Sri Lankan Academics View Outreach?

Table 1 summarizes the views of the academics regarding outreach involvement. Most of the academics (83%) viewed outreach as a mission of the university and agreed or strongly agreed that they have a duty/responsibility as scientists/academics to engage in outreach activities (87%). Although outreach has been identified as a mandate of universities, 7% of the academics disagreed or strongly disagreed that outreach should be considered a duty or a responsibility of an academic, and 6% neither agreed nor disagreed. A majority (61%) agreed or strongly agreed that engaging in outreach activities is beneficial. To further develop such attitudes, it would be important to enhance the benefits for academics who are engaged in outreach activities through career advancement/promotions and/or opportunities for financial benefits. Some opportunities for financial benefits can be created through consultancies and in research and development projects linked to industry and the private sector. Interestingly, the majority of respondents (86%) reported that they enjoy outreach engagement.

Extent of Outreach Engagement

The participants were asked to assess the extent of their outreach engagement. The extent was measured using a 5-point Likert scale that included the following categories: "very great extent," "great extent," "somewhat," "very little," and "not at all." The results showed that 35% of the participants had "very little" engagement in outreach activities. However, the majority perceived that they were engaged in outreach activities "somewhat" (38%) or to a "great extent" (21%). Furthermore, only a few respondents (4%) had not been involved in any kind of outreach activity during the past 3 years. These respondents were newly recruited probationary lecturers. Their lack of

Table 1. Views of the Academics Regarding Outreach Involvement					
Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
My belief is that outreach is a mission of the university	51%	32%	9%	6%	2%
I have a duty/responsibility as an academic/scientist to engage in outreach activities	42%	45%	6%	5%	2%
Engaging in outreach activities is enjoyable	59%	27%	8%	4%	2%
Engaging in outreach activities is beneficial	37%	24%	11%	20%	8%
Average	41%	32%	8%	9%	4%

participation in outreach probably reflects their need to initially focus on duties assigned to them such as teaching. They may also not have adequate academic training and experience to engage in outreach.

What Do Academics Do as Outreach?

Figure 1 shows the different types of outreach activities conducted during the 3-year period 2012–2014. The most common type of outreach activity conducted was trainings (32%), followed by workshops (24%), seminars (21%), consultancies (15%), and development projects (8%). In terms of the target sectors for outreach activities, the government sector, including different government departments, authorities, and institutes, was the key audience, with the highest percentage (43%). The involvement with industry was less than in other sectors (24%), indicating the need for improvement of the linkages with industry.

Less than 5% of the respondents also indicated some other outreach activities, such as serving as visiting lecturers for other universities, holding membership in professional bodies and serving as office-bearers, and representing the university in committees or meetings of different government departments and institutes at regional and national levels. These activities also enable academics to contribute their expertise to agencies outside the university.

Table 2 shows the number and the type of outreach activities conducted by academics for different sectors during the 3-year period during 2012–2014. The most common
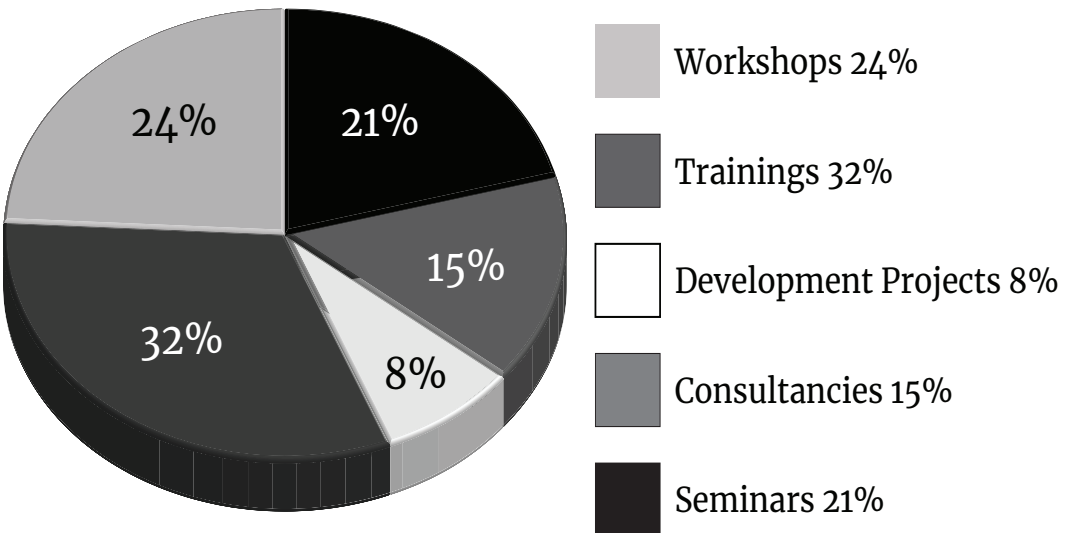
Figure 1. Different Types of Outreach Activities Conducted from 2012–2014

Outreach Activity	Community		Industry		Government		Total	
	No:	%	No:	%	No:	%	No:	%
Trainings	145	40	65	25	134	29	344	32
Workshops	88	24	51	20	127	27	266	24
Seminars	61	17	70	27	100	21	231	21
Consultancies	50	14	59	22	54	12	163	15
Development Projects	19	05	17	06	52	11	088	08
Total No:	363	33	262	24	467	43	1092	100

Table 2. Number of Outreach Activities Conducted by Academics for Different Sectors During the 3-year Period 2012 to 2014

Note: Government includes the different departments, authorities, research, and other government institutions. Community includes farmers, schoolchildren, and the general public. Industry includes basically the private production and service industries.

type of outreach activity was trainings (344). Within that, the highest number of trainings (145) was conducted for the community, which consisted of farmers, school-children, and the general public. In terms of the total number of outreach activities conducted by academics of the study sample (*n* = 124) during the 3-year period, the least involvement was in development projects (88). In terms of the sector of involvement, government ranked the highest (467), followed by community (363) and industry (262). The results clearly indicated that the involvement of academics with industry was less than with the government sector and with the community.

As indicated, most of the outreach activities were trainings, workshops, and seminars to transfer knowledge. This result, supported by key informant discussions, revealed the traditional view of linear knowledge transfer (top–bottom approach) from institutions to the end users. This model is more in line with the general agricultural extension approach. The basic assumption of this approach is that technology is generated and information is available that is not being used by end users, and if this knowledge could be communicated, practices would be improved (Axinn, 1988). These kinds of models are said to be traditional and top-down because the active participation of all
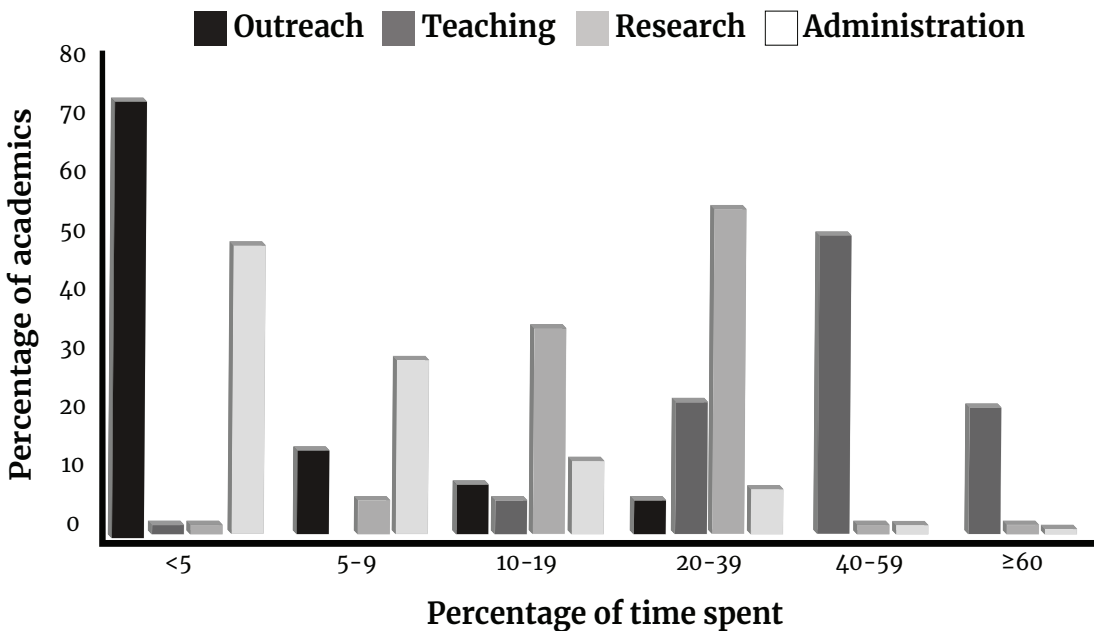
Figure 2. Self-assessment of Share of Time Allocated by Academics During One Week for Different Activities

involved parties in sharing of knowledge at different levels of technology generation and use is lacking. However, the term "outreach engagement" is meant more for sharing of knowledge and joint efforts with the stakeholders to address the problems faced.

How Much Time is Allocated for Outreach Activities?

Basically, academics are involved in teaching, research, administration, and outreach activities. Figure 2 shows the percentage of time allocated by academics for different activities during a week (8:00 a.m. to 5:00 p.m.), including weekends. Weekends were included since the majority of the academics are involved in postgraduate teaching and research and also in outreach activities during the weekends. This was so because even though the general working hours (8:00 a.m. to 5:00 p.m.) were considered a norm, most of the teaching, research, and outreach work in academia do not conform to these general working hours.

As illustrated by Figure 2, the majority of the academics (73%) spent less than 5% of their time on outreach activities. About 50% of academics spent 40%–59% of their time on teaching, and 54% spent 20%–39% of their time on research. In general, most of the academics devoted their time mainly to teaching activities, which is the core function of the university.

Teaching and research are considered the main role of a university. Therefore, academics devote their time mainly to teaching and research activities (Figure 2). Additionally, they also engage in administrative roles such as heads of departments, deans of faculties, directors of different units, and as the members of different subcommittees of their respective faculties and universities.

Perceived influence of time availability on outreach engagement was measured using the statement "There is no time to engage in outreach activities due to the workload of teaching, research, and administration." A 5-point Likert scale was given with the following response options: "very great extent," "great extent," "somewhat," "very little," "not at all."

According to the results, nearly half of the respondents (48%) stated that not having time due to the workload of teaching, research, and administration affected their extent of outreach engagement to a "very great extent" or "great extent." Accordingly, time availability is not a major factor affecting 52% of the academics' potential engagement in outreach activities. According to the Mann–Whitney U test, there was a statistically significant difference ($U = 1.356$, $p = 0.03$) between well-established universities and newly established universities in the impact of available time for outreach engagement. According to the mean ranks, academics in newly established universities claimed that they do not have time to engage in outreach activities ($M = 64$) compared to those at well-established universities ($M = 60$). According to the key informant discussions, the workload of the available staff of newly established universities is high due to lack of staff members in their faculties. Another contributing factor for the heavy workload of staff was that many of the newly recruited staff members were away on study leaves for their higher studies such as to obtain master's and doctoral degrees.

Presently, there is no accepted norm regarding how much time should be allocated by an academic in a Sri Lankan state university for outreach. Such a norm was not found in literature for other countries in the region as well. However, as outreach is one of the criteria for institutional review of Sri Lankan universities and higher education institutions along with nine other criteria, it would be beneficial if some guideline is provided to evaluate the level of outreach of faculties and correspondingly the level of outreach of individual academic staff members. It is noted that to become a professor, according to the grading scale given by UGC, it is essential to obtain a minimum of 10 points for the category of dissemination of knowledge and contribution to university and national development, out of a minimum of 105 points. It may be surmised that an assumption seems to be, even though not explicit, that roughly at least 10% of the achievements are associated with activities related to outreach. Accordingly it may be suggested as a guideline that an academic should devote approximately 10% of their time to outreach.

Even though the above value has been suggested for initial thoughts at an appropriate time when the need arises, it is noted that it is an extremely difficult task to set norms that are basically a standard for the whole

system. The time that could be allocated, and the contacts established, differ vastly between senior staff and newly recruited staff. Similarly, the contexts of established universities and the more recent ones are also very different in terms of resources that could be allocated to outreach, especially human resources where priority would be placed on teaching when the number of staff is limited or many of the new staff are on long-term study leave.

Further, it is also noted that although the university system has been operating for decades in Sri Lanka, this system has only recently begun to address the issue of norms for teaching and research. Given that norms for two well-accepted areas have experienced development only recently, it may be premature to set norms for outreach that need to be adhered to. The present need is to promote and obtain greater acceptance regarding the need for outreach, rather than trying to "force" a particular number of hours on an academic member. Thus, to restate, the value is only to give a suggestion for consideration when such a need arises in the system.

Outreach Strategies of the Faculties

Some universities in the world have formal, dedicated outreach centers as the outreach arms of the university and adopt different strategies to conduct outreach activities at the university. There were different outreach strategies in faculties of agriculture in state universities of Sri Lanka. However, outreach centers or units have been established only in a few faculties. AEU, AbC, and AgBC of the Faculty of Agriculture at the University of Peradeniya, University Interactive Cell in Faculty of Agriculture of the Eastern University of Sri Lanka, and Outreach Centre in Faculty of Animal Science and Fisheries in the Wayamba University of Sri Lanka are examples of such units. There were some teams/committees to coordinate outreach activities in some faculties where a specific outreach center/unit is absent.

Method of Coordination of Outreach Activities of the Academics

Coordination of outreach activities was, for most academics, achieved through individual/personal contacts (44%), followed by the dean or heads of the departments (37%). Only 18% of the academics had their outreach engagement through an outreach center or team in the faculty. It is important to utilize personal contacts/network to initiate and develop outreach engagement, but a formal mechanism to facilitate the process is a necessity. According to a key informant discussion conducted with a head of a department in Ruhuna University of Sri Lanka, there is no strong mechanism in the faculty for recording, monitoring, and evaluation of the outreach engagement of academics. Some academics do not even report their engagement to the faculty board since there is no mandated requirement. Accordingly, he pointed out that although the academics are engaged in outreach activities, there is no follow-up mechanism to evaluate the impact. Therefore, it is difficult to determine the effectiveness of such outreach work.

The key informant discussions confirmed that there was no formal mechanism, center, or office dedicated to outreach activities in many faculties of agriculture in the universities of Sri Lanka. In some universities, there were outreach mechanisms established by different programs and projects, but they were not sustainable. The main barrier to sustainability was inadequate financial support and less recognition and rewards for academics who were engaged in administration, coordination, and other work related to outreach activities. However, one recent outreach initiative—a mobile phone intervention in the mushroom industry by Faculty of Agriculture in University of Ruhuna in Sri Lanka (Wijerathna & Silva, 2014)—has been an example of a successful collaboration with a private mobile service provider. The project focused on the use of mobile phones for technology dissemination to small-scale mushroom producers. During a 6-month time span, 5,583 mushroom farmers accessed the program and obtained relevant knowledge elements for the enterprise. This project demonstrated that it is possible to have a sustainable private sector partnership even without a dedicated outreach arm. According to the key informant discussion with the activity coordinator of this project, it was successful due to the positive attitudes and commitment of the academic staff members. He also mentioned that the use of information and communication technology (ICT) enabled them to serve a larger community.

There was no full-time academic member or specifically recruited person for outreach activities in seven faculties of agriculture

out of eight. There was a permanent person recruited as a senior lecturer and to act as the director for only one outreach arm of the one faculty, namely, AgBC of the Faculty of Agriculture, University of Peradeniya. In addition, an academic cadre has been secured to serve in a similar capacity in the ABC of the same faculty. The director of the AEU is selected once in 3 years from the academic staff members of the Faculty Board. According to the key informant discussion conducted with the director of the AEU, it is important to have such a unit in the faculty to reach the public as the AEU rather than as individuals in order to maximize trust and recognition. The unit provides a platform for academics to engage in outreach. Furthermore, having such a unit is important because the reduction of bureaucracy streamlines financial handling and enables quick decision making. However, he highlighted the fact that the position needs high commitment due to the obligations for teaching and research as an academic. Further, he mentioned that the rewards and recognition for the commitment are less tangible. He also indicated the need for adequate office space and a dedicated staff member for clerical work and as an office assistant. It was observed that the success of the unit is dependent solely on the commitment of the person and on personal characteristics such as ability to develop a network with external constituents.

The directors of the ABC and AgBC are a permanent cadre position of the Faculty of Agriculture, University of Peradeniya. They report to the dean of the faculty. Therefore, the line of command is relatively short and thus less bureaucratic. According to the key informant discussion with the director of the AgBC, it is an advantage to have separate infrastructure facilities, including research labs, equipment, and a supporting staff. Furthermore, the challenge of the center is to earn money for its existence. The center is in a financial deficit since it does not receive money from UGC allocations. However, the center earns money by offering services to outside professionals, agencies, and organizations. According to the views of the director of the AgBC, the service to the farming community is neglected due to a lack of funding to provide free services.

In all other cases, academics of the faculty boards work as the directors, coordinators, and officers-in-charge in the outreach centers, units, and teams on a voluntary basis in addition to their teaching, research, and general administrative roles in the faculty. According to the key informant discussion conducted with the coordinator of the university–industry linkages at Eastern University, academics were reluctant to serve in these positions due to inadequate recognition and rewards and also because of time constraints. However, at present, outreach activities in most of the faculties have been promoted through the Quality and Innovative Grant (QIG) provided by the World Bank through the Higher Education for the Twenty First Century Project (HETC), and this is a positive trend.

Perceived Satisfaction of Academics With Their Outreach Engagements

Satisfaction of the academics in terms of quantity and quality of their outreach activities was measured. Only 31% of the academics who responded were satisfied with the outreach activities, and 38% were neutral in their response. More importantly, 21% were dissatisfied, and 10% were highly dissatisfied regarding outreach activities in comparison to teaching, research, and administration activities. The majority of the academics were highly satisfied about their teaching (69%) and research (69%), and 58% were neutral in response for the satisfaction about administration. This may be due to the low involvement of the majority in administrative work.

A Kruskal–Wallis test resulted in no statistically significant association between the two types of universities for satisfaction related to teaching ($x^2 = 0.116$, $p = 0.733$), research ($x^2 = 0.245$, $p = 0.621$), and administration ($x^2 = 0.071$, $p = 0.789$). However, there was a statistically significant relationship ($x^2 = 8.87$, $p = 0.003$) between well-established universities and newly established universities for satisfaction with outreach activities.

The academics in the well-established universities were highly satisfied and satisfied (69%) with outreach activities; in comparison, only 23% of those in newly established universities gave the same responses. Furthermore, only 24% of academics in the well-established universities were dissatisfied or highly dissatisfied about outreach, whereas 43% of those from newly established universities responded as dissatisfied or highly dissatisfied. This difference is probably due to more opportunities and facilities for outreach activities being

Table 3. Response of the Academics for the Statements on Subjective Norms					
Statement	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
My academic colleagues would approve the engagement in out–reach activities.	25%	48%	19%	6%	2%
My superiors (e.g., head of the department/dean of the faculty) would approve the engagement in outreach activities.	19%	62%	11%	6%	2%
My friends (nonacademic and family members) would approve the participation in knowledge and technology dissemination.	23%	56%	12%	7%	2%
Average	22%	55%	14%	6%	2%

available in well–established universities than at newly established universities. Furthermore, the academics of newly es-tablished universities have less time for outreach due to the workload of teaching, research, and administration.

Views on Approval and Support From Others for Outreach (Subjective Norms)

Subjective norms are the beliefs about whether a specific reference group would approve or disapprove of a particular be-havior, and that was measured using three statements. According to Ajzen (1999), ap-proval of the institutional community as well as family, friends, and other related outsiders is also an important factor gov-erning a particular behavior. Therefore, it shows the perceived social pressure for a given behavior.

In general, the majority of the academ-ics felt that outreach activities planned and implemented would get the approval and thereby the support of their academic colleagues, superiors (head of the depart-ment/dean of the faculty), friends, and family members (Table 3). The results thus revealed that in general the academics per-ceived obtaining the necessary support and motivation from the institute itself as well as from their families and outside friends to engage in outreach work. This approv-ing/supporting nature of the academics and superiors should be continued to improve outreach engagement by academics.

Factors Hindering Outreach Engagement

The ability to perform outreach tasks and the availability of resources and opportu-nities were important considerations in this study. Table 4 shows a summary of the responses given by academics for the statements given to assess the perceived hindering factors for outreach engagement.

The majority of the academics perceived that they have necessary knowledge and skills to engage in outreach activities and perceived that they have enough experience/training to engage in outreach activities. However, most of the academics agreed that the universities lack established net-works with government, the private sector, and the community for outreach activities. Furthermore, the majority agreed that they do not have a central mechanism/unit to coordinate outreach activities of their fac-ulties. Some academics (39%) perceived that their universities do not have a policy toward outreach engagement, and this could influence the outreach activities performed by them.

Table 5 shows the perceived effect of differ-ent resources (financial, human, and physi-cal) on outreach engagement. The majority of academics perceived that they do not have adequate financial, human, and physi-cal resources in their faculties to engage in outreach activities. Therefore, it is impor-tant to improve the human and physical resources and provide adequate financial resources necessary for outreach engage-ment. It was assumed that well–established universities and newly established universi-

Table 4. Response of the Academics Regarding Hindering Factors That May Affect Outreach Engagement					
Statement	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
I do not have necessary knowledge and skills to engage in outreach activities.	2%	2%	6%	40%	50%
I do not have enough experience/training to engage in outreach activities.	1%	12%	14%	29%	44%
Lack of established networks with government, private sector, and community.	17%	47%	17%	14%	5%
The university structure is not adapted for outreach activities.	10%	32%	22%	27%	9%
University norms, culture, and procedures do not support outreach activities.	5%	20%	20%	34%	21%
Curriculum of the faculty does not support outreach activities.	6%	40%	14%	20%	20%
Inadequate infrastructure facilities for outreach activities.	10%	42%	16%	23%	9%
Geographical location of the university does not support outreach activities.	9%	17%	18%	34%	22%
I am not aware of the opportunities to engage in outreach activities.	23%	33%	19%	20%	5%
The university does not have a policy toward outreach engagement.	8%	31%	26%	24%	11%
There is no central mechanism/office to provide support and coordination.	27%	33%	15%	15%	10%
Average	11%	28%	17%	25%	19%

Table 5. View on Extent of Influence of Resources for Outreach					
Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Financial resources are not enough to engage in outreach activities	19%	44%	19%	10%	8%
Human resource is not available to adequately engage in outreach activities	27%	32%	19%	6%	16%
Physical resources are not available to adequately engage in outreach activities	12%	40%	26%	16%	6%
Average	19%	39%	21%	11%	10%

ties would differ in extent of resources and influence on outreach activities. However, based on the results of the Mann–Whitney U test, only physical resources showed a statistically significant difference (U = 1541, p = 0.048) between the two types of universities. Well-established universities may have more physical resources than the newly established universities. Accordingly, a lack of physical resources could be a strong influence on outreach involvement of academics in newly established universities. Therefore, priority should be given to newly established universities in terms of physical resource development.

Grade and Outreach Engagement

It was assumed that academics from all designation categories may be involved in outreach activities similarly. However, according to ANOVA results (F = 3.243, p = 0.006), there was a statistically significant difference between the different designations and outreach engagement. The results of Duncan mean separation are given in Table 6. There was a gradual reduction in the number of outreach activities conducted by the academics from senior professors to probationary lecturers. The probationers are probably less engaged in outreach because they are within their first few years in the system as lecturers and thus are concentrating on their teaching roles, higher studies, and research. Their opportunities also may be limited. As an academic gets into senior positions, they also have more links, contacts, and responsibilities to cater to national and regional problems.

As the results indicate that the outreach engagement of junior academics is lower, they should be encouraged and be given opportunities to engage in more outreach activities than they are involved in at present.

Does Gender Matter in Outreach Engagement?

Among the respondents, 56% were male academics and 44% were female. In general, women have a dual role to play as a professional and as a mother or a wife, and gender stereotyping may sometimes constrain the women scientists. Thus, it can be assumed that time availability and cultural constraints limit the women academics in engaging in outreach activities. A study conducted by Dudo (2012) also identified no links between a scientist's gender and his or her level of public communication activities. However, he indicated that gender may have an impact in public communication activities of scientists and that this possibility requires additional scrutiny. Supporting this idea, Roten (2011) reported that the attitudes toward public outreach and engagement are the same among men and women scientists, but such activities are performed significantly more often by men scientists than by women scientists. Similarly, in this study as indicated by the ANOVA model (F = 17.558, p = 0.000), males had a significantly greater involvement than females in actual outreach activities (number of activities conducted during the past 3 years).

In contrast, Ecklund, James, and Lincoln (2012) reported that women scientists are markedly more involved in outreach work than men. However, the context examined for the present study was in Sri Lanka specifically. The results suggest that in design-

Table 6. Mean Value for Outreach Activities Engaged in by Academics According to Their Designation		
Designation	**Mean**	**SDE**
Senior professor	56.400	15.215
Professor	45.235	8.252
Associate professor	23.333	19.643
Senior lecturer I	24.227	7.254
Senior lecturer II	18.587	5.016
Lecturer confirmed	9.667	13.890
Lecturer probationary	6.680	6.804

ing and developing strategies to improve the outreach engagement of men and women scientists, known gender differences should be taken into account. The present study suggests that women academics should be more encouraged to engage in outreach activities.

Suggestions to Improve Outreach Engagement

It is important to look at academics' suggestions to improve outreach engagement. Figure 3 illustrates that 89% of academics in this study highlighted the need for financial flexibility in universities for engaging in outreach activities. It was revealed that it is difficult to utilize money received from outside organizations for outreach activities due to strict financial regulations and procedures of the university. For example, it takes a long time to obtain approvals due to the universities' bureaucratic financial management systems. It was also mentioned that a considerable percentage of the money has to be given to the university as an administrative fee.

About 87% of respondents proposed including outreach as a component of the curriculum to improve outreach engagement of the students as well as the academics. This suggestion would help to make outreach engagement compulsory by incorporating it in the academic program. As shown in Table 4, 46% of academics agreed or strongly agreed that the curriculum does not support outreach engagement; another 25% gave a neutral response. Including outreach activities in the curriculum is important to promote outreach engagement not only of academics but also of the students by enhancing their opportunities for exposure to real-world experiences.
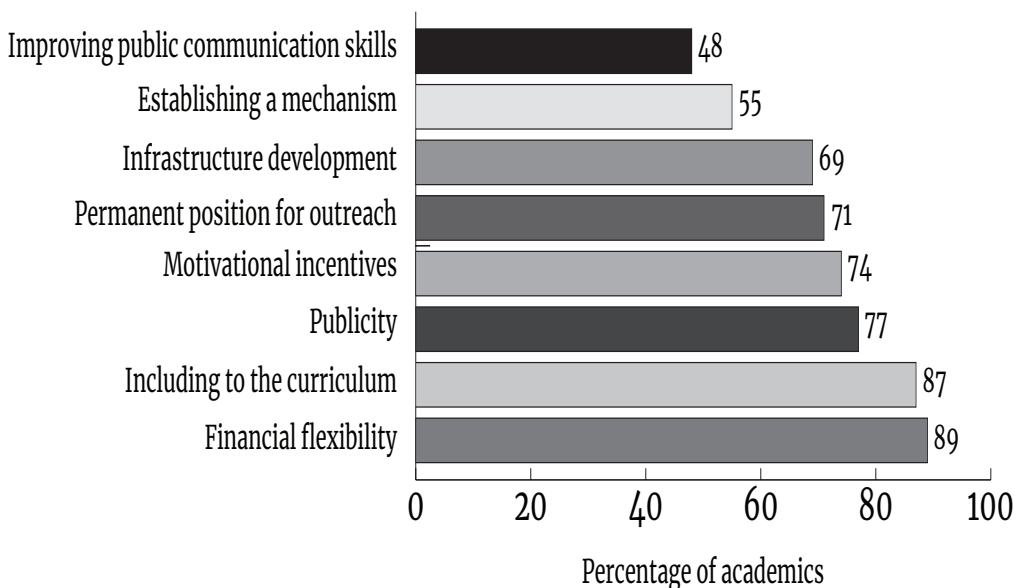

Figure 3. Suggestions of the Academics to Improve Outreach Engagement

Publicizing outreach activities was suggested by 77% of the responding academics, who claimed that the community and industry were not aware of the outreach arms/programs of the faculties. The suggestion of Self, Foster, and Sauser (1995) to look at outreach as a "service industry" and adopt the "marketing" concept is important in this regard. Establishment of new linkages and creating more demand from outside organizations are thus important. Also significantly, 74% of the academics in the study sample stated that it is beneficial to improve motivational incentives.

A fully devoted permanent position to coordinate the outreach activities of the faculties was suggested by 71% of respondents, and 69% perceived that it would be important to develop the infrastructure facilities of the faculties in order to facilitate outreach engagement. Specific suggestions included developing laboratories and equipment, as well as transport facilities. Such development may be mostly needed by the newly established faculties, given that human resources and other infrastructure facilities vary across the faculties. The need for an outreach mechanism was suggested by 55% of the academics. Only one of the faculties of agriculture had three established outreach centers/units. Interestingly, 48% of the responding academics suggested improving the interpersonal and public communication skills of the academics, including writing for newspapers, public speaking, and communication skills in electronic media such as radio and television.

Consideration of the above suggestions in planning and implementation of strategies to improve outreach activities of the faculties of agriculture would be of immense importance to strengthen outreach programs carried out by these faculties in the universities of Sri Lanka.

Implications

The academics of the faculties of agriculture in the universities of Sri Lanka are engaged in outreach activities to a limited extent and contribute in some measure to agricultural knowledge and technology dissemination to the community, industry, and various government departments, authorities, and institutes. However, in general, their involvement is not at a satisfactory level. The average number of activities per academic per year was 2.9, and the majority of questionnaire respondents spent less than 5% of their working time on outreach activities. More importantly, the majority is either dissatisfied or highly dissatisfied with outreach activities in comparison with teaching, research, and administration; indicating a need for more administrative support and coordination.

The most common type of outreach activity was trainings (32%) conducted for the community, which includes farmers, schoolchildren, and the general public (Figure 1). Other outreach activities were workshops (24%), seminars (21%), consultancies (15%), and development projects (8%). The lowest number of interactions occurred with industries in comparison to the involvements with government institutes and the general public.

The general mechanism of the academics for engaging in outreach activities has been through personal or informal contacts. Only one faculty has three well-established separate centers for outreach. Well-established universities engaged more in outreach activities than newly established universities during the period 2012–2014. Furthermore, more academics in well-established universities reportedly were "highly satisfied" or "satisfied" (69%) with outreach activities in comparison to those who were in newly established universities (23%).

Academics are generally confident enough in their competencies to engage in outreach. The study also revealed that, in the sample population, male academics showed a higher engagement in actual outreach than female academics during the period 2012–2014.

Recommendations

Recommendations for the Department, Faculty, and University Level

Measures should be taken to improve the general level of satisfaction and motivation of academics to engage in outreach activities. There should be a mechanism for recognition and rewards for outreach engagement, such as adequate recognition in promotional guidelines and in awarding research and development grants.

Promotion of favorable attitudes of academics toward outreach engagement and subjective norms would be beneficial. Motivational activities, such as formal and

informal approvals for such outreach activities and appreciation of services rendered by the academics from superiors, including heads of the departments, deans of the faculties, and vice chancellors of the universities, are important. Female academics should be motivated and encouraged more, as their engagement in outreach is low compared to that of males.

Outreach, too, should be an integral part of the academic curriculum of the universities. There should be a mechanism to facilitate the interactions of all the academics for outreach engagement, in contrast to the current predominance of working alone according to personal or informal contacts and agendas. Although the UGC has identified outreach as a mandate of universities, the academics are not much aware of that. Therefore, it is important to make them aware that outreach is an expected activity. All academic staff members should be aware that community engagement, consultancy, and outreach activities are part of the evaluation criteria in reviewing higher educational institutions in Sri Lanka. This would act as an additional motivating factor for academics to be involved in outreach activities and for faculties to promote outreach.

It is important to have an overall clear mission in the faculties for outreach engagement. It would be beneficial to have a formal outreach mechanism in faculties to promote outreach activities while providing opportunities to all stakeholders for joint efforts in learning, sharing knowledge and experience, and, especially, in solving the problems faced. Fully devoted outreach arms should be established at faculties or universities to facilitate this process. A permanent academic–administrative position should be established to coordinate the activities, as the academics are busy with their teaching, research, and obligatory administrative work. However, success does not solely depend on having a separate outreach arm or a dedicated staff member for outreach. The personal characteristics of the staff members are important determinants of success. The staff should be carefully recruited, especially when there is a permanent position for outreach, because success could be largely dependent on personal characteristics such as leadership, networking ability, public relations and communication, and, above all, motivation, interest, and commitment.

Recommendations at National and Policy Level

Designing strategies and preparing guidelines to improve outreach activities of the faculties of agriculture in the state universities in Sri Lanka at the national and policy level is of utmost importance. The outreach mission of the faculties of agriculture should be clearly defined. At present, the universities perform their outreach activities on their own without a clear integration with the national agenda. Therefore, the faculties of agriculture should be included in the formulation and execution of national research and extension strategies. Strategies should not overlap and conflict with already functioning external mechanisms, but should be mutually beneficial.

Adequate infrastructure should be developed to facilitate the outreach process, especially in newly established faculties of agriculture. Flexible administrative procedures in financial handling for outreach activities and possible strategies to finance the outreach activities should be explored. Also, establishing a clear innovation patent policy on the ownership of inventions originating in universities is important to encourage innovations by academics.

Many of the above recommendations would also enable taking into consideration the suggestions given by academics during planning and implementation of strategies to improve outreach activities of the faculties of agriculture in the state universities of Sri Lanka. The main suggestions were financial flexibility in universities for engaging in outreach activities, including outreach as a component of the curriculum, popularizing outreach activities, improving incentives to engage in outreach, establishing a permanent position for outreach, and developing necessary infrastructure facilities. These concerns should be addressed not only at the university level, but also at the policy level at higher forums.

Recommendations for Future Studies

Structural and policy arrangements of the universities, government institutes, and industries to facilitate outreach activities of academics should be studied in detail to identify the strengths, weaknesses, and opportunities for development through incorporation and coordination with each other. In-depth studies are required to investigate the activities in detail in relation to inputs

and their outputs and impacts. Case studies will also be useful in understanding specific situations, problems, and solutions. This study mainly focused on outreach activities of individual academics. However, it is important to assess the involvement and mechanisms of different units/centers/departments and faculties for a comprehensive understanding about the outreach activities of academia. Furthermore, it is also important to investigate the outreach engagement of students in relation to academic programs and extracurricular activities.

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Evaluating the Complexity of Service-Learning Practices: Lessons From and for Complex Systems Theory

Sarah Burton, Sharon Hutchings, Craig Lundy, Andrea Lyons‑Lewis

Abstract

This article examines the intersection of service-learning with complex systems theory. It is based on a research project we undertook to explore whether complex systems theory might be useful for better understanding the dynamics of service-learning practice and thus for assisting in the design, running, and evaluation of service-learning projects. Additionally, we were interested to find out whether the specifics of our service-learning experience and knowledge, what we refer to as "critical service-learning," might have something of value to contribute to the interdisciplinary and ever-broadening paradigm of complexity studies. Our findings respond to these two tasks in the affirmative: We conclude complex systems theory can be of benefit to service-learning practice in a conceptual, operational, and strategic capacity. In instances where critical service-learning practice initially appears to be incongruent with complex systems theory, conversely these instances instead highlight precisely how service-learning could advance the analysis of systems in complexity studies.

Keywords: critical service-learning, complex systems theory, community engagement

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For those involved in the delivery of service-learning, it is self-evident that this practice is complicated and complex. But could it be that service-learning is "complex" whereby this term is said in the technical sense given it by *complex systems theory* (CST)? This article will share the findings from research we recently completed that evaluated the complexity of service-learning practices in our university department. In addition to assessing the appropriateness of CST for understanding the dynamics of service-learning, our research also sought to (a) explore the extent to which the framework of CST could identify strengths/weaknesses in our service-learning practice, leading to adjustments in practice, and (b) explore whether our experience and knowledge of service-learning might in turn have insights to offer the interdisciplinary paradigm of CST.

Although CST is by no means a new conceptual paradigm for assessing social–physical systems and phenomena, its use in service-learning and community engagement environments is still relatively novel. To the best of our knowledge, this research is the first to explore the intersection of CST with the knowledge and practices of service-learning. We believe there is much to be gained from this encounter. To begin with, CST has proven to be a powerful tool for assisting community-led transformation (Durie & Wyatt, 2013), and there is every chance that service-learning practice could benefit from drawing on these findings. In the other direction, the field of service-learning has itself produced much knowledge about systemic processes and transformation that could potentially enhance our understanding of complex systems. We would thus anticipate that there are many and varied contributions that could be made in this area to cross-pollinate CST and

service-learning. Thus, our intention with this article is not to provide a definitive and comprehensive account of the CST–service-learning nexus; rather, we hope that in time it will be viewed as the opening salvo of a long and fruitful exchange.

For the service-learning practitioner this article is intended to open up one new and potentially useful avenue for theorizing and reflecting on practice, with the aim of developing and validating that practice. The very complicated and complex sets of relationships and structures involved in facilitating service-learning are understood and deeply felt by all of us working in this field and have indeed been theorized elsewhere (see, for example, Osman and Castle's [2006] use of critical education theory and McMillan's [2011] work using activity theory). What a complex systems lens might bring to us is a way of systematically describing, naming, and understanding our service-learning practice and helping others—such as senior administrators and managers, but also students—to appreciate this complexity too. Some of the principles of CST had immediate and deep resonance for the current authors as service-learning practitioners. As the article will explore, key characteristics of complex systems—such as their open, emergent, and nonlinear nature—appear to align well with the features of service-learning. Aside from motivating the research, this apparent synergy indicates why and how CST can be useful for the analysis of and approach to service-learning.

After providing some contextual background to our service-learning endeavors and the paradigm of complex systems theory, the article will outline our research activity and the key findings—namely, the role that value alignment, structures and systems, and time and rhythm play in the success or failure of service-learning projects. This will be followed by an analysis of the "complexity" of service-learning at Nottingham Trent University (NTU), after which we will engage in a more reflective discussion about the lessons from CST for service-learning, and vice versa.

Background

Critical Service-Learning at Nottingham Trent University

As practitioners and scholars of service-learning will be well aware, a significant amount has been written on what service-learning is and how it could or should be defined. Reviewing the details of this literature is beyond the scope of this article. Nonetheless, it is necessary to provide a brief overview of how we understand and practice service-learning here at Nottingham Trent University, so as to give some context to our recent engagements with complex systems theory and the research this article is based on.

We began service-learning in our Department of Sociology at Nottingham Trent University (NTU) in 2013 with a small pilot of two community partners and two small groups of sociology students. The following year it became credit bearing and core for three courses in the department (BA Sociology, BA Criminology, and MA Sociology). Since the pilot we have moved deliberately toward developing "a critical approach that is unapologetic in its aim to dismantle structures of injustice" (Mitchell, 2008, p. 50). In our view, this commitment to social justice, and not simply a focus on student transformations, is key to differentiating *critical* from *traditional* service-learning (Butin, 2015; Martin & Pirbhai-Illich, 2015; Mitchell, 2008; Mooney & Edwards, 2001). This intentional direction is in response to both our disciplinary focus and the significant issues evident in our city. To highlight some of them, Nottingham is ranked the eighth most deprived district in England out of a possible 326 (Department for Communities and Local Government, 2015). Nottingham also has the lowest household disposable income in the United Kingdom, high levels of hate crime, and increasing levels of child poverty (End Child Poverty, 2018). Our city is home to two of the largest universities in England, yet statistics also show that one suburb of Nottingham has the lowest number of young people applying for university places in the United Kingdom. This rather bleak picture of our city sets the justification and context for our service-learning activities—we want to work in solidarity and toward change with our community. As a result, service-learning for us is less a pedagogical practice and more an active partnership with the community working on the pressing issues in our city.

In making these claims we maintain that the student experience is not depoliticized. In our service-learning we ask students to

unravel the root causes of why their service exists in the first place and to do so within a disciplinary framework of public sociology and public criminology (Barrera, Willner, & Kukahiko, 2017; Butin, 2010; Mitchell, 2008; Petray & Halbert, 2013). In attempting to ensure that our service-learning does not reinforce privilege, the establishment and promotion of shared values that can guide practice takes precedence in our work (Butin, 2010; Jerome,2012; Ledwith, 2015; Marullo, 1999; Mitchell, 2008). These values center on working in partnership on authentic community needs, mutual and reciprocal benefit, critical reflective practice, and creating opportunities for a more porous and dynamic university (Duncan, Manners, & Wilson, 2014). Furthermore, we hope to enhance disciplinary connections and for students to understand root causes from their own experiential perspective. The pedagogical aspect of our service-learning is thus encompassed within a broader framework of social justice and activism that operates through collective endeavors, thus challenging the dominant discourse of "the student experience" as being individualized and consumerist.

In practice what does this look like? In the current academic year, 2018–2019, this involves around 280 students across the three courses, working with a range of community partners. This number is set to rise to approximately 350 next academic year. All of the community engagement and partnership work, academic preparation, and the matching of these two parties takes place within the department and is done by two academic staff, one of whom is part time. Throughout the duration of the service, workshops and seminars are supported by six additional colleagues. Students work in groups of varying sizes in partnership with not-for-private-profit organizations across the city on social justice projects identified by the community partner. Numbers of partners vary each year but average 25, which generally equates to the same number of projects. The actual service varies according to the organization, but examples might include undertaking a focused research project on an issue—for example, understanding hate crime across the city, helping at a community kitchen in a neighborhood, and working with activist groups on issues such as street harassment or homelessness in the city. Other projects have been more ambitious and have an ongoing impact not just on local communities but on national debate and policy. Students, we argue, should not "fill" core business nor draw resources from the organization. Rather, through projects agreed on with the partner, students undertake work that the organization would otherwise not be able to do, leading, we hope, to transformations in the city and our students.

The next section will attempt to briefly explain complex systems theory. As noted in the introduction, for the current authors there was an immediate recognition of some of the elements of CST in the practices of service-learning. That said, we recognize that complexity theory can be challenging when first encountered, particularly in the abstract. To assist in this regard, examples of the principles outlined below will be explored in relation to service-learning in the Findings and the Further Discussion sections, in contexts that may be more familiar to the reader.

Complex Systems Theory and Community Engagement

Complex systems theory, or complexity theory, is a theory that describes how phenomena emerge through the interaction of elements in a system. Initially developed in the natural sciences to explain and model biological and physical change, CST has since been appropriated and further developed by other fields across the social sciences and humanities. For example, in economics CST has been used to better understand market fluctuations (Beinhocker, 2007), and in health policy the principles of complexity have been deployed in order to improve community health outcomes (Durie & Wyatt, 2007; Hawe, 2015). Other examples include the use of CST for assessing the dynamics of systems and problems that involve both human and nonhuman components, such as weather systems and traffic flows. CST has been closely affiliated with chaos theory and nonlinear dynamical systems theory; however, it should be noted that CST is a broad and contested paradigm lacking consensus as to its precise definition. In other words, CST is not a formalized system of axioms and theorems, nor can its foundational principles be confined to a narrow field of scientific theory. That being said, researchers who draw from and apply CST generally agree on the following:

- A complex system is composed of a large number of elements that interact reciprocally with each other

and their environment, which is to say that elements within a complex system are coadaptive or coevolving.

- Following from the above, a complex system is an open system (rather than closed) that continually responds to changes in the environment, just as the environment itself adapts to changes among its elements (Durie & Wyatt, 2013).

- As such, a complex system cannot be reduced to the sum of its component parts, for it holds the potential to produce new phenomena and characteristics that are emergent from the dynamic relations of elements within the whole and their environment.

- These dynamic relations are nonlinear as opposed to linear, which is to say that (a) the system has a disproportional relation between inputs and outputs, and (b) the system disobeys the superposition principle, where the net response caused by two or more stimuli is the sum of the responses that would have been caused by each stimulus individually. As a consequence of this, a small event can lead to a big change—the so-called butterfly effect, in which the flapping of a butterfly's wings leads to wide-ranging systemic changes.

- Due to the open, emergent, and nonlinear characteristics of complex systems, there is limited predictability as to how the system will change over time (with such knowledge often dependent on the extent to which facets of the system can be mapped onto linear schema that serve as temporary estimates).

- Nonetheless, complex systems are path dependent or historically dependent, which is to say that the specifics of a developmental progression play an active role in determining the outcome of a complex evolution.

- Operative in complex systems are negative and positive feedback loops, the former of which return the system to its initial conditions (by making adjustments to cancel out emerging divergences), and the latter of which amplify divergences.

- When divergences within a complex system are amplified, taking that system far from equilibrium, the system is said to be at the *edge of chaos*—that is, in a region between the prior ordered state of the system and terminal chaos. In this region, self-organization occurs through the exploration of *adjacent possibles*, leading to the emergence of a new schema—a *phase transition* (Kauffman, 2000).

When assessing the complexity of systems, it should be borne in mind that complex systems will rarely if ever display all of the above characteristics in their fullness at every moment. This is an important point to make, for it reminds us that complex systems transition through different phases and the absence of any particular characteristic from the above list at a given time does not necessarily mean that the system is noncomplex. For example, a complex system may experience a long period of stability with minimal emergence, after which an event sparks a process of divergence leading to systemic change. An assessment that is restricted to the period of stability might therefore incorrectly conclude that the system did not display characteristics of complexity.

A recent paper by Durie, Lundy, and Wyatt (2018) has demonstrated the significance of attending to such nuances when evaluating the complexity of social systems. In their study of community engagement projects that involved partnerships between academics and people/institutions outside academia, the research results initially appeared to be contradictory: Although some successful partnerships clearly exhibited characteristics of complexity, others did not. With further reflection, however, the researchers accounted for this discrepancy by taking into greater consideration the particular phase that projects were in when exhibiting complex or noncomplex characteristics. As they concluded, CST is indeed a valuable paradigm for evaluating and designing community engagement partnerships, provided that a multiphase model is employed that attends to the differences between (1) the *engaging phase*, in which relationships and parameters for engagement are developed; (2) the *project phase*, in which the now-constrained project is car-

ried out or delivered; and (3) the *follow-on phase*, in which evaluation of the completed project and renegotiation of potential future engagements occurs. According to this multiphase model of engagement, the first and third phases display characteristics of complexity, whereas the second does not in projects that are "successful" (Durie et al., 2018, pp. 127–130).

Building on research in the social sciences that draws on CST, and in particular the work just described, our research sought to explore whether CST might be of use to service-learning and vice versa. For example, could the three-phase model proposed by Durie et al. (2018) help us to understand and potentially reshape some of our service-learning practices? And in the other direction, might the principles and experiences of service-learning at NTU provide lessons, or at the very least additional examples, that are of use for our appreciation of social complexity?

Methodology

The research might best be described as employing a case study design, with the case being NTU's service-learning provision and the "embedded units" (De Vaus, 2001) being community partners, students of different levels and disciplines, and staff. Structural elements of the service-learning provision are also units to be analyzed, such as assessment types and timings. Including the widest range of embedded units, we aim to understand more than "something qualitatively different from, that which any constituent element of the case could tell us" (De Vaus, 2001, p. 221). The inclusion of different elements means that a variety of different methods may be appropriate and necessary (De Vaus, 2001), and in our research we included one-on-one in-depth interviews, focus groups, and a participant validation event.

An important strength of case studies is their ability to be used for theory testing, which is a central aspect of our research. De Vaus (2001) claims that they "seek to achieve both more complex and fuller explanations of phenomena" (p. 221), enabling both ideographic and nomothetic explanations. This is important for us, as it will allow us to identify unique elements of our practice as well as to consider what we can generalize about complex systems theory and its value for understanding what

makes a successful service-learning project.

Case studies are intended to study "wholes rather than parts" (De Vaus, 2001, p. 231), where there is a small number of cases with a large number of variables. The application of CST to our service-learning means that we are conceptualizing our service-learning as a system, as a whole, and are keen to explore how the large number of variables or elements interact to produce a successful outcome or not.

Within the larger case, three distinct service-learning projects, embedded cases, were selected for analysis: one BA Criminology project, one BA Sociology project, and one MA Sociology project (Table 1). As well as spanning the three courses in our department where service-learning is a core element, the three cases were selected using a form of theoretical sampling, allowing us to access the social processes of interest to our research, and this led to the selection of cases or participants "where the phenomena in which the researcher is interested are most likely to occur" (Henn, Weinstein, & Foard, 2009, p. 182). As we were seeking to understand whether CST could help us to understand what makes a successful service-learning project, we selected projects that we perceived to have achieved various levels of success—based on anecdotal evidence—as well as having a variety of project trajectories. Students, community partners, and academic staff involved in each project were interviewed, providing a holistic understanding of the processes involved in each case.

One-on-one interviews with community partners and focus groups with each student project were conducted by a researcher who was not part of the teaching team. We were concerned with preexisting relationships and the extent to which they might cloud the research relationship and, in the case of the students, the power imbalance between them and an academic member of staff who had taught them and graded their work. A focus group of the academic staff who had developed and taught the various service-learning modules was facilitated by one of the current authors who sits outside the service-learning team. Finally, a negotiated feedback session was organized to share the initial findings of the project with the research participants, allowing for an evaluative discussion that fed back into the analysis of the data and led to refining the cross-cutting themes. The approval of

Table 1. The Case Studies
Project A (BA Criminology) This project involved seven students working with an anchor organization in a Nottingham neighborhood on a project designed to help new arrivals to the city to integrate better with the help of a "welcome pack." This involved interviewing members of the community for whom the welcome pack was created. The project's trajectory was smooth, with few obstacles or unexpected events; the project outcomes were achieved with all the information for a welcome pack researched and pulled together by the students. The community partner and the students perceived it to be a success.
Project B (BA Sociology) This project involved six students working with a very small community organizing project, seeking to promote social action in Nottingham neighborhoods. The project aimed to address the divide between younger generations and older generations of social groups in Nottingham, challenging the perception that older people and younger people have little in common and therefore have little to offer the other age group. The output of this project was to hold a meet-and-greet event across all age groups whereby life stories were shared with one another and commonalities discussed across the generations. Numerous obstacles occurred during the project phase: For example, the sole employee of the organization did not live in Nottingham and could not meet the students for the first few weeks of the project phase. The outcome desired by the community partner was not met in that the meet-and-greet event did not take place. The project was perceived to have failed by the partner and by the students.
Project C (MA Sociology) This project involved working with an organization run by and for migrants and refugees to Nottingham, aiming to support their integration. This was part of a wider collaborative project with other community partners who were producing multiple outputs for policy change. One of the MA students, X, already volunteered there and took the initiative to develop the service-learning project. It started as a solo project for her (most MA students do solo projects), with two other students being recruited partway through the project—which is not a standard trajectory. X was the lead student, mediating between the organization and the other students, with the latter never going to or meeting with representatives of the organization. The project was deemed a success by both the community partner and the students.

the School of Social Sciences Research Ethics Committee was obtained prior to data gathering.

Findings

The data was subjected to two levels of thematic analysis: an initial level that aimed to articulate emergent cross-cutting themes and a second level that examined the data through the lens of CST.

Cross-Cutting Theme 1: Values

It is perhaps to be expected that when reflecting on their service-learning projects—how they began, proceeded, and ended—many interviewees commented on the importance of values, such as the values that motivated their initial involvement and/or guided their activity. For example, one student from Project A said that their reason for joining the project was that they identified with the people that the organization provided services for, and that they wanted to assist those in a similar situation. This indicates the significance of value alignment between participants in a project. It must be noted, however, that close value alignment is not always necessary for the success of a project, and it certainly does not guarantee it. Moreover, value alignment can undergo processes of divergence or convergence during the course of projects.

These contrasting processes were borne out in the projects that we examined, as shown in Table 2. Project A, which was deemed successful by all participants, exhibited a tight alignment of values from the early stages of the project and throughout, with no appreciable shift in the quality or closeness of their commitments. Project B also commenced with a close alignment of values that was maintained through the project; however, it was agreed by all that the project ended in failure due to a range of other reasons, including poor communication and a loss of trust, leading to a lack of motivation. Unlike Projects A and B, the partner organization for Project C did not have a preexisting relationship with NTU, nor were they familiar with service-learning. But it so happened that this organization took value alignment very seriously and had established processes for ensuring that this occurred between collaborators prior to the commencement of the project. According to the participants in this project, the process of value alignment during the engaging phase of the project was central to their subsequent success.

> [W]e interviewed them, because that's what we do and we know how to do that. Now I know how to work out who's a good student and a bad student, and we did that quickly with [X], we said she is a good student. I would say that it worked for us. . . . She was very honest from the beginning; she mentioned that . . . there was a passion although she had uni work, she was organised. (Project C partner)

Cross-Cutting Theme 2: Structures and Systems

The importance of structures and systems to the functioning of the service-learning projects was most evident, though in different ways. The students of Project A, which was thoroughly successful, made use of meeting patterns initially formed by the module timetable to ensure regular and familiar modes of communication. As for the partner organization, they brought to the project well-established institutional structures for engaging with students, which were said to have greatly assisted the smooth running of their project. The same was the case for the partner organization of Project C, which had strong structures in place prior to the engaging phase and systems for supporting the students. As the partner explained:

> As an organisation, as part of commitment, if we take on a student, we need to be prepared, we need to have a job for that student, we don't expect them to come here and start twiddling their thumbs because they don't know what to do. When they come here we want to know what they're going to do. How they will be supported and all of that. (Project C partner)

This project also benefited from one student serving as the liaison between the partner and student group, with regular meetings to brief both groups. This communication system emerged dynamically through the course of the project. Although it seems to have assisted the smooth running of the project, it would be difficult to generalize and recommend this system more broadly, since it seems just as likely that it could be a hindrance in other situations.

As for Project B, which was deemed a failure by participants, there was a distinct lack of structures for engagement between the students and partner. This appeared to hinder the progress of the project, ultimately leading to its premature end. For example, the initial meeting between students and partner was delayed by several weeks, and when they did eventually meet, there was

Table 2. Value Alignment Across the Projects			
	Project A	**Project B**	**Project C**
Successful?	Yes	No	Yes
Values aligned in engaging phase?	Yes	Yes	Yes
Shift in alignment during project phase?	No	No	No
Previous experience with NTU service-learning?	Yes	Yes	No

very little structure put in place to ensure the project's objectives were going to be met by the intended deadline. As the project disintegrated, the partner withdrew from the engagement, and the students turned their focus to ensuring that they were still able to complete the module by satisfying the assessment demands.

Cross-Cutting Theme 3: Time and Rhythm

All participants spoke of issues relating to time and rhythm and how this impacted the levels of success of their project. Participants spoke of "good time-keeping" relating to punctuality and meeting deadlines, being aware of and accommodating other commitments that students or the partner organization had, setting aside time for certain elements of the project, and understanding the ongoing nature of the project's long-term aims. Establishing the "time" and "rhythm" at the beginning of the project was crucial in ensuring that the rhythm continued throughout.

For Project A, the members spoke of setting informal and unwritten ground rules very early on regarding punctuality and deadlines. Also, as the project went on, a rhythm developed that allowed the students to assess the project structures and flexibly accommodate any changes. For example, the students realized that meeting physically every week was unnecessary and that communication could instead occur through online updates and scheduled meetings when needed. Another element that aided this flexibility without hindrance was the partner's knowledge and appreciation for the students' additional workload outside the project.

> So, in terms of me managing the project it was me managing their workload and making sense of that with them but also making sure that we were fulfilling their university criteria . . . it was important that they felt that they were being successful both in their studies and in doing a project that had some meaning to it. (Project A partner)

Project C also had positive experiences of time and rhythm, but for them this arose from the flexibility and alteration of time and rhythm throughout the project. As an example, on two occasions the deadline for this project was pushed back, but the stu-

dents accommodated this by shifting their other work around—an outcome that the students were grateful for later in the year.

> With service-learning as well, there were deadlines that we had to produce our poster presentation and then was it two days after that something needed to be submitted to [teaching staff member], what we'd actually done. Ours had already been sent off and everything created but for other people, some of them are still probably doing service-learning now having given only a small brief. (Project C student)

Project B operated quite differently from the two described above. Although the students spoke of bonding a lot in the first few weeks of the project, little progress was made on the actual work of the project. By the time the students met with their partner, a pattern of inertia had already set in, making it difficult to generate momentum. In their words, the project took "too long to begin" and was replaced with a sense of "I'd rather just get it done with now." The partner then reinforced and solidified this negative sentiment:

> So if I was to show you the dates [of e-mail communication] you'd see how derailed it became right from the beginning because only one person sent me back the first ya know research task. So then where . . . what am I supposed to do, follow them all up individually? Well that's just going to eat up all of my time, and I'm not going to do that, you know? (Project B partner)

Although the three themes identified in the research findings came through very strongly individually, we also saw overlaps and interlays between them. Figure 1 uses a Venn diagram to illustrate examples of this. For instance, issues of time and rhythm overlap with systems and structures in instances where community groups and the university operate according to different calendar and/or funding cycles (e.g., the academic year and grant timelines).

The Complexity of Service-Learning at NTU

Service-learning at NTU is clearly com-
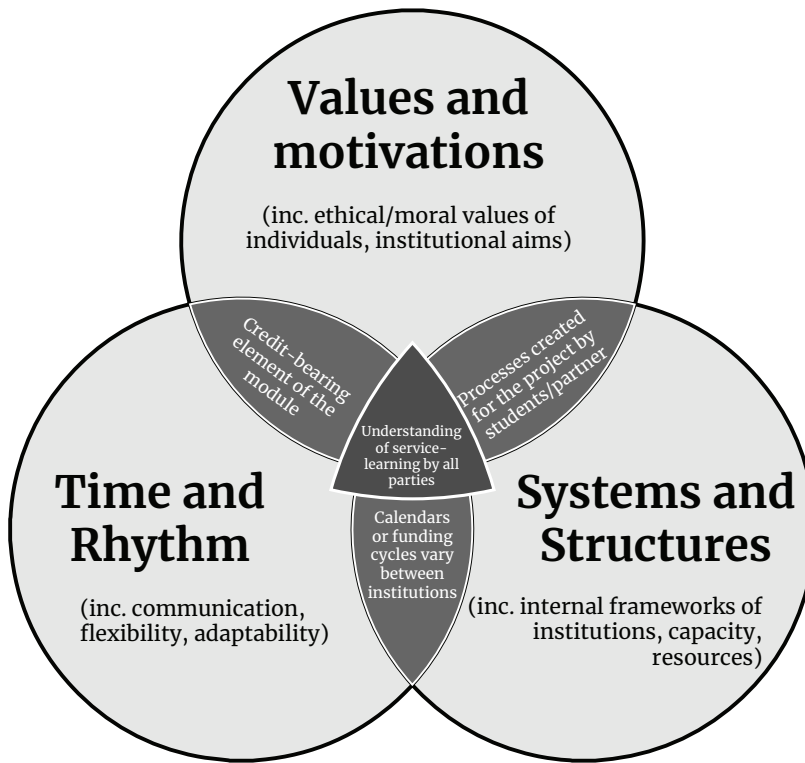
Figure 1. The Three Main Cross-Cutting Themes

plicated, but is it complex in the sense of complex systems theory? At the descriptive level the answer is yes, in a variety of ways. When each project is assessed as a system, it appears to us that each is composed of numerous elements that interact reciprocally with each other and their environment in a manner suggestive of coadaptation. It would be equally accurate, and we feel uncontroversial, to say that each project was an open system that displayed emergent behavior, limiting as a result the level of predictability. The extent to which these characteristics were present in the projects examined, however, varied. Moreover, the more successful projects appeared at first to be less open and exhibit greater predictability.

At this point we must draw attention back to the research conducted by Durie et al. (2018). In accounting for these results, Durie et al. concluded that successful projects often exhibited noncomplex features in the project phase of the engagement but were usually complex in the prior engaging phase and subsequent follow-on phase. Our data, however, appeared to suggest some results to the contrary. For example,

although the process of value alignment in Project C could be thought of as one of emergence, this entire process was guided by a predetermined structure/system created by one party and imposed on the other. Indeed, service-learning more broadly could be said to often operate in this manner, most explicitly when it comes to the classroom learning that students must navigate in order to take part in service-learning projects. Similarly with Project A, much of its success was due to the fact that the partner came to the engagement with predetermined structures/systems and expertly managed the relationships with students so that everything went according to plan. The students no doubt played their part in the success of this project, but it would be difficult to say that this project was an overt example of CST in action. This example, to be sure, does not invalidate CST, but it does require that one take a broader view of the system and its history. To illustrate, although the engagement between partner and students often appeared to be non-complex, this set of relationships itself sits within a larger set of connections between the service-learning staff and the partner/

students—and this network of connections of course has a history. When seen from this processual long view, stretching back to the initial interactions between the service-learning staff/program and the partner, it becomes easier to see how the phenomena of a stable and productive relationship and set of systems was the emergent result of coadaptive interactions. The current state of the system could also now be said to exhibit negative feedback loops that maintain the status quo and indicate the path-dependency of future engagements.

As for Project B, CST would again seem to provide useful explanations for the dynamics of its unfolding. For instance, we could say that the system was nonlinear, with a disproportional relation between inputs and outputs—for example, the 3-week delay in the initial meeting between partner and students that produced a terminal tailspin. The project could also be said to have experienced a positive feedback loop that amplified divergence leading to chaos. That being said, one could argue that this project suffered because it failed to take on board some of the lessons from CST, such as the importance of reciprocal interaction in the early stages of the engagement (the engaging phase) that lead to the emergence of a well-functioning system with shared values and practices.

This brings us to a reflective consideration of the lessons that can be potentially learned from CST for service-learning and vice versa.

Further Discussion

Lessons From CST for Service-Learning at NTU

It would be a stretch to say that our recent engagement with CST has completely revolutionized our understanding and practice of service-learning. Nevertheless, we have found the process to be productive in a number of ways. To begin with, CST, and in particular the multiphase model for its application devised by Durie et al. (2018), has assisted us in our thinking about the different phases of service-learning work and the various dynamics therein. The data from our research may have presented contrasting dynamics within each phase, as opposed to a shared pattern of dynamics across the projects, but the more significant lesson we draw from this is that different phases of a project will display different dynamics of complexity, and projects could perhaps be usefully designed accordingly.

A further, and no less important, effect of the multiphase model is that it has allowed us to explicitly name and point to these phases when discussing service-learning with colleagues and management. In our experience, adequate resourcing of service-learning has been an ongoing struggle. This situation has been exacerbated by a lack of recognition for the vital work that is done in Phases 1 and 3 of service-learning—the engaging phase and follow-on phase. All university modules of course involve preparation prior to their delivery, but it would seem to us that the preparatory work required for service-learning—in the form of developing new partnerships, maintaining/updating existing ones, and creating a roster of projects for students—is exceptionally high year-on-year (compared, for instance, to a standard module that can be repeat taught with minimal change to the content). Because of this, the underappreciation of the engaging phase of service-learning work has led in our case to an unsustainable situation that not only increases the likelihood of staff burnout but also places the service-learning program in jeopardy. As for the follow-on phase, if this were given greater attention, it would allow for successful projects and partnerships to be more effectively captured and built on, thus improving sustainability and mitigating the amount of work required in the subsequent engaging phase of the next cycle. It goes without saying that the service-learning provision, and the benefits from it that are enjoyed by all those involved, would be much improved if all phases of the service-learning cycle were further recognized and resourced.

Aside from helping to highlight the resourcing and capacity issues of service-learning provision, our encounter with CST has also encouraged us to think more deeply about the ways in which we as a team equip our students with the resources to successfully deal with complex and difficult situations. By recognizing that what students experience may not just be messy and "unpredictable" (Deeley, 2015) but might also take them "to the edge of chaos," it raises questions about how we support students through this experience. Prior agreement on shared values among the people involved in a project can no doubt be of assistance

in times of difficulty; however, as our data demonstrated, it is not a sufficient criterion for success. Alongside values we therefore need to recognize the benefit that clear structures and systems can bring to the service–learning process. Although this is, in one respect, an obvious thing to state, the point is not that structures and systems should be created and imposed in order to eliminate the effects of complexity; rather, their use is for preparing participants to deal with complexity in a way that maximizes positive "sayings, doings and relatings" (Kemmis, 2009). Moreover, CST can help those involved in service–learning activities to critically reflect on their sayings, doings, and relatings, and also recognize the impact that these might have had in their project trajectories. When combined with the above lessons from complexity, this means three things in terms of our practice:

- giving students a very clear framework for their projects within the multiphase model;

- introducing students to the CST paradigm so that they can see how complex systems are composed and anticipate disequilibrium; and

- providing students with a very structured training process in reflection, using, for example, the DEAL model of reflection developed by Ash and Clayton (2009), so that if or when students approach the edge of chaos in a service–learning project, they are equipped to analyze the specifics of their development progression and how that has determined or conditioned the outcomes they are experiencing, thus putting them in a stronger position to explore adjacent possibilities and to bring the project back to equilibrium.

A final lesson from CST for service–learning that we would like to briefly mention concerns the broader education context: How does a practice that we claim is complex and potentially chaotic sit within the current UK higher education landscape that is so focused on the metrics of measuring the student experience? How does service–learning perform in such metrics, and what risks are service–learning staff exposing themselves to by taking on this singular and complex practice? If compulsory university-wide evaluation tools are administered at the point when students are at the edge of chaos, what price does the service–learning practitioner pay for this? These concerns are particularly important to address given the comments above about organizational blindness to anything but the project phase and the consequent difficulties of gaining adequate resourcing for the engaging and follow-on phases.

Lessons for CST From Service–Learning at NTU

CST has proven useful for spurring constructive reflection on the nature and dynamics of our service–learning experience. Although we would not go so far as to categorically insist that all service–learning activities do or should conform to the characteristics of CST, it seems sufficient to say that CST can help service–learning practitioners in their evaluation and shaping of service–learning activities. But at the same time, it has been equally apparent to us that service–learning, as we understand and enact it, contains insights that could be beneficial for the paradigm of CST.

The foremost among these insights involves the ethico-political dimension of what we refer to as *critical service–learning.* Due to its genesis in the natural sciences, CST purports to provide a description of reality devoid of ethical and political concerns. For example, the dynamic change of weather systems or organisms is neither "good" nor "bad"—it simply is. The processes and activities of critical service–learning, however, are eminently ethical and political. Indeed, it could be said that the ethico-political dimensions of critical service–learning are the driving force of all affiliated processes and that without it critical service–learning becomes meaningless. Thus we would say that values take precedence in critical service–learning processes and activities (even, and perhaps especially, in cases where there is disagreement about values). Moreover, in our experience these values are foundational and in most cases (though not all) established prior to any actual service–learning activity. These features would at first appear to be outside, if not antithetical to, the paradigm of CST. It may not matter to CST whether the system under examination is human or nonhuman, fascist or democratic, but it certainly matters to critical service–learning. Critical service–learning therefore poses this question to CST: Whence the ethico-political?

Let us briefly elaborate on these elements of value precedence and priority. In our instantiation of service-learning, there are certain values that are not up for negotiation: for instance, mutual benefit, mutual respect, and a commitment to social justice. These values are formed prior to any interaction in complex service-learning activities, and they are more or less impervious to relational influence within the system. In addition, these values are not incidental, but on the contrary are of the utmost importance in shaping the nature of the complex system. In the absence of agreement on these values by all parties, it is unlikely that the partnership will continue. But one could also make the simple observation that systems with different ethico-political positions operate in different ways. For example, a fascist system functions quite differently from a democratic or anarchical system: They exhibit different levels/kinds of openness and closedness, hierarchy and flat organization, and so on. All this suggests that it is inadequate and/or naïve to suppose that all systems involving humans are equally subject to the principal characteristics of CST. Surely it is of relevance if the people involved in that system happen to already adhere to the values of openness and emergence through negotiation.

A further challenge to CST arises from this line of critique: Was it ever true in the first place to maintain that CST is devoid of ethics and politics? Could we not say, for instance, that the features of reciprocity, coadaptation, openness, limited predictability, and self-organization already align with, and indeed promote, a particular ethico-political stance? The claim that supposedly neutral scientific theories are not actually neutral is by no means novel. As it happens, advocates of CST have themselves effectively demonstrated how Darwin's theory of evolution was itself influenced by (and advanced) an underlying Judeo-Christian ethic (Goodwin, 1997). We should not then be surprised if CST also exudes an ethics and politics. It is for others more qualified than us to ascertain the inherent ethical and political character of CST; our more limited point here is that the ethico-political imperative of critical service-learning can usefully draw attention to the ethico-political aspects of CST. If advocates of CST wish to insist upon ethico-political neutrality, then more work will need to be done to convincingly establish this. But if, on the other hand, it is accepted that the paradigm of CST is ethi-cally and politically infused, and naturally so, then we would suggest that the field of service-learning has resources for assisting in the mapping out and tracking of ethico-political considerations throughout complex systems.

Conclusion

This is not the first attempt to theorize service-learning, nor is CST the only theoretical lens that might be brought to "this singular practice" (Butin, 2010). However, we feel that this endeavor has had considerable benefit for us as service-learning practitioners, enabling challenging dialogue and deep and critical reflection on our practices. As stated at the outset of the article, this is not intended as a definitive statement on what CST and service-learning have to bring to each other but is hopefully the starting point for future research and practice endeavors.

In conclusion, it may be fruitful to remind the reader why we set out on this research endeavor and what we think the findings offer to the service-learning practitioner. Previous research on community–university engagement has benefited from bringing a CST lens to understanding the processes involved there (Durie et al., 2018), enabling those involved to appreciate, for example, the multiphased nature of engagement. However, to our knowledge, service-learning had not been analyzed using complexity theory—service-learning being another form of community–university engagement, but one where a different quality or kind of relationship is added to the mix: namely, that between students and academic staff, and students and community partners. Although the principles of complexity theory are challenging in the abstract, when placed alongside service-learning there was immediate resonance for the current authors. We were thus keen to apply complexity theory to our service-learning practice in order to understand what we could learn from this paradigm, what it in turn could learn from service-learning, and we also hoped that along the way a CST lens would facilitate an evaluation of what makes service-learning successful. Our research has indeed generated learning for us from CST, and conversely, we believe, from service-learning to CST.

An important conclusion we draw from this research is that the ethico-political impera-

tive of critical service-learning can usefully draw attention to the ethico-political aspects of CST. Service-learning is a deeply normative practice, with a strong and explicit value base around mutual benefit and social justice. For this reason we had concerns about deploying CST alongside service-learning because of the former's apparent apoliticalness. However, our reflections have led us to question whether CST really is devoid of an ethico-politico dimension (a point that could perhaps be made about many seemingly objective, scientific paradigms). This suggests that there is work to be done by advocates of CST to more fully explore the ethico-political dimension of this paradigm.

In turn, valuable lessons may be offered to service-learning from CST. It does not offer a panacea or assured path to successful service-learning. What it has enabled in this research, however, is the clear and systematic identification of how complex service-learning operates. It seems that the prospects for a successful service-learning project are significantly enhanced when the values and motivations of all parties align; when the systems and structures existing prior to or developed for the project work in concert; and when the time scales, deadlines, and rhythms of all match up. But we cannot control for all of these variables. CST allows us to be alert to the potential

for projects to reach the edge of chaos and to use this knowledge and experience to inform others involved, especially students. There is value for all stakeholders in recognizing that service-learning projects have the open, emergent, and nonlinear characteristics of complex systems, meaning that there is limited predictability as to how the project will unfold. We can prepare students for this and, perhaps, as suggested in the discussion above, provide them with very structured reflective tools, equipping them to analyze the specifics of their development progression and how it has determined or conditioned the outcomes they are experiencing, thus putting them in a stronger position to explore adjacent possibilities and to bring the project back to equilibrium.

Finally, a further conclusion that we drew from this research and that may be of benefit to others working in the service-learning field, is that CST allowed us to recognize and name the multiphased nature of this form of community-university engagement, and to do so in conversations with management about resourcing. All phases of the service-learning cycle need to be adequately recognized and resourced—the engaging phase, the project activity phase, and the evaluation or follow-on phase—if service-learning is to be successful for all involved and sustainable into the future.

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Specifics of Measuring Social and Personal Responsibility of University Students After Completion of a Service-Learning Course in Slovak Conditions

Alžbeta Brozmanová Gregorová and Zuzana Heinzová

Abstract

This study at a university in Slovakia asked two questions: (1) Does completion of a service-learning course lead to changes in students' social and personal responsibility and their attitudes toward community service? (2) Are personal and social responsibility and attitudes toward community service correlated? Service-learning and the third mission of the university are almost unknown in Slovak higher education, and likewise no relevant test instruments adapted to Slovak conditions currently exist. Consequently, we adopted a scale from abroad—Conrad and Hedin's (1981) Social and Personal Responsibility Scale (SPRS). We also used qualitative research methods. Compared to a control group, the service-learning students had statistically significant higher posttest scores in the Social Welfare, Duty, Performance of Responsible Acts, and Global Responsibility subscales. The research results revealed a need for new measuring tools that are sensitive to the specific context of service-learning implementation in Slovakia.

Keywords: service-learning, social and personal responsibility, attitude toward community service, higher education

The nature of higher education is currently determined by several factors. Over the course of recent decades, the interest of universities has shifted from their original focus to two main roles: education and research. Universities thus are key actors in economic and cultural development and in the transformation into institutions committed to industry and society in general. Today's universities are considering their role for society and their relationships with its constituent parts, institutions and communities. This link between higher education and society is considered the third mission of universities. The third mission concept generally includes many of the emerging requirements in relation to universities, in particular the requirement to play a more prominent role in stimulating the use of knowledge to achieve social, cultural, and economic development. A strategy that has been successfully developed in the context of the third mission of universities for several decades around the world is service-learning. Thanks to this strategy, universities perform their core missions in a comprehensive manner and prepare a new generation of professionals who can integrate their acquired academic qualities and professional competencies with social responsibility and an active implementation of their civic roles in society.

The development of service-learning as well as civic engagement and the attitudes toward it are determined by historical, political, cultural, social, and institutional factors. These factors also greatly limit research opportunities in this area. The aim of our research was to find whether there were changes in the students' social and personal responsibility and attitudes toward community service due to the completion of a service-learning course, and find out if there is any correlation between personal

and social responsibility and attitudes toward community service. The correlation test was used to provide an adequate measuring tool for measuring personal and social responsibility in courses based on service-learning in an environment where service-learning is almost unknown and the discussion about the third mission of universities is just at its beginning. It has been a challenge to assess service-learning in Slovakia because the available methods, instruments, and terms do not resonate with the cultural and linguistic context because they have been normed on societies with different value systems.

Context of Service-Learning Development in Slovakia

Service-learning is a pedagogical strategy that links education and community engagement. Therefore, the context and possibilities for its development in Slovakia need to address the educational systems on the one hand, as in our study with its specific focus on higher education, and the form of solidarity and civic engagement on the other. The educational system and civic engagement in Slovakia are influenced not only by the country-specific historical, political, economic, and social situation, but also by policy at the European level. The directions set up by European institutions can play an important role in future service-learning development in a national context. EU countries are responsible for their own education and training systems, but the European Union helps them set joint goals and share good practices.

In 2000, the European Council introduced the Lisbon Agenda, in which utilitarian knowledge production and university knowledge transfer were placed high on the political agenda. Since the Lisbon Agenda, universities are now perceived as key players in the debate about policy measures to meet the target proposed by the Lisbon Agenda in 2010 (European Council, 2010) of turning the European economy into "the most dynamic knowledge-based economy in the world." The European Commission sets the need of connecting universities and society in several communications, chiefly the following: *The Role of the Universities in the Europe of Knowledge* (Commission of the European Communities, 2003), *Mobilising the Brainpower of Europe: Enabling Universities to Make Their Full Contribution to the Lisbon Strategy* (Commission of the European Communities, 2005), *Delivering on the Modernisation Agenda for Universities: Education, Research and Innovation* (Commission of the European Communities, 2006).

In the publication *Needs and Constraints Analysis of the Three Dimensions of Third Mission Activities* (E3M, 2008), the authors have made clear the need for changing the role of universities from teaching and research institutions to transforming themselves into key players in the knowledge economy in relation to society at large. It is also clear that this relationship with the "outside world" should be focused on three interrelated areas: research (technology transfer and innovation), teaching (lifelong learning/continuing education), and a social engagement function in line with regional/national development. In this respect, the third mission cannot be considered as an isolated (or residual) function; rather, it is complementary to the other two missions of universities. On 19 March 2015, the European Economic and Social Committee, acting under Rule 29(2) of its Rules of Procedure, decided to draw up an own-initiative opinion, *Engaged Universities Shaping Europe* (European Economic and Social Committee, 2015). In this document the Committee advocated explicitly for the first time for the concept of a civic university in EU policy documents. In May 2017, the European Commission (2017) adopted its *Communication (COM(2017) 247 final) on a Renewed EU Agenda for Higher Education*, focusing on four priority activities: tackling future skills mismatches and promoting excellence in skills development, building inclusive and connected higher education systems, ensuring higher education institutions contribute to innovation, and supporting effective and efficient higher education systems.

This emphasis on third mission activities of higher education institutions should be accompanied by appropriate data and indicators to support the development of third mission activities. That is why attention to the third mission of the universities is given by academic discourse and by research. In 2015, a special edition of the *European Journal of Higher Education* was dedicated to the topic. The Council of Europe has in particular published a number of essays on the role of higher education in modern societies in the last 10 years. Among others, we can mention *Good*

Practices in University–Enterprise Partnership (Mora, Detmer, & Vieira, 2010), *Reimagining Democratic Societies: A New Era of Personal and Social Responsibility* (Bergan, Harkavy, & Land, 2013), and *Higher Education for Modern Societies: Competences and Values* (Bergan & Damian, 2010). All of these studies and documents point out the need for changing the role of universities as well as teaching and learning strategies targeted on competency-based learning.

Although the emphasis on the third mission of universities is laid out in a number of European documents and studies, in Slovak higher education this term is almost unknown. Matulayová (2013), based on an analysis of strategic materials relating to higher education institutions in Slovakia, stated that the notion of a third mission or third role of universities is not explicitly used in even one strategic document. There is also no mention of the issue of "new roles" or social responsibility of higher education institutions. There is, however, accentuated cooperation with industry and the private sphere. Cognition and knowledge are preferentially perceived as goods; education and research as services. The Slovak Republic has acceded to these approaches that emphasize the economic dimension of tertiary education. Academic capitalism manifests itself in all aspects of state policy on tertiary education and science and research—from organization and funding through quality and outcomes measurement to designing future development. The redefinition of the missions of universities was to highlight the National Education Development Program "Learning Slovakia" (Národný program výchovy a vzdelávania "Učiace sa Slovensko") prepared in 2017, which defined the third mission of universities in a separate chapter (Burjan et al., 2017). However, the document did not come into force. The National Program for the Development of Education (Národný program výchovy a vzdelávania; Ministerstvo školstva, vedy, výskumu a športu SR, 2018), approved in Slovakia in 2018, included the implementation of tools to support the implementation of the third mission of higher education institutions, but it gave no specifics for this measure.

Slovak higher education institutions, as well as civic engagement itself in this region, were influenced by socialism. The educational system was based on egalitarian principles, collective education, and strong centralization. During socialism, the state had an absolute monopoly in education. There were only state schools, at a maximum level unified. The tradition of volunteer work and civic activism was forcibly interrupted in totalitarian regimes, and the operation of all forms of independent organizations was deliberately and systematically reduced or subjected to strict control. Civil society itself and voluntary engagement of citizens in resolving local problems were not supported, and universities did not play any role in the process. Any civic engagement was state-controlled, more compulsory than voluntary. The role of universities was seen primarily in research and education. This is why university teachers and leaders still do not understand well the social role of universities and the need for its development, and thus they are not prepared for its implementation in practice. Development of civic engagement is expected from organizations active in the nongovernmental sphere, not from higher education institutions, traditionally perceived as closed institutions with no relation to practice and real life.

The level of civic engagement in Slovakia still cannot compare to that reached in countries with a developed culture of engagement in resolving local problems. The latest research, from 2011, shows that only 27% of adults had participated in formal volunteering in the previous 12 months (Brozmanová Gregorová et al., 2012). This low rate of participation is due to the above-mentioned historical experience, as well as to other problems and needs identified in the analysis presented by European Volunteering Centre (2011), such as the need to actively motivate people to get involved in civic and voluntary activities; the need to educate about volunteering; and the need for education, training, and capacity building in the field of volunteering and civic engagement.

The role of higher education institutions in the development of communities and regions, in resolving local and global problems, and in actively contributing to the development of civic engagement and social responsibility of employees and students is not as easy for "traditional" higher education institutions as research and education. Many of them are still not open to cooperation with public and nongovernmental organizations in their region, and they do not have sufficient capacities developed to

participate in the resolution of local, regional, or national challenges and problems.

The lack of attention from universities in Slovakia to the third mission and strategies developed within this mission can also be attributed to the general attitude of society regarding the responsibility for solving problems in society and communities, as well as the specific meaning of solidarity in Slovakia. Solidarity in the context of practical community service carries a voluntary attribute, not only to indicate that a person participates in it of his or her own will but also to express a certain contradiction to compulsory solidarity. Historically, voluntary solidarity was the precursor to that of a compulsory nature, but the powerful social state during the period of communism and consequently to the social-democratic direction of governments after 1989 led to its weakening. Compulsory or forced solidarity and contributions to the social system began to be seen by people as fulfilling their obligations toward others in order to fulfill reciprocity and comradeship. This is evidenced by research findings on the perception of volunteering among people in Slovakia. For example, there is a strong belief in Slovakia that volunteers would not be needed if the state fulfilled its obligations. In 1998, this view was held by 55% of respondents (Woleková, 2002) and by 74% in 2003 (Bútorová, 2004). This view is upheld even by the younger generation.

In research conducted in 2017 (Brozmanová Gregorová, Šolcová, & Siekelová, 2018) among young people aged 15 to 30, up to 54% of respondents agreed with this view. As Bútorová (2004) states, this way of thinking is based on the idea that, under ideal conditions, the hand of the caregiving state should "reach out" to every situation in the life of the community, whether it is an emergency situation or development opportunities. People with such a statist approach do not perceive volunteering as an irreplaceable segment in the life of society. The growth of forced solidarity has, on the one hand, positive consequences in that the state guarantees the satisfaction of the basic needs of the population, which increases the sense of social security. On the other hand, it risks the loss of activity of individuals and the limitation of voluntary solidarity. Forced solidarity essentially blocks the possibility of expressing freedom of action for the benefit of someone else, because this role is undertaken by the state and leaves no room for that freedom.

For these reasons, the terminology used in the field of civic engagement in the Slovak context is unstable and unclear, which also complicates research in this field. The most commonly used term in this area is the concept of volunteering, but this is also not perceived unequivocally by the general public. This is well illustrated by one of the publications on volunteering in Slovakia among the young people, titled *I Am Not a Volunteer! I Only Do It . . .* (Králiková, 2016). People often do not identify themselves with the position of a volunteer, even though they perform this activity on a regular and long-term basis. The terms *community service*, *community engagement*, and *service-learning* are not used in the Slovak language, and they do not have Slovak equivalents. After literal translation into Slovak, they are basically incomprehensible and unusable. Similarly, *community* is not a commonly used word for Slovaks.

In this context, not only the third mission of universities, but also service-learning is being developed as one of the ways of fulfilling this mission. As stated by Regina (2013), service-learning focuses on eliminating the gap between social engagement and academic life. At the same time, it helps build bridges between "serious scientists" and socially engaged universities, creating a synergy between the three missions of universities.

The literature in the field indicates several basic theoretical definitions of service-learning, as well as numerous paradigms and perspectives in which this strategy is viewed (see Butin, 2010; Moore & Lan, 2009). In the last 20 years, more than 200 new definitions of service-learning have been published, in which service-learning is understood as an experience, a pedagogical concept, a philosophical concept, a social movement, and so on.

Service-learning is often known in the literature as a pedagogy that combines a service to the community with learning opportunities offered to the involved students (Heffernan, 2001). Service-learning is generally described as a "balanced approach to experiential education" that can "ensure equal focus on both the service provided to the community and the learning that is occurring" (Furco, 1996, p. 3). In other words, service-learning is perceived as a method by which students can learn

and develop social and professional competencies through active participation in community-oriented experiences that are connected to their academic curricula and provide them with reflective opportunities (Furco, 1996). From this strategic application, we expect not only the development of professional competencies but also changes in the students' "civic characteristics," which determine a citizens' involvement not only during but also after performing service-learning projects.

Nowadays, international consensus defines service-learning through three key characteristics: (1) a focus on efficiently and effectively addressing needs *with* a community, and not just *for* the community; (2) active student involvement in all stages, from planning to assessment; and (3) being intentionally linked to learning content (curricular learning, reflection, development of skills for citizenship and work, and research; Regina, 2017). Service-learning works with real student experiences and involves metacognitive learning when the student is aware of how they have learned, what they have learned, what helped them learn, how they can use it in practice, and what they need to learn further. It is understood as a teaching and learning strategy that integrates meaningful community service with education and reflection. The community service is incorporated into the curriculum of various academic subjects and study programs. There are several service-learning models in practice.

When operating with a service-learning concept in a higher education system, it is suggested that a distinction has to be made between community service, volunteerism, field education, and service-learning (Fiske, 2001; Furco & Holland, 2005; Lipčáková & Matulayová, 2012). Thus, service-learning distinguishes itself from other types of community-oriented activities by connecting with curriculum content, enriching the learning process by promoting a better understanding of course and disciplinary content, promoting civic responsibility of students, and strengthing communities (Bringle & Hatcher, 1996; Fiske, 2001; Rusu, Bencic, & Hodor, 2014).

Thanks to instrumental and innovative service-learning focusing on the social and professional development of students as well as community needs, we are currently experiencing the development of service-learning programs at universities around the world. In Slovakia, service-learning for the academic public and educational practice is a new and still almost unknown pedagogical strategy. In recent years, this strategy has been spreading, especially from one of the Slovak universities—Matej Bel University in Banská Bystrica—not only within its internal environment but also in a wider context.

The specificity of service-learning development in Slovak conditions is its connection with education for volunteering and civic engagement. In April 2018, the Strategy for Education of Children and Youth for Volunteering in Slovakia (Koncepcia výchovy a vzdelávania detí a mládeže k dobrovoľníctvu; 2018) was adopted by the Minister of Education, Science, Research and Sport.

The Strategy is based on strategic and conceptual documents prepared at the national level, research findings in the field of youth volunteering, and the current practice in this field. The Youth Strategy 2014–2020 in Slovakia (Ministerstvo školstva, vedy, výskumu a športu SR, 2014) pays attention to the development of youth volunteering. One of the measures defined in this Strategy is to connect volunteering to formal education. The Support Program for Volunteering and Volunteer Centers (Úrad splnomocnenca vlády pre rozvoj občianskej spoločnosti, 2013), based on the Government of the Slovak Republic Resolution No. 68/2012, Point C.15. and approved by the Council of the Government of the Slovak Republic for nongovernmental, nonprofit organizations through Resolution No. 22/2013, emphasizes and justifies the significance of volunteering, the urgency of supporting it, and the need to educate volunteers within the concept of lifelong learning. In harmony with the proposed measures of the program, there was a task incorporated into the Action Plan for the Strategy of the Civil Society Development for the years 2017 and 2018: preparing the Strategy for Education of Children and Youth for Volunteering. This strategy views volunteering as a cross-sectional theme and a space for experiential learning based on the reflection of experience, and thus promulgates the view that children and young people should be led by pedagogues toward active participation, a proactive approach in solving societal problems, helping others through volunteer activities, but also toward inclusive behaviors and prosocial attitudes and values.

Volunteering in the school environment is developed in Slovakia within several models. Several organizations in Slovakia based their recruitment of volunteers on specific schools or universities and organizing volunteer programs for them. Schools are usually inclined toward such cooperation; however, volunteering is in such a case perceived as an extracurricular activity and part of informal education. At primary and secondary schools and universities, we also often encounter active teachers who inspire children and young people to engage in voluntary activities and organize these activities—they actively search for volunteering opportunities for their students or plan such activities together with pupils and students. Volunteering in the school environment is also supported by several nongovernmental organizations within their programs, such as the Institute for Active Citizenship, the Green Foundation, some regional volunteer centers, and the Duke of Edinburgh's International Award Foundation. However, in schools the good intention of becoming an active part of the community often leads to literally forcing students into volunteering without their free choice, which for some students can result in a negative attitude toward volunteering as such. Connecting volunteer experience with the educational process and reflection of this experience by students is usually a very rare practice, so many volunteering activities of students remain "only" an experience without explicitly specified educational goals.

The Strategy for Education of Children and Youth for Volunteering in Slovakia is based on service-learning pedagogy principles, and its goal is to create the prerequisites for the implementation of education for volunteering at all levels of education (also at universities). The strategy and its introduction into practice should help volunteering become a natural part of lifestyles of people and communities in Slovakia, and thus connect formal education with real life. According to this strategy, volunteering should also fulfill these objectives:

- developing the perception and sensitivity of children and youth toward the needs and problems of the environment and the people around them or wider community in which they live;

- leading children and youth toward coresponsibility for what is hap-

pening in their surroundings and to develop their self-confidence so they can become the change-makers in the society; and

- promoting the interconnection of volunteering and competencies gained through it with the personal and future professional lives of children and youth.

Implementing the strategy into practice will also require empirical verification of the fulfillment of its objectives, so research on the impact on students of service-learning adapted to Slovak conditions is highly topical. Verifying the impact of service-learning on university students is a first step toward laying the groundwork for research in this area in a national context and is being implemented as part of "The Influence of Service Learning—Innovative Strategy for Education—on Social and Personal Development and Citizen Involvement of University Students" supported by the Ministry of Education, Science, Research and Sport of the Slovak Republic.

Service-Learning at Matej Bel University

At Matej Bel University (MBU) service-learning has been applied since the 2005–2006 academic year, and it can be stated that MBU is the leader in this field in Slovakia—conducting research, using grants, and publishing both at home and abroad. Elsewhere in Slovakia, only the Prešov University in Prešov devotes any time to service-learning, and then only in the education of social workers; the Catholic University of Ružomberok is, at present, only in the initial phases of its introduction. There are also several elementary and secondary schools conducting service-learning pilot projects (many in cooperation with the Volunteer Center in Banská Bystrica and MBU).

MBU has been working on the development of voluntary student activities since 1998, particularly in cooperation with the regional Volunteer Center in Banská Bystrica. The students were involved in organizing numerous volunteer activities for community and nonprofit organizations. MBU has been providing service-learning since 2005. It was implemented by one teacher (nowadays coordinator of service-learning at MBU) within the subject Third Sector

and Nonprofit Organizations in the education of future social workers. Since 2013, the project Development of Innovative Forms of Education at Matej Bel University in Banská Bystrica has been instrumental in the qualitative and quantitative development of service-learning at MBU. Based on the assessment of students' needs, we have applied service-learning since the academic year 2013–2014 to a two-semester optional university subject, Service Learning 1 and Service Learning 2, led by an interdisciplinary team of 10 teachers from different departments. In 2016, MBU entered the international program directed by Centro Latinoamericano de Aprendizaje y Servicio Solidario [Latin American Center for Service-Learning] (CLAYSS) supporting the development of service-learning at universities. More than 30 teachers from MBU were educated on the implementation of service-learning through online and offline courses offered by CLAYSS. At the same time, a platform for an exchange of information and experience in the field was created.

Service-learning was officially confirmed by the rector of the university as a way a university can meet its third mission. One of the principles and values of MBU is "MBU is engaged in the development of communities and the region, in solving local and national problems and it actively contributes to development of a civil society" (Univerzita Mateja Bela, 2015, p. 4). This principle was incorporated in the strategic documents of MBU in 2017, mainly thanks to the activities regarding development of service-learning strategy. Each year there is also a concrete task regarding service-learning development in the plan for the university and faculties. MBU understands service-learning as the key route to fulfilling its third mission. Service-learning at Matej Bel University is defined as an active teaching and learning strategy based on service for others in an effort to develop students' personalities, key competencies, and sense of civic responsibility and engagement. It emphasizes that it is the conjunction of the needs of students, the community, and the organization (school).

Service-learning development at MBU is a bottom-up process. The main role in practical development is played by the core service-learning team. Nowadays the core team consists of 12 teachers. The teachers share different responsibilities and tasks (mentoring for new teachers who want to implement service-learning, organizing roundtables and workshops, delivering training for teachers, service-learning promotion, conducting research). The team coordinator is also coordinator of service-learning at MBU, but it is an unofficial position. She promotes, with strong team support, service-learning outside and inside the university and coordinates projects in this field. In the academic year 2018–2019, more than 15 subjects at MBU included service-learning pedagogy, and 17 teachers were involved in the implementation. The subjects are part of different study programs in different faculties, mainly social work, pedagogy, social pedagogy, teacher education in different areas, and economics. Since 2013, more than 400 students have participated in service-learning projects in cooperation with different community partners (schools, community centers, municipalities, nongovernmental organizations, houses for social services, community foundations, and others). There is no administrative or support staff at the department, faculty, or university level helping teachers with administrative issues. The involvement of teachers is not part of their responsibilities; they do not have any special benefits from it or financial motivation. The involvement in service-learning or any community activity is not part of the teachers' regular evaluation. In 2018, the fund for supporting students' service-learning projects was established at MBU. For the first time, students have the opportunity to obtain support for their project implementation from university sources. The implementation of the university's third mission and service-learning in the university curriculum is an important structural issue. We have managed to complete the first steps in the process. The biggest challenge is not so much the formal change but the mental change, which is a long-term and challenging process.

As evidenced from the above-mentioned definition of service-learning, an integral and essential part of service-learning is service in the community. Therefore, from this strategy application in the process of education we expect not only the development of professional and key or transversal competencies but also changes in social and personal responsibility. That is to say, this attitude significantly determines actual citizens' involvement not only during but also after the performance of service-learning

projects. Citizenship is described as bringing with it not only democratic rights but also a responsibility to help solve problems in the community through active participation in community matters. Service-learning offers students the opportunity to recognize the role they can play as responsible citizens while they are students and also after they have completed their studies, by bringing their future career to the community to help solve problems or add value (Eyler & Giles, 1999).

Civic Outcomes and Service-Learning

A long research tradition of the effectiveness and the design of service-learning can be observed in the United States. We list here some of the most significant contributions to research abroad: Astin, Vogelgesang, Ikeda, and Yee (2000); Billig (2000); Celio, Durlak, and Dymnicki (2011); Clayton, Bringle, and Hatcher (2013); Eyler, Giles, Stenson, and Gray (2001); Melchior et al. (1999); Morgan and Streb (2001); Reed, Jernstedt, Hawley, Reber, and DuBois (2005); Simons and Cleary (2006); Yorio and Ye (2012). These works are aimed at the analysis of the impact of service-learning on students and suggest that service-learning has a positive effect in several areas. Empirical findings not only demonstrated the positive contribution to the development of personal skills and learning success, but also illustrated the potential for the development of civic outcomes (Furco, 2004). As stated by Hemer & Reason (2017), the study of civic outcomes is not a high-consensus field; rather, it is informed by multiple academic disciplines and theoretical perspectives. Hemer and Reason offer a review of studies on a broad conceptualization of civic outcomes, including (a) civic knowledge, (b) skills, (c) attitudes and values, (d) behaviors, and (e) civic identity, which is a broader outcome inclusive of the previous four. Civic outcomes in these areas are presented in several studies, for example Astin et al. (2000); Bender and Jordaan (2007); Bowman (2011); Bringle, Clayton, and Bringle (2015); Coe et al. (2015); Hatcher (2011); Keen (2009); Kim and Billig (2003); Klute, Sandel, and Billig (2002); Mayhew and Engberg (2011); Prentice and Robinson (2010); Shiarella, McCarthy, and Tucker (2000); Torney-Purta, Cabrera, Roohr, Liu, and Rios (2015). Besides the quantitative outcomes, one of the most important qualitative outcomes of service-learning programs reported in the literature is the students' feeling that their actions can make a significant difference to the community (Simons & Cleary, 2006) and the perceived sense of their own actions (Conrad & Hedin, 1991). Eyler and Giles (2001) reviewed more than 40 studies reporting positive effects of service-learning on students' sense of social responsibility, citizenship skills, or commitment to service. More recently, Buch (2008) found that students who participated in service projects as part of a discipline-centered learning community had significantly higher scores on the Civic Action Scale (Moely et al., 2002) than a comparison group of students not in the learning community. Using the same scale, another study reported positive changes in civic action scores among students participating in a semester-long service-learning project (Moely, McFarland, Miron, Mercer, & Ilustre, 2002). Kilgo, Pasquesi, Ezell Sheets, and Pascarella (2014) demonstrated that service-learning is a possible mechanism to encourage social responsibility.

Reason and Hemer (2015), based on a review of research studies focused on civic outcomes, found that the vast majority of researchers' inquiries into civic outcomes used quantitative methods, often based on students' self-report instruments and cross-sectional designs. For measuring civic attitudes, different tools were also developed, for example the Community Service Attitude Scale (CSAS) developed by Shiarella et al. (2000), the Civic Action Scale (CAS) developed by Moely et al. (2002), the Civic Engagement Scale developed by Doolittle, and Faul (2013), or Mabry's (1998) scale for measuring the outcomes of service-learning including also civic attitudes. Steinberg, Hatcher, and Bringle (2011) offered in their work the basis for assessment and research on civic outcomes of service-learning based on the concept of the civic-minded graduate (CMG). They provide a model (CMG Scale, CMG Narrative Prompt, CMG Rubric, CMG Interview protocol) for approaching civic development on a different level of analysis and across time.

We agree with Gerholz, Liszt, and Klingsieck (2017) that the results of these studies are not directly transferable to different and heterogeneous European contexts (e.g., learning and teaching tradition, understanding of society and civic engagement). As stated by Gerholz et al. (2018), the results of a mixed-method study in the European

area revealed positive time effects on the development of civic attitudes based on the understanding of Mabry's scale. In addition, the results of these empirical analyses are limited, particularly regarding the implementation of service-learning. The methodological level shows the different operationalization of the constructs examined, which is substantiated in the absence of a standardized competency model.

Furthermore, no study of this kind has as yet been performed specifically for and among Slovak higher education institutions and students. There are research studies from Matej Bel University, where service-learning has been developed since 2005 and where an interdisciplinary team is focusing also on measuring the impact of service-learning on key competencies and civic engagement of students. In several studies we approved, service-learning had a positive effect on the development of a subjective perceived level of key competencies and social and personal responsibility (for example, Bariaková & Kubealaková, 2016; Brozmanová Gregorová & Heinzová, 2015; Brozmanová Gregorová, Heinzová, & Chovancová, 2016; Brozmanová Gregorová, Heinzová, Kurčíková, Šavrnochová, & Šolcová, 2019).

The benefits of service-learning in the education of social workers at Prešov University have been reported in several studies (Balogová, Skyba, & Šoltésová, 2014; Lipčáková & Matulayová, 2012; Skyba & Šoltésová, 2013). In the Czech environment, service-learning is used in university education, primarily in the preparation of social workers, at the University of Olomouc. Matulayová (2013, 2014) pointed out the benefits of its application in education in social work. In these cases, these are simple studies based on analyzing reflections of students who have completed subjects that are not focused on civic outcomes.

Neither in the Slovak environment nor in the Czech environment, which is very close to Slovakia, can we say there is any appreciable attention paid to the topic of community service, based on a systematic review of literature. This fact is caused by the above-mentioned context of service-learning development in Slovakia. Service-learning is becoming more integrated into higher education practice, as well as in lower levels of education. There is a need to conduct studies on the impact it has on students. Universities have programs where academics see potential positive outcomes for students, but these outcomes cannot be verified with existing methods and instruments.

Methods

In our research, our goal was to verify the impact of service-learning on the social and personal responsibility of students.

Participants

The respondents for our research were students at MBU who completed a service-learning course during a period of three academic years, namely 2015–2016 to 2017–2018, and who formed an experimental group of 75 students. In addition to the experimental group, we selected a control group that was experimentally matched by study field, degree course level, and gender. The control group consisted of 32 students. Respondents of both groups surveyed gave their consent to anonymous processing of the data they provided to us by completing pencil-and-paper questionnaires that were administered approximately seven months apart. There is no institutional review of human subject research approval needed in Slovakia; the research was carried out within the research project supported by the Ministry of Education, Research, Science and Sport of the Slovak Republic, and before approval, the project was reviewed by experts outside the university. Submission of the project was reviewed and signed also by the head of the Faculty of Education at MBU.

Stimuli

The research findings presented in this article relate to a study of students at Matej Bel University who completed a specific course based on service-learning. At the university, there is an optional two-semester course open to students of all levels and in all study programs. The course has been led since 2013 by an interdisciplinary team of teachers from different departments, with the aim of developing the students' competencies (i.e., knowledge, skills, and attitudes) related to delivering activities for the benefit of others and project management.

The first part of the course is implemented in several teaching blocks. Students acquire theoretical knowledge through creative and active teaching methods. Practical analysis helps them to gain experience in group

dynamics and team roles. They learn about careful planning and time management, explore the necessity of aligning objectives with a target group through the choice of an adapted tool to ensure an efficient promotion of their service-learning project within the target group, practice communication in model situations, and acquire skills for drafting budgets. Reflection precedes self-evaluation and evaluation of each activity. The second part of the course transfers service activities to the students, who, no later than the end of the summer semester of the academic year, identify their own needs and the needs of the school and community within their group, and then create activities to meet the identified needs. They continue to cooperate with their teachers through mentoring. At least twice a month, the activity is assessed by the student and his or her tutor, from various points of view including planning, implementation, and evaluation. At the end of the summer semester, all students meet and present their implemented activities and their outputs, reflect on their own learning process, and provide an evaluation of the whole course to the other students and to the public. The evaluation session is an integral part of the service-learning course and takes place at the university as a seminar open to all students and teachers of the university.

Procedures

As there is no tool for measuring social and personal responsibility in Slovak terms, we have adopted Conrad and Hedin's (1981) Social and Personal Responsibility Scale (SPRS) to assess the impact of the service-learning on the development of these characteristics of students. While verifying changes in social and personal responsibility, we also experimentally verified this range and its use in our conditions.

The SPRS is divided into five subscales:

1. The *Social Welfare subscale* focuses on the extent to which one feels concerned about problems and issues in a wider society.

2. The *Duty subscale* focuses on the extent to which one feels bound to personally meet one's social obligations.

3. The *Competency to Take Responsibility subscale* reflects that although a person may have a positive attitude toward others, they may still not be able to act

in a responsible manner if they do not have the competence or skill to do so.

4. The *Efficacy Regarding Responsibility subscale* reflects that a person must be willing or be able to believe that taking responsible action will have an impact on the social or physical environment.

5. The *Performance of Responsible Acts subscale* assesses the extent to which students perceive that they do in fact act in responsible ways. (Conrad & Hedin, 1981)

The original scale was designed for secondary school students. We used the scale as adapted by Brozmanová Gregorová (2007) for university students in research focused on volunteering in higher education in Matej Bel University. The authors of the survey tried to forestall students' tendency to give socially desirable responses by making a special type of scale where the respondents do not assess themselves but their peers. Each SPRS item consists of two statements concerning social and personal responsibility. The respondent should choose only one statement and assess whether it is "always true" or "sometimes true." In total, there is a four-level scale for each item of the questionnaire. The questionnaire consists of 21 items (42 statements) divided into five subscales and involves 11 reversible items. Two items of the questionnaire are not evaluated at all. The scale has been translated into Slovak. The data were analyzed using SPSS 19.0.

Within the qualitative strategy we applied content analysis. We analyzed the self-reflections of the students who completed the course with service-learning strategy and completed the measuring tool SPRS in 2015–2016 and 2016–2017 ($N = 34$). The students elaborated written self-reflections after completion of the course and at the same time they filled in the questionnaires. The self-reflections were structured according to questions focused on the benefits from service-learning experiences. The students were informed that their self-reflections would be used for research purposes.

Results

In Table 1 we present the results of the data reliability survey using Cronbach's alpha, and in Table 2 the descriptive indicators of our research sample ($N = 107$), especially for experimental and control group.

Table 1. Cronbach's Alpha for Pre– and Posttesting Using the Social and Personal Responsibility Scale		
	Pretesting	Posttesting
Attitudes toward being responsible: Social Welfare	0.271	0.637
Attitudes toward being responsible: Duty	0.146	0.758
Competency to Take Responsibility	0.337	0.351
Efficacy Regarding Responsibility	0.537	0.597
Performance of Responsible Acts	0.461	0.572

Table 2. Descriptive Indicators Social and Personal Responsibility Scale in Experimental (N = 75) and Control Group (N = 32) From Posttesting		Median	Mean	SD	Skewness	Kurtosis
Experimental group (N = 75)	Social Welfare	3	3.083	0.560	−0.394	−0.355
	Duty	3.5	3.308	0.491	−0.106	−1.052
	Competency to Take Responsibility	2.5	2.703	0.547	−0.534	1.259
	Efficacy Regarding Responsibility	2.5	2.688	0.528	−0.169	0.457
	Performance of Responsible Acts	3	3.070	0.585	−0.237	−0.580
	Global Responsibility	3	2.984	0.351	−0.139	−0.775
Control group (N = 32)	Social Welfare	2.5	2.728	0.711	−0.770	0.671
	Duty	3	2.930	0.786	−1.131	1.089
	Competency to Take Responsibility	2.5	2.637	0.601	0.149	0.192
	Efficacy Regarding Responsibility	2.5	2.633	0.535	−0.309	−0.605
	Performance of Responsible Acts	2.5	2.728	0.703	−0.410	−0.177
	Global Responsibility	2.5	2.735	0.522	−0.486	0.501

The reliability of the questionnaires was evaluated by using Cronbach's alpha and varied from 0.146 to 0.537 for pretesting and 0.351 to 0.758 for posttesting. We attribute the low level of data reliability to the un–usual form of questionnaire administration, when we had to allocate approximately 15% of improperly administered questionnaires from the questionnaires to the research sample, especially in pretesting. Therefore, we will only consider posttesting data for our research needs.

In several subscales of the questionnaire, experimental group students assessed their social and personal responsibilities at higher levels than did the control group students. The data in Table 1 did not show normal distribution; therefore, we used nonpara–metric testing in our research (Spearman correlation test and Mann–Whitney U test).

Results About Changes in Personal and Social Responsibility—Quantitative Approach

In our research, we tried to find out whether there was a change in the level of personal and social responsibility measured by SPRS. We compared the results of the posttests

Table 3. Difference in the Posttest SPRS Between the Experimental and Control Group					
	Group	Median	U	P-value	CLES
Social Welfare	Exper	3	850	0.016	0.292
	Cont	2.5			
Duty	Exper	3.5	884	0.030	0.263
	Cont	3			
Competency to Take Responsibility	Exper	2.5	1087.5	0.435	—
	Cont	2.5			
Efficacy Regarding Responsibility	Exper	2.5	1148	0.720	—
	Cont	2.5			
Performance of Responsible Acts	Exper	3	872.5	0.025	0.273
	Cont	2.5			
Global Responsibility	Exper	3	858.5	0.020	0.285
	Cont	2.5			

between the experimental and control groups (Table 3). Posttest data reliability, as we mentioned before, was acceptable. We tested the differences in personal and social responsibility between experimental and control groups through the Mann–Whitney test.

The statistically significant difference in posttests between the experimental and the control group was demonstrated in the Social Welfare, Duty, Performance of Responsible Acts, and Global Responsibility scales Common language effect size shows weak relations. All differences are in favor of the experimental group.

Results About Changes in Attitude to Community Service—Qualitative Approach

Based on the qualitative analyses from the students' self-reflection, we can identify concrete benefits connected with the changes in social and personal responsibility and attitudes toward community service. As shown in Table 4, we organized identified benefits according to the model of altruistic behavior described by Schwartz (1977). According to Schwartz, altruistic helping behavior describes how aware individuals are of the needs of others and to what degree they want to help others. This model corresponds also with the social and personal responsibility concept measured by SPRS. The Schwartz model identifies the sequential steps represented by the identi-

fied categories in our qualitative analysis.

Discussion

In our research, which focused on the impact of service-learning on social and personal responsibility of students, we faced a number of methodological facts. On the one hand, we were forced to adopt a foreign methodology for investigating this phenomenon, and on the other hand, it was specific in the administration of the questionnaire. This fact—the slight incomprehensibility of its administration—was reflected in the respondents by a relatively high error rate and, ultimately, by low reliability of data during its first administration. We attribute the low level of data reliability to the unusual form of questionnaire administration, when we had to allocate approximately 15% of improperly administered questionnaires from questionnaires to the research sample, especially in pretesting. The authors of the questionnaire tried to avoid social desirability responses when constructing it, but it is clear that the questionnaire form is difficult for Slovak conditions and that respondents found the items incomprehensible and thus sometimes answered at random. Regarding posttesting reliability, it probably increased because the respondents had previously encountered this scale. Since the higher values of Cronbach's alpha occurred in posttests, we can say that the experience of working in the community is

Table 4. Identified Benefits of Service-Learning Experience in Area of Civic Attitudes (adapted from Schwartz, 1977)	
Community service attitude	**Student Reflection Statements**
Activation steps: Perception of a need to respond (Social Welfare subscale)	
Awareness that others are in need	*"I have better knowledge about the needs and problems in society."* *"I gained knowledge about the community and the needs in the community."* *"I became aware that there are many people who need help."*
Perception that there are actions that could relieve the need	*"Because of the subject, I know that there are people and groups that deal with others and I can be part of them."*
Recognition of one's own ability to do something to provide help	*"I learnt to respond actively and flexibly to the developing needs in the community."* *"I know what it is to help other people, and that I am able to do it."* *"I can actively respond to the needs of others."* *"I will know when helping the community how to better judge my possibilities."*
Feeling a sense of responsibility to become involved based on a sense of connectedness with the community or the people in need	*""I realized how important it is to help other people and that it is part of my task."* *"It was important for me to know that I can be helpful."*
Obligation step: Moral obligation to respond (Duty subscale)	
Feeling a moral obligation to help that is generated through (a) personal or situational norms to help and (b) empathy	*"I don't see only myself but also the needs of other people . . ."* *"I learned how important it is to see problems from the viewpoint of those who need help, which is also necessary in one's work."*
Defense steps: Reassessment of potential responses (Competency to Take Responsibiity subscale and Efficacy Regarding Responsibility subscale)	
Assessment of (a) costs and (b) probably outcomes (benefits) of helping	*"I found that helping other people can have more benefits for myself than I realized before this experience."*
Reassessment and redefinition of the situation by denial of the reality and seriousness of the need and the responsibility to respond	*"It is nice to be creative and come up with new ideas, but I see that in community service it is more important to also see if our activities are needed by somebody in the community."* *"Thanks to graduating in my subject, I have become aware of a number of initiatives and ideas that I have begun to implement."* *"I realized how important and necessary it is to help others."*
Response step: Engage in helping behavior (Performance of Responsible Acts subscale)	
Intention to engage in community service	*"I want to be more engaged in solving the real issues in society and the community and I want to also motivate other people to become involved in community service in the future."* *"I will engage more actively in various activities that are beneficial to the community."*

important for comprehension of the questions, as it evidently led to more consistent answers. Likewise, we suspect that some of the statements are confusing for people who have no experience with civic engagement and have no plans to practice it (after the service–learning experience, the reliability of the subscale was higher).

On the basis of testing differences in social and personal responsibility after completing service–learning, we can say that there is a statistically significant weakness between these groups, especially in *attitudes on social welfare*, *attitudes on duty*, and *performance of responsible acts*. The results of reliability testing, however, point to the low realism of the research tool and data. We realize that our research is only a pilot in view of the size of our sample in the experimental and control groups, but despite the experience of processing data from SPRS, we see that it is necessary for us to produce our own scale for the verification of social and personal responsibility.

On the other hand, the results of qualitative analysis point to the fact that the benefits of service–learning can be identified from an individual perspective also in the area of civic outcomes. The results of our study show that there may be considerable differences between students as individuals regarding changes in their civic attitudes. The important role is played not only by the individual characteristics of the students themselves, but also by the service–learning experience itself. In some projects, students have a close connection to the community, whereas in others it is not so strong. Students also spent varying amounts of time in community service during the service–learning experience.

As Gerholz et al. (2018) stated, the empirical results indicate that a general effect of service–learning can be assumed, even if only minor effects are evident and the results of the studies are mixed. The capacity of the results at the contextual level is limited, as nearly all the studies come from the United States, where a more community-oriented education goal is traditionally prevalent.

Limitations and Future Research

The current study had a small sample size in both the experimental and the control groups of participants, and used measuring tools. For future research, we recommend increasing the sample size. The possibilities of increasing the sample size in Slovak conditions are strongly related to the future development of service–learning at MBU as well as in other Slovak universities. In addition, it would be beneficial to repeat the posttest after a longer time period to measure the long-term impact and outcomes of the experience.

Also, data collection methods must be tailored to the specific conditions of development of service–learning in Slovakia. After verifying the research tools we transferred, we have prepared a new research tool for the measurement of personal and social responsibility for the academic year 2018–2019. We have included items where we have found higher reliability for repeated measurements. It also appears that a suitable approach to identifying the benefits of service–learning is a combination of research methods and approaches that can reveal the different perspectives of the phenomenon under consideration, in our case the benefits of service–learning in the civic area. We also agree with Battistoni (2013), who states that beyond greater precision of the conceptual framework, there are three areas in particular that should drive the research agenda in assessing students' civic learning outcomes: (a) more and better longitudinal and qualitative research, (b) understanding of the role and importance of educators in students' civic learning, and (c) comparison of the impact of different service–learning models on students' civic learning.

Conclusions

Despite the above-mentioned findings and weak points of our study in itself and in relation to the findings of other researchers doing similar research, we can conclude that service–learning belongs to those educational strategies that help develop a personal and social responsibility and positive attitudes of students toward community service.

Research on service–learning in Slovakia is also still at an early stage, and little subject-specific research has been conducted. It is therefore believed that the current study has filled a gap in the existing research, as it was the first study of its kind and will probably lead to further studies on attitudes toward and perceptions of community service–learning, and its integration into the curriculum.

From this study we learned how important it is to use measuring tools that respect the context of service–learning development and test them to prove the validity of obtained data. It is also important to conduct more in–depth qualitative analysis, which could provide important contextual understandings of the terms that are used in research in this field.

Research on the benefits of service–learning is one of the important factors in the development of this strategy under Slovak conditions. The challenge for development in the field of service–learning is the newly adopted *strategy for education of children and youth for volunteering*, which is based on service–learning pedagogy principles and which also includes higher education institutions. We also see the research on service–learning in Slovak conditions as a way to prove its benefits and advocate for its implementation in practice.

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Civic Attitudes and Skills Development Through Service-Learning in Ecuador

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Abstract

A mixed methods study was conducted to determine if a mandatory hybrid service-learning course had an effect on the civic attitudes and skills of college students attending a private university in Ecuador. The Civic Attitudes and Skills Questionnaire (CASQ) was used in a quasi-experimental design using MANOVA with follow up t tests. After this analysis, results showed that civic action was not significantly different while the other five factors of the CASQ had a significant difference. A case-study interview approach was used for the qualitative portion, and students reported feeling engaged with the community and perceived a positive impact in each of the CASQ six factors: civic action, interpersonal and problem-solving skills, political awareness, leadership skills, social justice attitudes, and diversity attitudes.

Keywords: CASQ, service-learning, civic attitudes, higher education in Ecuador, community engagement

A private liberal arts university in Ecuador began using the service-learning model in 2011 as part of its General Education Program (Universidad San Francisco de Quito, 2017). In the summer of 2014, an initial mixed methods study was conducted to determine if the civic attitudes of students changed after taking a mandatory service-learning hybrid course. The Civic Attitudes and Skills Questionnaire (CASQ) developed by Moely, Mercer, Ilustre, Miron, and McFarland (2002) was used with a sample of 188 students before and after taking the course. A Wilcoxon signed ranks test was used to compare the medians of the pre and post measures, with the finding that Factor 2: Interpersonal and Problem-Solving Skills and Factor 3: Political Awareness had significant changes between the pre and post measure. However, this effect was not controlled for test-retest reliability. In-depth interviews were conducted with 11 students, and the majority reported being aware of their role in society and the social and political issues occurring within the country (Diaz, Ramia, & Garlock, 2017).

After conducting this first study, the researchers realized that the instrument required a careful translation and factor analysis prior to conducting further studies. Consequently, the instrument was translated using the forward-backward methodology, and the authors received the CASQ authors' approval to use the new translated version. A factor analysis was performed before starting the current study, and the results of this analysis confirmed that no changes needed to be performed on the original CASQ version.

Research Questions

Two questions guided the current study, performed during the summer of 2015: What is the impact of a mandatory service-learning course on Ecuadorian college students' civic attitudes and skills? How does the service-learning course transform students' thinking and civic attitudes?

The literature review section presents an overview of service-learning outcomes, the difference between mandatory and

course-based service-learning, a discussion of civic attitudes and skills, the theoretical framework that consists of an analysis of the connection of service-learning with transformational and experiential learning theories, and the context of service-learning in Latin America. In addition, the methodology section includes information about the setting and context, a description of the participants of this study, and an explanation of the data collection process. Finally, the results segment presents the quantitative and qualitative findings from the deductive and inductive analysis.

Review of the Literature

The concept of service-learning has evolved since the development of land-grant colleges and the tradition of volunteerism and activism in the United States. Organizations such as Campus Compact formed in order to embrace service-learning as a methodology that promotes active and experiential learning while advancing cross-cultural and global understanding (Crabtree, 2008). Service-learning is now seen as a way to link instructional content with real communities outside the classroom through a planned reflection process that allows students to assess their assumptions about poverty, justice, democracy, privilege, and ethics, while benefiting communities in a concrete manner (Donahue, 2011; Steinberg, Bringle, & McGuire, 2013).

The reflection component is critical to service-learning. As Eyler and Giles (1999) mentioned, the hyphen in service-learning symbolizes reflection and the central role it should play in service-learning courses. Another essential aspect of service-learning is reciprocity. This entails that both students and community partners should benefit from this experience by clarifying service expectations. Service-learning can be a way to transform mental schemes into different ones that lead students to take action when working within a community (Donahue, 2011).

Impact of Service-Learning on Students

Various studies, focused on both undergraduate and graduate students mainly from North America, have found positive outcomes for students when using service-learning. Students who participate in service-learning report that they were able to apply knowledge and skills, to reflect critically, and to challenge their previous stereotypes (Strait, Turk, & Nordyke, 2015). Other benefits include overall better academic performance, transfer of learning into real contexts, enhanced communication, development of leadership skills, and more cultural awareness than students who were not exposed to this methodology.

A group of researchers followed students who took service-learning courses as undergraduates and found that after graduating their participation in civic activities increased within their communities, they maintained their teamwork abilities from their first service-learning experience, and they were better able to solve problems than students who did not participate in service-learning opportunities (Knackmuhs, Farmer, & Reynolds, 2017; Morgan, 2016). Another study with students who took an environmental class and completed a restoration project in a forest within their community reported having developed environmental awareness, problem-solving skills, and even continued to be engaged within their communities after the service-learning class ended (Knackmuhs et al., 2017).

The impact of service-learning has been studied across various disciplines including health care, social work, and information systems, as well as in interdisciplinary contexts where students are exposed to different knowledge areas and work as teams in their service-learning experience. For example, a group of information systems students perceived positive results after engaging in web development activities at a local community, reporting that they were able to transfer their learning into a real-world context (Lee, 2012). In another study, students in the health profession worked with interdisciplinary teams and reported improvement in their communication skills, improved collaborative working skills, enhanced community ties, and an increase in their social capital (Craig, Phillips, & Hall, 2016). Social work students who took a social policy class were able to connect theory to practice more effectively during their service activities through coalition building, using social media to draw attention to their cause, and writing concrete proposals (Lim, Maccio, Bickham, & Dabney, 2017).

According to Jacques, Garger, and Vracheva (2016), faculty leadership styles can influence the quality of the perceived impact

of the service-learning experience. When instructors were motivated and dynamic, students' overall experience was regarded as more meaningful. One case study conducted by Leon, Pinkert, and Taylor (2017) analyzed the experience of three instructors who implemented service-learning as a new methodology in their courses. The results showed similarities in terms of the positive outcomes found in students who participated. For instance, faculty reported being more adept at teamwork, more reflective of their teaching practice, and more critical and active within their communities.

Mandatory and Course-Based Service-Learning

There are various higher education initiatives around the world that incorporate global service-learning as part of the curriculum. For example, a group of U.S. engineering students participated in a service-learning experience in El Salvador as part of their senior capstone course, working with the community on various projects such as potable water solutions and soil analysis. There are also some challenges identified by faculty that include course-based service-learning experiences, as sometimes first-year students are not adequately prepared to be part of such an experience. Another challenge is having the time and resources to maintain a working relationship with a community partner to develop a long-term commitment (Siniawski, Saez, Pal, & Luca, 2014).

There is evidence of positive learning outcomes when a service-learning component is mandatory in a course. Researchers conducting a quasi-experimental study with pharmacy students concluded that the experimental group was able to demonstrate the knowledge and skills proposed in the learning outcomes better than the control group (Kearney, 2013). Another study with occupational health students reported the benefits of having students take different courses involving service-learning to achieve learning objectives that could not be accomplished inside the classroom, such as empathy with children and their families, awareness of how a community interacts, and understanding socioeconomic topics (Waskiewicz, 2001).

Furthermore, there is evidence that mandatory course-based service-learning components have an effect on student motivation and connection. A study with gerontology students supported the difference in outcomes when comparing a traditional course and a service-learning course. Those that took the service-learning class reported having questioned their stereotypes on aging and felt more engaged in their learning process as opposed to the group of students in the traditional class (Blieszner & Artale, 2001).

Civic Attitudes and Skills and Service-Learning

Erickson and Anderson (2005) reported that students have to develop problem-solving skills among other skills to be successful citizens in the 21st century. One outcome that may result from a service-learning experience is appreciating the value of citizenship, or learning about the role of being an integral citizen. Other outcomes include attaining higher order thinking skills and becoming active citizens (Erickson & Anderson, 2005).

Theoretical Foundation

Transformational Learning

Professors can have an active role in promoting transformational learning through service-learning by planning specific discussion questions that promote reflection while confronting previous mental paradigms, enabling transformational learning moments to occur (Donahue, 2011). Paradigm shifts are possible after service-learning courses, as students have the opportunity to reflect upon their personal mental schemes, challenge the status quo, and look for answers to inequality, social injustice, and poverty, among others (Yep, 2011). Jacoby (2015) pointed out that critical reflection is key within service-learning programs. This type of reflection has to be a consideration and reconsideration of one's views, beliefs, and values, and can be performed through speaking, writing, class activities, online discussion forums, or media and artistic creation.

Experiential Learning

Jacoby (2015) stated that there are multiple definitions of service-learning used by researchers and practitioners today. She defined service-learning from an experiential education perspective where there are experiences integrated within the structure of a program or course that promote reflection

and learning along with reciprocity between the recipients and the providers of service. Service-learning is one of the most explicit forms of experiential learning. Students complete service hours in a community setting where they are transferring classroom learning and at the same time challenging their own assumptions through planned reflection activities (Hale, 2005).

Jacoby (2015) explained Furco's (1996) model where service-learning is seen as a distinct, blended form of community-based work and experiential learning together, placed in between these two types of learning programs respectively. Considering community-based work on one side, there is volunteerism, which is providing a service without any reflection or applied learning. Then there is community service, which is focused on the benefit of the organization or community in a more structured way, but does not necessarily include reflection. Within experiential learning, there is the internship, where the focus is on the student or provider of the service and the emphasis is on learning from practical experience. In this case, learning may not be connected to a course or may not include a reflection requirement. Another form of this learning is course-based, where the service is connected to the curriculum or profession that is being learned. In between these two types of learning is service-learning, where there is a balance between the benefit to the student and the benefit to the community. Reflection is significant to service-learning because the program has to emphasize different types of learning objectives. Also significant is the reciprocity between the students and the community (Jacoby, 2015).

Context of Study

This study focused on an aspect of experiential and transformational learning that influenced the development of college students. The main objective was to find the impact a hybrid mandatory service-learning course had on the civic attitudes and skills of Ecuadorian college students.

Service-Learning in Latin America

Service-learning in Latin America has particular connotations that distinguish it from other service-learning practices around the world. The word *service* is used interchangeably with the word *solidarity*, where the work is performed between partners in- volved in an egalitarian relationship to seek the greater good rather than for an altruistic purpose (Tapia, 2010).

One of the first forms of service-learning in Latin America occurred in Mexico in 1910, where service hours were mandated for higher education students. This initiative was not service-learning as we currently know it; however, it was the start of the current use of service-learning in a higher education context in the Western world. The current Mexican model implies that all higher education institutions include some form of social service. For instance, one Mexican university requires its students to conduct their final research project by studying a relevant issue in a local community and sharing results with them (Tapia, 2016). In Argentina, the first record of using service-learning dates to 1978, and in Chile it started in 2000 (Tapia, 2007). Professors in a university in Argentina decided to incorporate an experiential class project where students were required to go into a community and make videos about current social issues that would benefit a particular community organization.

Another way of using service-learning is to incorporate this methodology into a practicum or internship class where students use knowledge and skills from their majors to create concrete projects for community partners. For example, education students in Argentina created material for a group of public school students with learning disabilities to help them reach their potential (Tapia, 2016). In Chile, the Ministry of Education provides funding for service-learning initiatives within higher education and promoted the implementation of service-learning programs in secondary schools through the Solidarity Schools program from 2002 to 2010 (Tapia, 2016). In Brazil, there is a law requiring inclusion of environmental education at all education levels, and some universities are using the service-learning model to fulfill this requirement (Tapia, 2016). Other countries, such as Uruguay, work closely with the Centro Latinoamericano de Aprendizaje y Servicio Solidario (CLAYSS; Latin American Center for Service-Learning) to implement service-learning programs in elementary schools (Tapia, 2004).

In Ecuador, the Organic Law of Higher Education was passed in 2010 in order to regulate both public and private universities. One of the components of the law

included community engagement as mandatory for all undergraduate students. Students must fulfill a community engagement requirement through both practicum and internship hours related to their fields of study and community needs (CES, 2017). The service-learning model is not included in this Ecuadorian law; however, a private Ecuadorian university has been using the service-learning model since 2011 (referred to as PASEC, Programa de Aprendizaje y Servicio Comunitario or Community Service-Learning Program) as a requirement for all undergraduate students (USFQ, 2017).

Tapia (2004) suggests that one of the particular characteristics of service-learning in South America is inclusiveness, since the vulnerable population is going to be actively participating in the service-learning project and the students participating are also facing social problems of their own. Thus, service-learning activities in Latin America are usually targeted toward pressing problems such as poverty, hunger, and unemployment, where students work with a particular community group in order to find common ground and solutions to their particular issues. Universities in Latin America tend to organize service-learning opportunities through student unions or extracurricular departments that are not part of a particular school or a university program (Tapia, 2004). Both mandatory and voluntary service-learning options are found within higher education institutions in Latin America with no conclusive evidence concerning which has a more significant impact (Tapia, 2007).

Methodology

Setting

Ecuador is a country with four diverse regions: the Mountain region, the Coast, the Rainforest region, and the Galapagos Islands (INEC, 2015). A significant number of Ecuadorians still do not have their basic needs met and live under the poverty line. Many families do not have adequate housing, clothing, food, health care, or education. The study took place in Quito, Ecuador, at a private liberal arts university founded in 1988. The college has an active diversity scholarship program that recruits students representing the 13 different Indigenous nationalities within the country. It has a strong international program that at-

tracts around 500 students per semester. Notably, this particular college is among the best higher education institutions in Ecuador, being classified as category "A" by the Ecuadorian national accreditation agency for higher education (Universidad San Francisco de Quito, 2017). It is sensible to conclude that this institution gathers a very privileged group of the country's higher education students.

Participants

Demographic information about the sample can be found in Table 1. The total sample size was 396 students. There were 176 (44.40%) participants in the control group and 220 (55.60%) participants in the experimental group. In total, there were 218 (55.10%) female students and 171 (43.20%) male students. However, 7 students did not specify a gender (1.7%). The average age from both groups was 20 years old.

In the control group, the age range was 18 to 32 years old, with participants from a variety of majors. For example, 25% of the students in this group were studying medicine, 6% chemical engineering, 5% economics, 4.5% dentistry, 4% administration, and 40% architecture.

The age range in the experimental group was 18 to 44 years old. In the experimental group, 30% of the students did their service hours with children 0–5 years old, 11% worked only with ages 6–11, 8% worked only with ages 12–17, 7% performed their hours only with adolescents, and 8% worked only with adults (18 years of age or older). In addition, 43% of students worked with two or more age groups as shown in Table 2.

Data Collection

Before the data collection process, IRB approval was secured and each student signed informed consent to voluntarily participate in the study. The data was collected via both a survey and semistructured interviews. The survey instrument used was the Civic Attitudes and Skills Questionnaire (CASQ) developed by Moely et al. (2002). As the authors explained, this instrument was "designed to measure attitudes, skills, and behavioral intentions that might be affected by service-learning participation" (p. 15). The instrument began as an 84-item questionnaire, developed based on a review of literature that attempted to measure the

Table 1. Demographic Characteristics of Each Sample		
	Female	Male
Gender	55.1%	43.2%
	Control	Experimental
	N = 176	N = 220
Major		
Medicine	25%	0%
Chemical engineering	6%	5%
Economics	5%	7%
Dentistry	4.5%	0%
Administration	4%	0%
Architecture	40%	14%
Civil engineering	0%	4%
Industrial engineering	0%	6%
Law	0%	5%
Other	4.1%	55.8%
Undeclared	11.4%	3.2%
Year in college		
Freshman	48.3%	3.2%
Sophomore	33%	24.5%
Junior	6.8%	38.2%
Senior	2.3%	22.7%
Fifth year	1.1%	11.4%
Did not respond	8.5%	0%
Ethnicity		
Mestizo	89.8%	95%
White	5.1%	3%
Indigenous	2.3%	0%
Asian	0.6%	0%
Did not respond	2.2%	2%
Age range (years)	18–32	18–44

Table 2. Service Experience Characteristics	
Age groups of service beneficiaries (years)	
0–5	30.5%
6–11	11%
12–17	8%
18+	8%
Multiple age groups	42.5%
Students worked with:	
One age group	57.5%
Two or more age groups	42.5%
Service organization area	
Urban	82.3%
Rural	15.9%
Urban and rural	0.9%
Did not respond	0.9%

effect of service-learning. After various trial versions and analysis, they ended up with 45 items divided into 6 factors:

1. *Civic Action* (asks if students plan to engage in future civic action such as volunteering, being an active community member, or helping clean the environment)

2. *Interpersonal and Problem-Solving Skills* (asks about students' abilities to work with others and solve conflicts with them)

3. *Political Awareness* (asks about students' knowledge of current events facing their community, nation, and the world)

4. *Leadership Skills* (asks about students' identification as leaders)

5. *Social Justice Attitudes* (asks about students' attitudes toward poverty)

6. *Diversity Attitudes* (asks about students' attitudes toward people from different backgrounds)

The corresponding questions for each of the six factors can be found in Table 3.

Although CASQ is the most recent and comprehensive instrument to measure the outcomes of service-learning, it was designed in English. Therefore, the instrument was translated and in January 2015, a factor analysis was conducted with a revised translated version of the CASQ. Factors were extracted using a principal component analysis for the six fixed factors. Varimax rotation with Kaiser normalization was used, and the six factors represented 48.64% of the variance. There were no changes to the instrument suggested by this factor analysis.

In May 2015, this mixed methods case study was conducted using the new version of the CASQ. Approximately 220 learners took the required service-learning course. Their scores were compared to the scores of a control group of 176 learners who did not take the mandatory service-learning class but were taking other courses during this academic period.

We analyzed the impact of a redesigned mandatory service-learning hybrid course using a control group to rule out test-retest score variation. In addition, we conducted 10 in-depth interviews about transformational learning with students representing the five quintiles of scores on the pretest from the experimental group. These interviews were evaluated with both inductive and deductive procedures for qualitative data analysis.

In the redesigned service-learning course, a special emphasis was given to the reflection piece using technology. The content, readings, and activities of the eight modules of the course were updated with multimedia material to maximize the interactive com-

Table 3. Civic Attitudes and Skills Questionnaire (CASQ) for Evaluation of Service–Learning Outcomes
Factor One: Civic Action
I plan to do some volunteer work.
I plan to become involved in my community.
I plan to participate in a community action program.
I plan to become an active member of my community.
In the future, I plan to participate in a community service organization.
I plan to help others who are in difficulty.
I am committed to making a positive difference.
I plan to become involved in programs to help clean up the environment.
Factor Two: Interpersonal and Problem–Solving Skills
I can listen to other people's opinions.
I can work cooperatively with a group of people.
I can think logically in solving problems.
I can communicate well with others.
I can successfully resolve conflicts with others.
I can easily get along with people.
I try to find effective ways of solving problems.
When trying to understand the position of others, I try to place myself in their position.
I find it easy to make friends.
I can think analytically in solving problems.
I try to place myself in the place of others in trying to assess their current situation.
I tend to solve problems by talking them out.
Factor Three: Political Awareness
I am aware of current events.
I understand the issues facing this nation.
I am knowledgeable of the issues facing the world.
I am aware of the events happening in my local community.
I plan to be involved in the political process.
I understand the issues facing (my city's) community.
Factor Four: Leadership Skills
I am a better follower than a leader.
I am a good leader.
I have the ability to lead a group of people.
I would rather have somebody else take the lead in formulating a solution.
I feel that I can make a difference in the world.

Table 3. Civic Attitudes and Skills Questionnaire (CASQ) for Evaluation of Service-Learning Outcomes *Continued*

Factor Five: Social Justice Attitudes

I don't understand why some people are poor when there are boundless opportunities available to them.

People are poor because they choose to be poor.

Individuals are responsible for their own misfortunes.

We need to look no further than the individual in assessing his/her problems.

In order for problems to be solved, we need to change public policy.

We need to institute reforms within the current system to change our communities.

We need to change people's attitudes in order to solve social problems.

It is important that equal opportunity be available to all people.

Factor Six: Diversity Attitudes

It is hard for a group to function effectively when the people involved come from very diverse backgrounds.

I prefer the company of people who are very similar to me in background and expressions.

I find it difficult to relate to people from a different race or culture.

I enjoy meeting people who come from backgrounds very different from my own.

Cultural diversity within a group makes the group more interesting and effective.

ponent in the online portion of the course. The redesigned hybrid course used a learning management system and discussion forums as one of the reflection strategies. According to Waldner (2015), the hybrid learning model used in this specific course corresponds to what she calls eService-learning Hybrid III, which is a blended class that uses some form of instruction and/or service online.

The quantitative part of this study followed an experimental design since the independent variable (group) was manipulated to determine if civic attitudes and skills (dependent variable) had any effect. Self-selection bias can be controlled by administering a pretest to determine how similar groups are at the beginning of the study (Steinberg et al., 2013). A multivariate analysis of variance (MANOVA) was used in the analysis to control for differences between control and experimental groups. Using multiple designs is recommended in order to understand more deeply what is being researched (Steinberg et al., 2013).

The sample for the qualitative section of the research was 10 students enrolled in the service-learning class. The reason for

choosing 10 as the sample size was practical, as the summer course only lasted 8 weeks, and the researchers' time was highly limited. All interviews were conducted with students from the service-learning course and not the control group, as the focus of the study was the service-learning course.

Nine of the 10 students originally selected for the interviews agreed to participate and were interviewed. One was no longer taking the course, so another student was selected and agreed to participate. Thus, a total of 10 students were interviewed. As in most qualitative research, the 10 students were selected using "purposeful sampling": selecting a sample from which the most can be learned (Merriam & Tisdell, 2015). More specifically, the participants were purposefully selected using a maximal variation sampling strategy, which involves the selection of individuals representing a wide range of characteristics (Creswell, 2012). This strategy was chosen because the variability in sample characteristics strengthens the arguments for potential generalizability of findings, when findings are recurrent despite all of the differences in the sample. The sample was varied in the following criteria: gender, ethnicity, age, major, year of

study, and service–learning group. The first criterion was the service–learning group, as the main goal was to select participants taking the course with different professors in diverse classrooms, since the focus of the study was to learn about the course and not the individual instructional approach.

Findings

Quantitative Analysis

The first steps in the quantitative analysis were multiple independent sample t-tests to compare the pretest and posttest total scores of each theme, as well as the total scores of the control and experimental groups. The results are shown in Table 4. There was a significant difference in the means for the control group and the experimental group on Factor 1: Civic Action; Factor 2: Interpersonal and Problem–Solving Skills; Factor 5: Social Justice Attitudes; and Factor 6: Diversity Attitudes. There was also a significant difference in the means of the total scores on the pretest between the control group and the experimental group. These results suggest that the two groups' dependent variables were different from the start. Therefore, subsequent analyses were performed with the difference in scores instead of the total scores, in order to focus specifically on the variance that the intervention may account for.

Since the main objective of this study was to determine the impact the service–learning course had on students, participants took the CASQ questionnaire twice (once before and once after the intervention). The difference between the posttest and pretest scores was calculated for each of the six themes before comparing the averages of these differences between the two groups. For this purpose, a MANOVA was used to identify the possible effects of the different independent variables on various dependent variables (Hernández, Fernández, & Baptista, 2010). The MANOVA showed a significant difference between the control and the experimental groups. Follow–up independent sample *t*-tests revealed a nonsignificant difference between the control and the experimental group in Factor 1: Civic Action. However, significant differences were found in the rest of the CASQ factors as shown in Table 5.

The results of the multivariate analysis of variance (MANOVA), through Wilk's index, suggest a significant effect between groups (control and experimental) and the averages of the differences (before and after taking the service–learning course) of the CASQ themes. Partial eta square identifies the proportion of the variance of the dependent variable that is explained by the independent variable (Field, Miles, & Field, 2012). In this study, the value of partial eta square was .07, which means that 7% of the experimental and control group differences can be considered an effect of the intervention. The results of subsequent independent t-tests showed an increase in the average postintervention (after taking the service–learning course). When the experimental

Table 4. Means and Standard Deviations				
	Control		Experimental	
	N = 176		N = 220	
	M	*SD*	*M*	*SD*
CASQ Scale				
Civic Action*	33.48	5.67	34.64	4.81
Interpersonal and Problem–Solving Skills*	50.61	6.48	52.64	5.64
Social Justice Attitudes*	28.90	3.81	29.96	3.79
Diversity Attitudes*	18.12	3.37	19.03	3.55
*Total Scores**	171.25	16.62	177.06	15.45

Note. Factor 5 and Factor 6 (Political Awareness and Leadership Skills) were not found to have significant differences.
*p < .05.

Table 5. Score's Difference Mean and Standard Deviations				
	Control		Experimental	
	N = 176		N = 220	
	M	*SD*	*M*	*SD*
CASQ Scale				
Civic Action	0.76	0.45	−0.14	0.31
Interpersonal and Problem-Solving Skills*	1.09	0.57	−0.59	0.48
Political Awareness*	0.57	0.32	−0.98	0.28
Leadership Skills*	0.56	0.22	−0.26	0.19
Social Justice Attitudes*	0.96	0.30	−0.65	0.29
Diversity Attitudes*	0.59	0.26	−0.45	0.24

Note. Five out of six factors were found to have significant differences.
$p < .05$.

and control groups were compared, these differences were statistically significant in all cases except for Factor 1.

Cohen's d was reported as an index of effect size, with their corresponding confidence intervals at 95% for all pairs. These indices provide descriptions of the size of the observed effects that are independent of any distortions related to the sample size (Fritz, Morris, & Richler, 2012). The range of Cohen's d values varies from .17 to .39, and when compared to the levels proposed by Cohen (1988), it can be concluded that there is a small effect size, meaning there is a real effect but the difference between the control and the experimental group is not very large. In conclusion, the results suggest that after taking the service-learning course there is a statistically significant increase in the averages of Factors 2, 3, 4, 5, and 6, with a small effect size on the sample of students at this university.

Qualitative Analysis

In basic qualitative research, researchers are "interested in understanding the meaning a phenomenon has for those involved" (Merriam, 2009, p. 22) and "how people make sense of their lives and their experiences" (p. 23). For this study, a qualitative component was included to obtain more detailed information from the survey collected; for example, the reason why students selected certain answers on the questionnaire. Also, the interview attempted to explore to what degree students thought their views changed while taking the service-learning course, and its possible impact.

The interviews were approximately one hour long. Students were reminded of the purpose of the study and their rights as research participants, then asked to read and sign a consent form before beginning. Students consented to be audiotaped to facilitate transcription and data analysis and were assured only the research team would have access to their specific answers. The interview was semistructured with six open-ended questions that mirrored the six areas of the survey (civic action, interpersonal and problem-solving skills, political awareness, leadership skills, social justice attitudes, and diversity attitudes).

The qualitative data analysis was conducted in two different ways: deductive and inductive. For the inductive analysis, the transcribed interviews were analyzed to find patterns that emerged from the data. We followed open coding with exemplary quotes from the data and then merged certain categories, then analyzed it again with the merged categories. For the deductive analysis, participants' answers to the questions about each theme on the CASQ test were analyzed separately to summarize their views for each factor.

Identifying new categories. Beginning with each theme, we identified "segments in [our] data set that is responsive to . . . research questions" (Merriam, 2009, p. 176). The next step involved placing segments

into categories and subcategories. Reading through the transcripts one at a time, answers were synthesized by a word or phrase (open coding) and added to a spreadsheet. As needed, these categories were split or merged using axial or analytical coding (Merriam, 2009). Thus, a summary of the perspectives of the 10 participants was constructed for each of the six CASQ themes synthesized in the spreadsheet. We then scanned the transcripts again in search of illustrative quotes and added them to the text. From the inductive analysis of the data, additional new categories emerged that did not correspond to the CASQ. These categories are listed below.

Empathy. Some students reported feeling empathy after working with street children and trying to put themselves in their position. As one student stated:

> Feeling empathy itself is super cool because they are children at risk . . . then it is beautiful to share time with them and also feel what it is to walk in their shoes because we often see them on the street and say "what a shame!"; but in the end, we never know what [story] is behind each one of them.

Everhart (2016) found that college students are more likely to develop their empathy through service-learning when they are able to observe emotional experiences of others, have more responsibility at their placements, and have opportunities to learn more about an individual's background and personal life.

Intrinsically Motivated by Experience, Increased Commitment. Students described how they were intrinsically motivated to do the work. One student said he was motivated to research different techniques for working with the elderly and summarizes his reflection as follows:

> For example, in this class of PASEC I was volunteering at the center, just going there. I helped in the kitchen, talking to the grandparents; but it forced me to search the Internet or some other sources: First, what are the elderly?; what is geriatrics?; some psychology for the elderly and also on YouTube for ways to plan activities for them who are the most in need.

Levesque-Bristol and Stanekthat (2009) found that service-learning courses with hands-on experiences, such as this one, support students' autonomy, which in turn increases their levels of motivation (measured as a multidimensional construct), including intrinsic motivation.

The Connection Between Service and Theory. Some students articulated how they saw connections between their service placements and the topics discussed in class. One student realized the connection between theory and practice by commenting on the importance of analyzing the theoretical content in readings and videos and her experience in the community. She stated:

> I think more is learned in practice and readings are a complement. In practice, it is like living the reality of how the situation is. For example, the theme of this week was health and we watched a video and read; but in the end, there are many things in the video I did know but I did not realize what was actually happening. The theory and practice are complements but I think the most important thing is to be with them, live what they live, the things you have and share time with them because, in the end, they are awesome.

Some universities offer course-based service-learning opportunities that allow students to connect their experience with course content. For instance, gerontology students directly related their understanding of the dynamics of social services being analyzed in the classroom while reflecting on their concrete experiences working with a specific group of elderly citizens (Blieszner & Artale, 2001). As Jacoby (2015) mentioned, the key to connecting the theory and practice is guided critical reflection.

Awareness of Ecuador's Social Reality. Students talked about being more aware of Ecuador's social reality. One student reflected on her awareness of Ecuador's social reality after the class:

> I think before the class I was a bit negligent about the situation and I think that's what happens with a lot of young people that we do not stop to think about what is happening. I think this class kind of draws

us to reality and says "Hey! wake up, this happened"; It has forced me to think; to listen to the news; to be more conscientious about what happens.

This theme is very related to the more recent term "critical service-learning" (Carrington, Mercer, Iyer, & Selva, 2015). Critical service-learning is geared toward understanding the cause of injustices and encouraging students to see themselves as agents of social change. Although there was clearly an expanded awareness about their country's reality, this awareness was not necessarily always linked to the students seeing themselves as agents of change.

Transformational Learning. Five students reported that they were reflective of their mental schemes about topics such as poverty and religious beliefs during the course. For example, one student stated:

> Then I realized that there are many reasons to have poverty, which is not just saying "people are lazy," but there are people who suffer neglect and are abandoned; they are exploited and there are also people who are not mentally able and it is difficult for them to get jobs and that taboo exists.

As stated before, this course incorporated discussion questions to promote reflection. In the discussions both in class and online, students are confronting their previous mental paradigms and some of them may have transformational learning moments (Donahue, 2011).

Analysis of CASQ themes. For the analysis based on the CASQ themes, the deductive approach by Merriam (2009) was used. A table for each subquestion resulted, showing how many participants had alluded to each response category; in some cases only one; in others, seven or more. Thus, we were able to estimate the recurrence of certain answers as shown in the text that follows.

Theme 1: Civic Action. Eight of 10 interviewees participated in volunteer work before taking the PASEC class. Six of them volunteered because of high school requirements. In general, the participants showed great appreciation for volunteer work and the service hours they performed during the course. As one person said:

> I thought it was a really interesting activity. It's really like seeing another world outside your bubble. It's seeing how other people live, the problems, and how in other places life is more difficult. It's also a good activity because it helps you help other people that most need it. It's like it does open your mind, it makes you more grateful for what you have.

Most participants reflected these sentiments, saying how they enjoyed it. Four interviewees mentioned that they would want to be more active in the future, and two gave ideas of how they would do this.

A study conducted with undergraduate students participating as mentors with at-risk children facing mental health–related issues in a poverty situation demonstrated that a service-learning experience that promotes understanding a concrete reality and that fosters reflection, reciprocity with the community partner, and responsibility while performing the service hours, could increase civic action and engagement in its participants (Weiler et al., 2013).

Theme 2: Interpersonal and Problem-Solving Skills. Eight of the participants said they exercised the skill of listening, especially during their service hours. For example, many mentioned listening to children and older people they worked with. Seven mentioned working collaboratively, especially with other volunteers and adults at their service-learning site. Eight of the ten interviewees said they had made friends, especially with children and other volunteers. Four participants mentioned helping solve conflicts between children and communicating, especially with children. Only three participants mentioned having thought logically and analytically, as one said:

> In other classes, I must also be thinking logically. Actually, I think the whole university is very much focused on this. In the service-learning class, yes because we talk and debate about topics and analyze them, but I don't know if above what is done in other classes.

In general, most participants mentioned that they exercised most of their skills during their service hours, and not in class.

One student mentioned learning something new about how to work with children from the "theoretical" part of the class, and another one spoke of the service hours:

> So, in the organization, I really had to work with other people and I've always been a more individual person that works alone, not in a group. In the organization with the other volunteers, you have to work in a group and develop that skill because we all have to be there for them. So I think that yes, yes it has helped me with that.

Overall, students' perceptions about improving their interpersonal skills support the findings of previous studies that show students who participate in service-learning report improvement in interpersonal skills such as verbal communication, leadership, and teamwork (Hébert & Hauf, 2015).

Theme 3: Political Awareness. Students taking college courses that involve a service requirement could be hesitant to work within a community, as they are not necessarily aware of what their communities are experiencing and might doubt whether their service hours can have a real impact. As suggested by Sylvester (2011), students' concerns need to be addressed from an instructional approach and other students previously involved in service-learning could share their perspectives to help overcome resistance to perform service hours. Students' political awareness as a theme is also related to the new category Awareness of Ecuador's Social Reality.

Five participants mentioned that they do generally feel quite well informed. They spoke of reading newspapers, watching the news, and speaking with family and friends. In the words of one of them:

> So, I think I have learned a lot with the class: I've read everything on the platform and it's very interesting, very complicated, everything that is happening. Sometimes one says "poverty: poor lazy people that don't work," but in reality, there are many themes that contribute to the reality that a person is poor and there are various types of poverty and more. So, I think that this class has taught me a lot, has made me think, start listening to the news and be more aware of what is hap-

pening.

These realizations about how complex reality is have also been found by previous studies. For example, undergraduate students taking a sociology class were directly involved in a local community, able to analyze their internal organizational policies, dynamics, and budget constraints, and realize how politics work at a local level. They reflected upon their role as politically engaged citizens at that level, and the extent of influence they could have on issues such as social justice, poverty, and discrimination among others (Guenther, 2011). Similar experiences can be replicated to promote political awareness among undergraduate students.

Theme 4: Leadership Skills. Six participants mentioned exercising leadership skills during their service hours, when they were in charge of children and managed to supervise them. One person also said she exercises leadership skills by organizing her own work and making decisions. In the words of one of them:

> I think so because the fact of standing in front of children and making them pay attention to what you're doing, it's a way to lead and not just pick up and say "sit, this is so." You have to explain to them what to do and relate to them; so that they do not feel forced or pressured. It should be like "she is doing that; it's good; looks good and fun, then I'll do it too," so I think that it is quite important. They are 12-year-old children and they are more difficult to handle and are not like little children to tell them "sit," it is different, then I think I developed leadership a lot and ability to control a little.

Students who believed this experience helped them exercise their leadership skills might have said so because this particular course creates a space for students to choose and shape their experience. According to Wurr and Hamilton (2012), service-learning projects foster leadership skills because they encourage students to become coproducers of knowledge.

Theme 5: Social Justice Attitudes. Participants were asked why they thought there was poverty and/or inequity in Ecuador. Their

answers varied, with each participant mentioning one or more of the following reasons. All participants agreed that poverty and inequity should be reduced, although one clarified that he/she thought only poverty was a problem, not inequity. As one participant said:

> Something that seems key to me is education because from my point of view if you have an education, the rest comes. So if you have an education, you can move ahead even if your family didn't have the resources. You were able to get an education and move ahead, and now your children can move ahead. So, it can be that if you have more resources and you can help someone, you do it and you give them a job. But I think the most important thing is education.

Other ideas mentioned include raising awareness, ensuring equal opportunities, getting people who have a lot to realize how much could be accomplished with them having a little less, and ensuring basic services for all (health care, security). All respondents said that the service-learning class influenced their views on poverty in one way or another. Five said they now knew more, one specifying that she/he did not previously know the relationship between child malnutrition and poverty. One spoke of understanding the complexity better, and two spoke of feeling more aware and empathetic after seeing things firsthand. Three spoke of how they changed their views, and in the words of two of them:

> Mostly, I thought like "they're poor because they feel lazy," but sometimes, on the other hand, it's like a more cultural problem because it's not like people who don't have resources are lazy because they are hard-working people, and I hadn't realized that. Now I see and it's like these people do work, even small children want to work. But it seems it's the opportunities.

> So I remember that we were on the poverty unit and we saw videos and people spoke and it did make me change my views on that we don't know the personal situation . . . we don't know anything. Maybe some

are lazy, but there are many people that for some reason have had a hard time moving ahead.

Thus, it seems some participants initially thought that people were poor because they did not want to work, but began to question this assumption and see a more complex assortment of possible reasons. A qualitative study with undergraduate Latino students taking a Spanish Language and Culture for Heritage Speakers service-learning course revealed that participants gained a deep sense of the inequality, lack of access to services, and discrimination the marginalized group they worked with experienced within their communities (Petrov, 2013). These findings suggest that service-learning courses can be connected with social justice education and undergraduate students.

Theme 6: Diversity Attitudes. Nine respondents said they had opportunities to meet people different from them. Six mentioned Indigenous peoples, five mentioned people of low socioeconomic status, and three mentioned people from other provinces. Others mentioned Europeans, Afro-Ecuadorians, people with disabilities, people with a different sexual orientation, and religious people. As one explained:

> I think that as a preference, it'll always be someone similar to you . . . but even so, I have no problem interacting with people who are not the same. But as people, I think we always prefer people who are more similar to us.

The last question of the interview asked participants whether they thought their views regarding people different from themselves changed after taking the service-learning class. Only five responded, and most spoke of becoming more sensible or reaffirming views they already had. One spoke of a change of view:

> In the PASEC class it's like we shared a ton of things that people had in their different places. For example, there's a girl that is working with people from the LGBT community and the view of how she speaks and what she speaks about makes you feel really comfortable. And I, who do not belong to this community, can feel good with

them. So, yes it makes you question how you can get along with people that are different from you in certain things, but if you get to know them more, they can be similar to you in other things.

Students' responses do not point toward a change in their beliefs about diversity. It could be that students already had a positive attitude about diversity, or it could be that this experience did not necessarily change their initial attitude. According to Bowman and Brandenberger (2012), to help promote student growth, faculty should facilitate diversity experiences that are contrary to students' expectations. This could be a key to improving courses like this in the future, where specific experiences are planned within the course for students to interact with diverse groups in a positive way.

Conclusions

This mixed methods study was conducted to determine if a mandatory hybrid service-learning course had an effect on the civic attitudes and skills of college students attending a private university in Ecuador. A quasi-experimental design was followed in the quantitative part of the study, and interviews were used for the qualitative part.

In regard to the quantitative data analysis, MANOVA and follow up *t*-tests with the control and experimental groups' difference of scores showed that Factor 1 (Civic Action) was not significantly different between the groups, whereas the other five factors showed a significant difference. Previous independent sample t-tests with the pretest scores showed that the two groups started significantly different in their civic attitudes and skills. This difference may be explained by the demographic differences between the groups, the most relevant being the year of study. The control group was formed by 6% juniors and 3% seniors, with the majority being freshmen and sophomores. On the other hand, the experimental group was 38% juniors and 33% seniors, with a minority of freshmen and sophomores.

Qualitative data analysis followed both an inductive and a deductive approach. As a result of an inductive analysis of the interviews, new themes emerged such as empathy, increased commitment due to experience in service-learning, the connection between theory and service hours, awareness of Ecuador's social reality, and transformational learning. Students reported that they were able to put themselves in another person's position while performing their service hours. Also, students described that once they were involved in their service hours, they felt motivated to continue to work with the group they started working with. During the interviews, students reported a clear understanding of the relationship between the theory reviewed in class through readings and assignments and the work performed in the community. Students felt they were more aware of their country's social reality after their service hours and reflected on their personal mental schemas about poverty, working with the elderly, religious beliefs, working with unfamiliar groups, and challenging prejudice about certain groups. These results suggest that this may be a particularly effective intervention for students from privileged backgrounds, such as the participants in this study, to become sensitive to the living conditions that other groups in their country have.

The deductive approach was used to analyze the interviewees' responses as they related to each of the six themes on the CASQ. In this analysis, the interviewees showed how the course had a positive impact in each of the six themes: civic action, interpersonal and problem-solving skills, political awareness, leadership skills, social justice attitudes, and diversity attitudes. These differences correspond to what was found in the quantitative analysis. Specifically, in the Civic action theme, most participants mentioned that they were somehow used to doing volunteer work. This affirmation corresponds to the fact that in this country there are mandatory community service hours for high school students and college students. Somehow, it is seen as a normal requirement and part of their academic and career preparation. For this reason, many interviewees mentioned they were already committed to volunteer work. The fact that they mostly had previous volunteering experience and were already committed to service may explain why there was not a significant difference found in the t-test of the pretest-posttest between the experimental and control groups. It seems that service hours are becoming a normal experience for Ecuadorian youth, and these experiences may positively influence their attitudes toward civic action.

The mixed methods approach was particularly useful in this study to explore the reasons behind the quantitative results. Finding positive impacts of a course intervention is not as informative as having students' views on different aspects of the course's impact. Through the qualitative analysis, a more detailed description of why each factor had a significant quantitative improvement was revealed. An inductive data analysis provided insight on the course's impact on student learning and on motivational aspects that could be explored further in future studies. Important elements about the intervention were highlighted, like the importance of direct service that provides hands-on experience, high levels of autonomy, and emotional experiences. Also, the fact that this is a mandatory course but students talked about their intrinsic motivation to perform the service was a particularly interesting finding.

Implications and Recommendations

The results of this study contribute to a continued exploration of developing civic attitudes when taking a mandatory service-learning course in Ecuador. The use of the control group allowed us to determine the real impact of the course, which was positive and significant. These positive findings should persuade decision makers to implement similar service-learning models in other higher education institutions in Ecuador and Latin America. The results suggest that similar types of courses may lead to students' increasing their interpersonal and problem-solving skills, political awareness and leadership skills, and becoming more sensitive toward issues of social justice and diversity. Therefore, higher education institutions may consider adopting similar hybrid courses.

Qualitative data shows that students' service-learning experiences can trigger their internal motivation to learn more about a topic. For example, students working with elderly patients became interested in autonomously learning more about geriatrics. Thus, higher education institutions could harness service-learning to increase students' motivation for their area of study. Qualitative data also suggests that hybrid service-learning models connecting theory and practice can lead to transformational learning, where students question their beliefs and change their perspectives. Thus, higher education institutions could use such models to foster transformational learning.

We recommend continued research through conducting similar studies, comparing Ecuador's situation with that of other countries in Latin America in order to describe how service-learning in higher education is evolving in this region. The next steps include focusing on exploring relationships with service agencies and the impact these programs are having on the community at large. Also, a longitudinal study to analyze student effects over an extended period of time could clarify the real impact of this particular service-learning course.

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A Case of Service–Learning and Research Engagement in Preservice Teachers' Education

Luigina Mortari, Roberta Silva, and Marco Ubbiali

Abstract

This article describes a service–learning program developed at the University of Verona, Italy. This community service research learning (CSRL) program involves preservice and in-service teachers and incorporates learning, community service, and research. We detail the program's theoretical basis and then present the results of a research project conducted with 45 students (preservice teachers) involved in the program during the academic year 2017–2018. The aim of the research was to identify the enrichments students' believe they achieved through their program participation and what they considered most relevant from program participation for their professional improvement.

Keywords: service–learning, teacher education, apprenticeship, professional development, research engagement

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Since its first appearance as a pedagogical method in 1966 (Stanton, Giles, & Cruz, 1999), service-learning (SL) has increasingly gained popularity as a pedagogical tool (Billig & Waterman, 2014), instigated in part by the passage of the National and Community Service Trust Act (1993) in the United States. Today, SL is a pedagogical strategy aimed at connecting community engagement and academic learning in contexts where students are involved in providing a service to a community, trying to contribute to the solution of a need and at the same time learning from the experience itself (Verducci & Pope, 2001) by connecting what they have learned in class and in the process of giving service to the target community (Carrington & Saggers, 2008). It represents an experiential methodology that is now widely practiced in higher education (Felten & Clayton, 2011). It's popularity stems from its capacity to develop both academic and soft skills, particularly as they pertain to civic analysis and reflection (Astin, Vogelgesang, Ikeda, & Yee, 2000; Astin et al., 2006; Eyler & Giles 1999). According to Stanton et al. (1999), SL has gained prominence, perhaps to the great-est level, in higher education. Today, SL is found in every academic field and every type of course across colleges and universities. While it first appeared in and expanded within the United States, it has increasingly been adopted in many countries all around the world. According to Stanton et al. (1999), SL has gained prominence, perhaps to the greatest level, in higher education. Today, SL is found in every academic field and every type of course across colleges and universities. While it first appeared in and expanded within the United States, it has increasingly being adopted in many countries all around the world.

Many authors emphasize how SL has become more and more important in the field of teacher education, first gaining the attention of teacher educators in the United States since the 1990s (Erickson & Anderson, 1997; Wade, 1997). In 2003, Anderson and Erickson (2003) counted more than 300 teacher education programs that integrated SL in their curricula. Even though many universities have adopted SL practices in teacher education programs (Anderson & Erickson, 2003), research on this practice is not as robust (Kirtman, 2008; LaMaster,

2001). Nonetheless, the amount of research is gradually growing as scholars try to fill the gap that several service-learning scholars have noted (Furco, 2001, 2003; Furco & Root, 2010).

Other scholars have emphasized how SL is useful to enhance elements that are essential for future teachers: (a) the development of teaching skills (Jackson et al., 2018; Wasserman, 2009) and reflective skills (Baldwin, Buchanan, & Rudisill, 2007); (b) a student-centered caring approach to teaching (Buchanan, Baldwin, & Rudisill, 2002); (c) a more complex vision of teaching and learning practices (Maddrell, 2014); (d) an attention to children with special needs (May, Chitiyo, Goodin, Mausey, & Swan-Gravatt, 2018; Russell, 2007), and to children coming from different social and ethnic backgrounds (Carrington & Saggers, 2008; Li & Lal, 2005); and (e) a human service-oriented vision of teaching (Wade & Anderson, 1996) and in building a community of practice (Swick, 2001). Conner (2010) emphasizes that all of these learning outcomes can be reached only if SL is a project designed with a clear pedagogical intentionality and carried out through a well-structured and long path. If an SL program is not well-structured, instead of being really educative, it can confirm and strengthen preconceived notions (i.e., stereotypes, prejudices) that students had at the beginning of their training (Baldwin et al., 2007; Chesler & Vasques Scalera, 2000; Coles, 1999; Erickson & O'Connor, 2000; Petersen, 2007), or can generate lack of comprehension or distrust in facing complex situations (Sperling, 2007). In order to avoid such outcomes, it is essential to remember that teaching needs not only tools (i.e., instructional strategies) but also a vision of education able to orient choices and actions (Mortari, 2009).

A Community's Action: Service and Research

Starting from this premise, we can see that the literature indicates different elements that contribute to developing personal and professional achievements. One of the most important is the connection between preservice and in-service teachers. This connection is important because education is a practice, and for it to be learned, an exchange of experiences, through the cooperation between experts and novices, is necessary (Mortari, 2009). This exchange is represented by entering a community of practice (Lave & Wenger, 1991; Wenger, 1998). SL builds a context in which the learner is initiated into the culture of a community and gradually cooperates in building the knowledge that funds it, in a mutual and reciprocal action (Farnsworth, 2010; Hart & King, 2007; Leeman, 2011; McMillan, 2011; ten Dam & Blom, 2006; Yogev & Michaeli, 2011). If the aim of a community is collective improvement, to be part of a community of practice means to look for shared knowledge that arises from working together. For a preservice teacher it is fundamental to learn how to be an educator by sharing educational activities with an expert and being part of a mentoring relationship. Moreover, in an ethical vision, we would like to give form to this relationship not only as a way of learning for the mentee, but it also serves as an enrichment for the mentor and for the whole school community. That is why it is important that the learner acts to benefit the community. SL is a very appropriate method to provide this kind of active support while learning (Boyle-Baise, 1998; Mortari, 2017).

Moreover, if education is a practice, as we already have suggested, there is not a predetermined theory that can be applied in every context exactly as it is learned in books. education, in fact, cannot be preprogrammed (Dewey, 1929). Educative wisdom, as Mortari (2009) asserts is situational. Teachers should face the variability of different problems in educational contexts by analyzing their own actions and producing theories rooted in experience (Mortari, 2017). Teachers' training should be part of a context that is entered not with a preplanned lesson to be taught (as occurs in many teachers' training programs), but rather with an open mind to understand the challenges and a creative look to gain solutions. This is the philosophy that makes SL particularly useful for teachers' training. Anyway, this experience can be possible only if preservice teachers are trained as professionals adhering to a service perspective. SL can be useful for developing research-based learning with a sensitive look at community needs (DePrince, Priebe, & Newton, 2011; Harkavy & Hartley, 2010). Dewey was the first author who conceived research as an essential element for teachers' education, arguing that a practice that does not consider the contribution of scientific inquiry enforces a conventional way of educating, which is at risk of becoming an uncriti-

cal routine (Dewey, 1929). Mortari (2009), developing Dewey's intuition, provided research in a fundamental role in teachers' education, but she specified that

> asking the teacher to carry out research doesn't mean to ask him/her to become a researcher, because his/her duty is not to carry out research but to educate through teaching; instead, he/she is asked to give form to a sufficient competence set allowing him/her to rigorously examine practices acted, and to collect data useful to redefine the theory, and so enabling it to promote a continuous improvement of practices themselves. (p. 35)

Even the European Commission (2014) argues that education to perform research is fundamental in teachers' training, starting from the early stages.

The Verona Program

A Revolutionary Policy of Education

According to these considerations, the University of Verona (Italy) organized for students of the master's degree in primary school education a SL program that assumes the form of community service research learning (CSRL). The CSRL program has a double aim: (1) to promote learning as a service for the classroom in which the students are engaged in their apprenticeship and (2) to envision the research for the writing of each student's dissertation as a work that answers significant questions raised by teachers-mentors. The program involves (a) students of the last two years, (b) in-service teachers coming from different schools, and (c) an academic team that has collectively assumed the role of supervisor. We define this program as community research service learning (Mortari, 2017) because students achieve academic outcomes through a service action aimed at responding to a specific need of a community (in this case a school community). Moreover, they are also called upon to develop educational research related to their service action and write a research dissertation on their experience.

This model of CSRL is grounded in a revolutionary policy of education: the idea of the university engaged in the community, serving it with its research and educational practices (Mortari, 2017). This model starts from the assumption that this choice, on the one hand, reinforces the connection with the community and, on the other, supports the development of the preservice teachers' research skills. The European Commission (2014) considers such skills as key skills for teachers' training because, in order to understand what is happening in a real context, a teacher must know how to get in touch with authentic and not idealized everyday life, and therefore he or she must know how to look "inside" it (Mortari, 2007). Indeed, university policies of education to perform research should be revised. Too often, in fact, undergraduate students' final dissertations are simply a written reflection about an "intellectual curiosity." This can certainly have an interesting outcome but, in most cases, it remains unknown to the community of practitioners. This lack of binding of the research work to a real-world context causes a lack of significance that translates into a cultural diseconomy. Despite the importance that these skills have for the practice of teaching, the training programs directly aimed at developing them are very few; however, in the CSRL program, their development is emphasized.

The Structure of the Program

The program is implemented in five steps. In Step 1, students attend the SL program during the Course of Educational Research (60 hours) and the related Workshop (15 hours). During the course, students become familiar with the SL theoretical basis and the methodological tools needed to plan, observe, document, and analyze their SL experience. More specifically, they learn how to identify a school need, how to design an intervention starting from it, how to use qualitative observation tools, how to create a qualitative report of the experience, and how to analyze actions to improve their efficacy. During Step 2, every student (preservice teacher) chooses the level of school in which he or she wants to be trained (kindergarten or primary school), and then each student is put in connection with an in-service teacher, paying attention to the fact that a good relationship should be established between a student and his or her mentor, since they have to share two years of school together.

Step 3 is focused on the identification of the community's need. What differentiates the Verona program from many other SL

programs is that this identification does not precede the entrance of the students into the context. On the contrary, the community need is defined jointly by the in-service and the preservice teachers during the first weeks of their induction as a result of the cooperation between them. Indeed, students are called upon to put into action what they have learned during the Course of Educational Research in order to help the in-service teacher identify the problem on which the action will be focused. Step 4 concerns the service action: preservice and in-service teachers, by mutual agreement, design an action (an educational program, a teaching program, an evaluation program, etc.) aimed at responding to the previously identified needs. In this phase, the academic team supervises the design of the action, supports preservice and in-service teachers in case of need, and mentors the preservice teachers in order to guide the achievement of their academic outcomes and the development of the educational research that they are called upon to conduct. This interaction between the step focused on the action and the one focused on the research is symbolic of the interaction between two kinds of knowledge: the academic "news" brought by preservice teachers and the deep experiential wisdom elaborated by practitioners.

Finally, Step 5 of the program regards the development of the dissertation that students are called upon to write in order to achieve their degree. The writing of the dissertation is the moment when students put their research project into words, from the needs identification to the collection and analysis of data. Thanks to this writing they reflect on the practice and really learn a pedagogical posture. In this regard, it is worthwhile to emphasize that, during the SL program, students are required to write a reflective journal in which they write thoughts, feelings, and actions related to their SL experience.

The Research Question and the Methodological Framework

Start From the Question

In order to analyze the CSRL program, during the academic year 2017–2018 we decided to conduct a study that involved 45 students, in order to: (1) define what are, according to their experiences, the achievements that these students have earned from their participation in our SL program; and (2) identify what students consider important for their personal and professional growth. Indeed, our CSRL is built on the conviction that a SL practice helps future teachers develop essential professional skills (reflective, civic, teaching, etc.), but, starting from their own experience, what do students really feel they have learned? Hence, the research question that guides our study is "Starting from their own experience, what achievement do students think they have achieved through their involvement in the CSRL program?"

Coherently to our aim, we developed a study that follows an ecological paradigm, according to the idea that in order to throw light on something that happens in a real context, you must interview those who are involved in it (Merriam, 2002; Mortari, 2007). We chose a phenomenological approach because it is particularly suitable for exploring the meanings that people give to their experience (Lincoln & Guba, 1985). This method of inquiry is inspired by the phenomenological-hermeneutic philosophy, because its aim is to examine the problem starting from the subjects' lived experiences (Mortari, 2007). The data collected are the reflective texts connected to students' dissertations. This method of gathering data leads the researchers to acquire direct knowledge of the subjects' world, following the principle of adherence to reality. The analysis of the data is inspired by content analysis because it allows defining and organizing the meaning of a text to discover its core elements without losing its undertones (Elo & Kyngäs, 2008; Hsieh & Shannon, 2005). This tool is set into a more articulated analysis method that interconnects the empirical phenomenological method (EPM) and grounded theory (GT; Mortari, 2007). This method takes inspiration from the EPM for the posture of analysis that allows us to pay attention to the visible profile of things, remaining faithful to the qualities of the phenomenon and leading to a rigorous description of it. On the other hand, this method is connected with GT because it gives us a way to build a systematic process of analysis through different steps (Mortari, 2007; Mortari & Silva, 2018).

The Process of Analysis

This systematic process of analysis is guided by several main "rules" and is organized

in different steps. The rules guide the researcher to proceed in certain ways:

- reading data many times;

- exploring data without a map of ideas or epistemic moves already defined (i.e., cultivating open attention);

- recursively going back to data in order to have the possibility to understand the smallest details;

- being patient: The researcher must develop a restful posture of the mind in order to listen to the text; and

- during the process of constructing the descriptive theory, monitoring the words to enable them to faithfully express the meanings emerging from the analysis itself. (Mortari, 2007)

This tool of analysis is organized into eight steps or phases. The first phase can be considered Step 0, which is aimed at gaining an overall knowledge of the research material, which is necessary to grasp the overall meaning of the data, in order to provide a context for the emergence of specific units of meaning. In the next step, Step 1 the text is divided into meaning units and the researchers generate descriptive labels for every unit, comparing their ideas and examining the descriptive alignment and interpretive dissonances between them. The aim of this step is the development of a provisional coding characterized by descriptive labels to identify the specific quality of every meaning unit. Step 2 is optional, but it is needed when something unclear has emerged in the previous step. This step involves holding a specific data analysis session with subjects in order to clarify the meaning of excerpts for which researchers' interpretations vary widely.

In Step 3 the provisional coding is verified through a recursive process to monitor the capacity of the coding to describe every unit of meaning in an adequate and effective way. The aim of this phase is to redefine the labels, testing their descriptive adequacy in achieving a faithful conceptualization of the different aspects of the phenomena. Step 4 regards a kind of "tuning" of the coding, which is refined in order to make it not only appropriate but also clear. In Step 5 the descriptive grains (labels) are organized in categories that help us to define more precisely the "shape" of the phenomena we are investigating. In order to complete this step, the labels are regrouped into categories (second-level labels) with analogous types of meaning units, and they are then placed into homogeneous sets, producing a list of categories that characterize the qualities that mark the different aspects of the phenomena. Hence, this step allows the researchers to define the coding of analysis. In Step 6 all the meaning units are classified (using a table) according to the final coding system and, after that, the researchers focus their attention on the categories (or the labels) that emerge to make them more coherent with the research question. This second level of mapping makes clear the distributions, the frequencies, and the interconnections of the various categories, and it leads to the emergence of a descriptive theory inductively constructed through a gradual process of interpretation of the data (Mortari 2007; Mortari & Silva, 2018).

Findings and Conclusion

The research was conducted between October 2017 and November 2018 and involved 45 students. Every student is assigned an anonymizing identifier (e.g., S1, C2). The analysis leads us to elaborate a coding system (presented in Table 1) that describes the achievements that students, starting from their lived experience, think they have earned at the end of their SL experience.

In this article, we do not present the entire set of findings but, in alignment with the research question that we had submitted, we focus our attention on the professional skills and particularly on the categories "development of research skills," "development of reflective skills," and "development of a service perspective." We focus our attention on these elements because, as we have previously noted, research skills are what make the future teachers able to transition from technicians to competent professionals (He & Prater, 2014), to become someone able to modulate his or her professional behavior according to the context of emerging needs (Kellehe & Farley, 2006), and to transform his or her own experiences into experiential knowledge. This knowledge leads to interrogating practice to construct educational theories and able to enlighten practices, rather than merely "applying" knowledge that is developed by someone else (Mortari,

Table 1. Self-Reported Skills Students Gained From the CSRL Program	
Professional skills	Increasing of professional knowledge
	Completion of professional profile
	Development of reflective skills
	Development of a service perspective
	Development of research skills
"Transversal" (or "personal") skills	Development of the skill to learn from mistakes and manage a crisis
	Development of skills useful to handle the unexpected
	Development of self-critical skills
	Supporting motivation
Interrelational skills	Development of collaborative skills
	Development of empathic listening
	Development of a child-centered approach

2007, 2017). In order to do this, it is also necessary to develop reflective skills, because it is through reflection that the subjects reelaborate their experience in systematically structured systems of thought, allowing a critical analysis of action that permits the elaboration of experiential knowledge (Eyler & Giles, 1999; McCarthy, 2010; Mortari, 2009; Wade, 1995). The SL experience adds a further enriching aspect because it not only allows the development of research and reflective skills of future teachers, but it does this starting from a service perspective. This connection between research and service perspectives echoes the thought of Rorty (2002) and his pragmatist vision of research. According to Rorty, research must be focused on solving the real problems of a context. This is possible only when starting from an ethical posture open to the other's needs, which "should not be understood as the passive bending to every request that comes from the context." Rather it is the ability to be engaged in an action starting from "a negotiation of the meanings that leads to a common framework" (Mortari, 2017, p. 31).

Research Skills

The development of research skills, this is an explicit goal of our program, and the students are made aware of this. Moreover, from student feedback, we have learned that these skills are something that students consider relevant for their future professional practice. As one student stated, "I would like to bring with me . . . my being a researcher. . . . I will enter in the school not only as a teacher but also as a researcher" (D1).

In their texts, students express their views of what characterizes the professional profile of a teacher who adheres to a research perspective. The first element that they emphasize is that this kind of teacher is someone who applies the tools that research offers to analyze and evaluate the teaching and learning processes with a transformative purpose. In other words, to be a teacher with research skills means to have a powerful tool that not only represents an interpretive aid for analyzing the context, but also a device to be used in solving the problems that emerge from the context.

> The posture of the researcher leads a teacher to examine in a rigorous way the practices put in place in classroom and [this means] to develop a habit that considers research as something aimed at promoting the quality of educational actions. (R1)

The second element, according to our students' experiences, is that the development of research skills had represented for them a kind of "catalyst," able to activate other forms of professional growth. This means that the achievement of the research skills for these future teachers is not only an important acquisition on its own, but because these competencies are connected to the development of a critical and analytical vision

of professional practice that enables them to develop a professional practice, they are skills oriented toward lifelong learning.

> The research experience had represented a real opportunity for training and learning. [P1]

This statement also recalls what official documents affirm regarding the need for teachers to adhere to a lifelong learning perspective (European Commission, 2014). However, many researchers have emphasized that this disposition should be cultivated from the early stage of teacher training in order for it to be embedded into the teachers' teaching ethos (Day, 2002). Starting from our students' experiences, the development of a research habit seems to be a way to promote commitment and enthusiasm for lifelong learning.

> Something that I have learned from this experience is that a teacher . . . is someone who can be an active actor in the construction of the future of people, being in a lifelong learning perspective with and for others. (Z1)

It is interesting to note that students consider lifelong learning an expression of their responsibilities toward their pupils. Indeed, in the expression "with and for others" we can find the meaning of educational research that is enrolled in a participatory dimension, not only because it sees the involvement of teachers as active agents in research actions in which the pupils also play an active role (Mazzoni & Mortari, 2015), but also because it acquires meaning through a principle of utility aimed at improving the well-being of the pupils the teachers are responsible for (Mortari, 2009).

Reflective Skills

As we have previously noted, the development of research skills is strictly connected to the development of reflective skills. Nevertheless, these competencies are also something that characterize the profile of a good teacher, so these competencies have a double relevance in the professional development of a research-oriented teacher. Reflection is a critical component of thinking that allows us to look at the context, identifying critical areas and assuming effective educational strategies because it is not only a cognitive act able to analyze a

problem and propose solutions, but it also throws light on the dynamics of thought that accompany this path (Mortari, 2009). For this reason, reflection is for a teacher "an intentional act of the mind" that makes him or her able to investigate his or her own way of teaching (Lyons, 2002, p. 99), transforming experiences into experiential knowledge, a thoughtful and critical knowledge that interrogates practice to construct theories able to enlighten it (Mortari, 2009). The students' texts emphasized the importance that reflexivity has held for their professional development.

> Self-reflective practice . . . [is an] activity of critical vigilance on thought, which I have been able to exercise along the entire path. (R1)

> [This program] has led me to grow in reflexivity. . . . I have ventured into a continuous reflection on my experience. (O1)

The students were encouraged to write a journal that kept track of both the practical and reflective dimensions of their experience. These field notes are composed of observational notes and reflective notes, which draft the thoughts that accompanied the actions.

> Writing helps to gather the [pedagogical] knowledge and the reflections on it, giving the possibility to retrace one's own step, to be able to observe it from different points of view and to capture aspects which at first you have not notice. (P1)

Writing is essential for the development of future teachers' reflective skills because it helps activate a critical vision of their professional practice that leads to developing "anticipatory reflection"—that is, the ability to reflect on actions in a future-oriented mode (van Manen, 1995, p. 33). Indeed, the teacher should be able to reflect in a pendulum that temporally goes from the moment that precedes the act, transits to the action itself, and closes, in a circular perspective, with the phases that follow it. The purpose of this transversal reflection is to weave, in a critical way, the moment of intervention planning, the implementation phase, and the evaluation, directing future practices more effectively (van Manen, 1995). The writing of a journal that keeps track of his or her own experience can help the teacher

develop this kind of reflection (Mortari, 2009). Furthermore, writing a journal helps future teachers develop the narrative dimension of their actions; indeed, the narrative thought allows teachers to revise their actions starting from multiple points of view and leads the subject to bring to light values, beliefs, and theories that are subtended to their behavior, guiding them to a deeper and better articulated reading of their lived experiences (Conway, 2001; Jalongo, Isenberg, & Gerbracht, 1995). During the program, moments of shared reflection were also organized in different forms (peer groups, small and large groups with the support of the academic staff, and so on).

> An element that I considered essential in developing this experience was the frequent occasions for thinking, either individually or with the help of the team of university professors who supported us. (M1)

This choice has precise reasons: on one hand, peer coaching supports preservice teachers in developing reflective skills because it helps each student go deeper into his or her own perspective and compare it with others' perspectives. Indeed, peer confrontation leads to developing a kind of reflexivity able to relate, with an open mind and thoughtful approach, to the complexity that characterizes educational contexts (Lee & Choi, 2013; Mortari, 2009). On the other hand, the support of the academic staff is aimed at helping students cultivate the ability to analyze the cases and develop new solutions, keeping contact with the reality from which it is born and to which it must return, accompanying the teacher in a process of elicitation of his or her knowledge through a critical and systematic analysis (Mortari, 2009).

> [Reflecting] has always helped me to implement a good teaching and grow professionally. I hope not to lose this ability but rather to further refine it to become a good teacher, able to observe and design following the needs of my students. (S1)

From these words emerges awareness of the importance of reflective practice as a daily habit in order to support the future teachers' capability to continuously reinvest energies in their own professional training starting from everyday actions, despite the fact that it is hard to put *reflective practice* into action during the flow of the teaching activity. The reflective teacher is the one who looks at his or her own experience, analyzing it through a variety of tools and from different perspectives, in order to highlight his or her potential and areas that need improvement (Mortari, 2009). Reflective competence is essential as a contrast to the idea of teaching as a routine practice, which produces a standardization of thought in younger generations and a general failure of critical thinking (Mortari, 2009). All these considerations have a great impact on the development of the debate on teachers' training, leading to the concept that the development of reflective skills is one of the cornerstones for teachers' professionalism, with a solid theoretical base, an in-depth knowledge of educational contexts, and the improvement of evaluative skills (Yost, 2006).

The third element connected to the development of research and reflective skills of future teachers is the development of a service perspective.

The Service Perspective

The development of a *service perspective* is crucial in a SL program, and it is essential to clarify that it should not be interpreted in a pietistic or philanthropic sense that considers "service" as "charity" (Mortari, 2017). Indeed, this interpretation of the concept of service echoes the idea of an act of restitution to society in order to cover a debt that the subject contracts by virtue of a privileged position that can lead to underestimating the civic role and the transformative value of these experiences (Gorham, 1992; Sandaran, 2012). Indeed, the service perspective that SL promotes is based on an idea of equality between all the subjects involved because all of them should "gain" something from the SL experience: the students (development of professional and personal skills) and the community (receiving concrete help in solving a real problem; Kahne & Westheimer, 1996). In this regard, it is interesting to note that the students observed how this is a difficult perspective to assume, particularly at the beginning of the program, because it is experienced in some way as a leap into the void.

> Putting oneself at the service of someone "blindly" means in a certain sense take a risk. (C2)

From the texts of our students emerges that what transforms their experience into a positive one, making them really able to develop a service perspective, is the relationship with the in-service teacher. In many cases the relationship between the student (preservice teacher) and the tutor (in-service teacher) was characterized, while their mutual knowledge increased, by respect and collaboration leading to a reciprocal enrichment.

> To make oneself available to the other is not a simple thing, initially there are many doubts. In time, however, we get to know each other and if you know and respect someone, you want to help him. (S1)

There are two more elements, partly connected to the relationship with the in-service teacher, that are positively connected to the development of the service perspective: (a) the sense of usefulness that students witnessed in feeling they were part of the solution to a problem that concretely affected the quality of life of a class and (b) the awareness that the in-service teachers trusted them. As regards the first one, many students have emphasized their feeling of being part of the class and therefore being responsible for the solution to the problems of the class, making the service action a goal that they felt as primary.

> I was able to experience what it means to actually offer a service. . . . For the first time I felt really useful in the face of a real need for a teacher in the classroom. (B2)

This community and participatory aspect of service-learning is linked to a concretely acted civic engagement in which community service activities do not represent a corollary of the training path but constitute "the backbone" capable of promoting a teacher figure characterized by a strong ethical and civic dimension (Mortari, 2017).

As regards the second element that we have underlined, the importance for students of feeling that tutors trust them, in the words of our students it emerges that this awareness is at the base of a new confidence that they felt as a "reward" for their actions and as a proof of their being able to "make a difference" thanks to the alliance they had made with the tutor.

> Planning together . . . with the aim of improve the learning experience of the children has allowed me to feel the value inherent in the service. During this journey, I have always felt useful, and I felt the trust that the teachers had in me and their desire to feel supported by me to discover what was "going wrong." (G2)

This feeling of usefulness emerges from the lived experience of our students to be an element that had a crucial role in the reinforcement of their motivation, particularly in the difficult moments. Anyway, we think that it is important for another reason also. It is through this feeling that students discover their being really part of the community, a part that can concretely contribute to its quality of life. Each student's action of service is therefore not only a "duty" but becomes the manifestation of an idea of civic responsibility that finds its inspiring principles in participation and sharing.

In this sense, the service action takes the role of an actualization of the ethic of care, assuming the principle of mutual well-being as a daily and possible inspiration within a genuinely understood community dimension (Mortari, 2017). This gives a new significance not only to the service action, thanks to its being a concrete help that students provide to the teacher, but also through the research actions they carried out with the aim of improving the quality of class life.

> Returning the data and reflections to the teacher [. . .] makes this research [. . .] an authentic service oriented research. (V2)

From the words of our students emerged the idea of service-oriented research, meaning research that wants to be at the service of the participants, with the aim of promoting the improvement of an educational practice designing new educational experiences and subjecting them to rigorous scientific analysis. At the same time, a dual objective is thus pursued: to increase pedagogical science and qualify educational contexts. To be in a perspective of "service" means to assume a precise sense of the gift concept, which means to give something to the other responding to a personal inner need without expecting something in return. This is reminiscent of the words of Seneca (*Benefits*,

I, v, 1, ca. 59 A.D./2000), who defines the gift as "a thing that responds to a spiritual order" and consists "in the willingness to give." This gift is care, a care that inspires an ethical vision of life (Mortari, 2017). Care, in its ethical core, means to act looking for the good not only of the individual but also of others and of institutions (Ricoeur, 1992). In order to do this, you should be able to put yourself in brackets, because otherwise you cannot understand what is good for others and direct personal actions from a service perspective. These reflections are coherent with what emerged from our students' feedback and show us that our SL program improves civic skills inspired by an ethic of care in our students. This ethic of care puts this concept into a political framework that goes beyond a narrow vision of the teaching profession and sees it as the core element to reach a more democratic vision of society that nourishes a public life inspired by the principles of solidarity, responsibility, and commitment to the community (Mortari, 2017).

From our study it emerges that what characterizes this kind of teacher is (a) ability to use the research tool interpretively to analyze both the needs of the contexts and his or her own educational practice; (b) a research habit oriented to a transformative purpose, which means being involved in concrete actions aimed at solving the problems emerging from the contexts, meshing this action with a commitment to lifelong learning; (c) the use of reflectivity to transform the educational experience into experiential knowledge, assuming a critical and thoughtful posture to interrogate contexts with a high level of complexity in order to construct theories able to enlighten them; and (d) the development of a participatory vision of his or her professional practice inspired by a concretely acted civic engagement and a concept of care that inspires an ethical vision of life. This shows how the CSRL program promotes in our students a vision of teaching guided by the principles of utility, reflexivity, participation, civic engagement, and care, a vision that we hope will inspire all their future professional practice.

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Impact Analysis of a Service-Learning University Program From the Student Perspective

Anna Escofet and Laura Rubio

Abstract

Service-learning has become increasingly prevalent in higher education in recent years. Within this context, this article presents and analyzes some data regarding the perception of students who participated in a program developed by the Service-Learning Office of the Faculty of Education at the University of Barcelona during the 2015–2016 and 2016–2017 academic years. In particular, by means of a survey method, the article analyzes university students' perception of the impact of service-learning projects in terms of their participation, development of competencies, service performed, and experience gained. The results indicate that students value their participation positively, although they point out the need to further improve the link between learning and service. Finally, the article highlights the need to delve into and further develop reflective practice as a means to strengthen the academic link with the service performed by the students.

Keywords: service-learning, higher education, reflection, social responsibility

I n recent years university education in Europe has experienced a significant sequence of changes that have fundamentally altered university learning. The European Higher Education Area (EHEA) has spearheaded a considerable shift in the paradigm of knowledge within the continent, moving focus from academic disciplines to the development of professional competencies that are linked to the real world, to the natural environment in which the student will actually develop, both professionally and as a citizen.

This paradigm shift has taken place at a time when Europe has been experiencing a deep economic crisis that has caused, in turn, profound changes in the ethical and moral values of European society. As social institutions, universities have felt challenged and have thus developed various forms of social engagement to respond to these changes. At a pedagogical level, one of the ways in which this social engage-ment has materialized is through service-learning.

Service-learning is a pedagogical philosophy that seeks to promote students' learning through their participation in community service experiences. Along these lines, Puig, Batlle, Bosch, and Palos (2007, p. 18) posited that:

> Service-learning, while still a programme, is also a philosophy. That is to say, service learning is a way of understanding human development, a way of explaining the formation of social bonds and a way of building human communities that are fairer and are better at managing coexistence.

In other words, referring to service-learning as a philosophy implies understanding that it is much more than a teaching methodology or a program or a way of organizing work with various agents in a context,

emphasizing its value within the framework of university social responsibility.

Over the years, various research has looked into the positive effects of service-learning. A review of these effects was conducted by Gelmon, Holland, and Spring (2018), differentiating between the impact of service-learning projects on students, faculties, the community, and the institution. In relation to the impact of service-learning projects on student learning, the most prominent studies conclude that service-learning allows students to connect theory and practice, develop critical thinking, improve the ability to solve problems, learn more about the resources available in the community, and develop their professional and citizenship skills (Eyler & Giles, 1999; Jacoby, 2015; Martínez Vivot & Folgueiras, 2012; Moely & Ilustre, 2014; Tapia, 2006; Warren, 2012). The undeniable educational richness generated by service-learning practices—added to the fact that an increasing number of initiatives are being implemented in higher education—makes it necessary to investigate the impact that service-learning has on university students.

Students' perceptions as a key element to justify the development of service-learning projects have been the focus of study in various research conducted in different contexts and disciplines (Bassi, 2011; Bender & Jordaan, 2007; Lee, Wilder, & Yu, 2018; Tande, 2013). Most of these studies report that students perceive improvements in their learning, in direct correlation with their involvement with the environment. In this framework, the study presented here aims to delve deeper into students' perception of their participation in service-learning projects, the skills acquired, and the types of service performed.

Conceptual and Contextual Framework

Over the past few decades, the practice of service-learning has been growing significantly worldwide and also at the university level. Service-learning first began in the United States and Argentina and, since then, different initiatives have been emerging, nearly simultaneously, in multiple countries.

Many studies have highlighted the key elements in the development of service-learning projects. Referring to the federal program Educación Solidaria of the Argentinian Ministry of Education, Rial (2010) highlighted the importance of curricular links, the relationship between activities and learning, service analysis, participation, and instances of transfer and/or dissemination toward the community. For its part, a rubric used at the Pontifical Catholic University of Chile (Casas-Cordero, 2009) identifies three key phases, which in turn are divided into different subdimensions and levels: the design phase (identification of community needs, design of objectives, planning, monitoring and evaluation, familiarization with students, balance between promotion and attendance); the implementation phase (fulfillment of commitments, coping with unforeseen situations, ethical aspects of the relationship); and the results phase (fulfillment of objectives, technical quality, usefulness and level of satisfaction of the community partner). Also, the Research Group on Moral Education (GREM by its acronym in Catalan) at the University of Barcelona highlighted twelve categories of dynamics, which they grouped into three different types: basic dynamics (social needs, learning, service, and social sense); pedagogical dynamics (participation, teamwork, reflection, recognition, and evaluation); and organizational dynamics (partnership, consolidation within the center and within the entity; Puig et al., 2014). Finally, the Service-Learning Quality Assessment Tool (2018)— SLQAT— identifies up to 28 items grouped into various dimensions: learning, service, students, faculty, community, and course design.

As pointed out by Annette (2005), all these initiatives have one element in common: service-learning is seen as a means to promote young people's involvement in community service. At the same time, service-learning also strengthens the link between important dichotomies in educational institutions that aim to improve training geared toward the development of competencies: namely, the link between theory and practice, classroom and "reality" (pointing to other possible contexts), training and commitment, and cognition and emotion (Rodríguez, 2014). These benefits only result from true service-learning practices, that is to say, from practices that include academic learning, an aim toward social transformation, horizontal dialogue with the community, and protagonism of the student body (Manzano, 2012). Service-learning is, therefore, an effective pedagog-

ical strategy with benefits that go beyond the academic curriculum (Cho, 2006; Furco, 2005; Robinson & Meyer, 2012). In addition to their potential to foster interdisciplinary learning and knowledge, service-learning experiences promote students' citizenship by directly involving them in service tasks through projects of a social nature, empowering them to analyze the social, ethical, and civic impact of their professional practice (Naval, García, Puig, & Santos-Rego, 2012).

The research presented in this article is part of the work carried out in recent years at the Service-Learning Office of the Faculty of Education, University of Barcelona (Spain). Therefore, this section includes an overview of service-learning in Spain, in the Catalonian region, and, finally, at the University of Barcelona, focusing particularly on the meaning and structure of service-learning at the Faculty of Education.

In Spain, it has only been over the past decade that universities have been incorporating service-learning (Martínez, 2008), informed by research and contributions made in other countries. Thus, service-learning took hold in Spanish universities through concrete experiences that aimed to reinforce the value of practical learning, interaction with the environment, and a sense of engagement with the community.

The development of service-learning in Spanish universities has thus been promoted mainly by the teaching staff directly involved in these experiences, as they have become increasingly aware of its methodological benefits and of the importance of the university's social responsibility (Folgueiras, 2014). In addition, service-learning has opened new lines of research, not only on its implementation but on ways to achieve its institutionalization.

It is in this context that the Spanish University Service-Learning Network emerged. This association currently brings together teachers from over 40 universities in Spain who, in one way or another, have introduced service-learning in their teaching and research. The University Network of Service-Learning was created to achieve three main purposes: (1) to gather members at an annual conference, which, in its latest editions, has already had wider European and international participation (Barcelona 2010, 2011, and 2012; Bilbao, 2013; Madrid, 2014; Granada, 2015; Santiago de Compostela, 2016; Seville, 2017; and Madrid, 2018); (2) to promote publication of the works and experiences that are being developed in this context (Aramburuzabala, Opazo, & García-Gutiérrez, 2015; Carrillo, Arco, & Fernández Martín, 2017; Rubio, Prats, & Gómez, 2013; Santos-Rego, Sotelino, & Lorenzo, 2016); and (3) to promote research on service-learning, both within single institutions and interinstitutionally, whenever possible.

Furthermore, service-learning was officially recognized in 2010 in the Statute of University Students as follows: "Universities . . . will promote social and civic responsibility practices that combine academic learning, within various degree programmes, with the provision of services to the community aimed at improving quality of life and social inclusion" (Royal Decree 1791/2010, 30th December). Subsequently, a white paper titled *Institutionalisation of Service-Learning as a Teaching Strategy Within the Framework of University Social Responsibility for the Promotion of Sustainability at University* was approved in 2015 by the Executive Committee and the Plenary of the Sustainability Commission (CADEP Group) of the Conference of Rectors of Spanish Universities (CRUE in Spanish).

Along the same lines and taking advantage of their territorial proximity and joint work spaces, in 2015 seven of the nine universities in Catalonia joined forces and founded the Catalan University Network of Service-Learning—ApS(U)CAT (see http://www.acup.cat/ca/projecte/xarxa-daprenentatge-servei-de-les-universitats-catalanes). The aim of this association is to share teaching experiences and research, as well as to address challenges linked to the expansion and improvement of university service-learning. So far, exchange and work meetings have been held at Pompeu Fabra University (2015), the Autonomous University of Barcelona (2016), the Rovira and Virgili University (2017), and the University of Girona (2018).

At the University of Barcelona, service-learning is the main focus of the Service-Learning Group ApS(UB) (see http://www.ub.edu/grupapsub/en/blog/aps-ub-group). This is an interdisciplinary team, comprised of lecturers from different faculties and areas of knowledge. Currently, the group has representation from most of the university faculties: Fine Arts, Librarianship and Documentation, Biology, Earth Sciences, Law, Economics and Business, Education,

Nursing, Pharmacy and Food Sciences, Philology, Philosophy, Geography and History, Medicine, Psychology, Chemistry, and Social Work. Since its inception, this group has sought to disseminate and extend service-learning throughout the University of Barcelona.

One of the leading faculties in the promotion of service-learning at the University of Barcelona is the Faculty of Education, which since 2010 has had a Service-Learning Office (see https://www.ub.edu/portal/web/educacio/aps) to coordinate this type of projects. Although service-learning is a valuable formative proposal in any discipline, it is undoubtedly even more important for future educational professionals, both as a methodology and as content. Service-learning is an effective methodology because it allows students to construct knowledge from practice, helping them to become professionals who are more competent and more committed to the social environment. And it is effective as content because students learn and analyze the potential of service-learning projects so that they can later implement this formative experience in their professional future, involving their future students in their immediate environment.

In this framework, the Service-Learning Office is responsible for (a) promoting service-learning among teachers and students within the faculty; (b) coordinating, managing, and evaluating the service-learning projects offered to the students; (c) supporting academic staff in the introduction of service-learning in their modules; (d) building a network of partners with social and educational entities; (e) ensuring the quality of the service-learning programs; and (f) conducting research on topics related to service-learning and its development in the faculty.

Currently, the Office of Service-Learning of the Faculty of Education is coordinating a total of 26 projects and entities, involving students from various degree programs in the Faculty of Education.

Methodology

As previously stated, the objective of this research was to learn about the perceptions of university students involved in service-learning projects in terms of their participation, the competencies developed, and the service performed in the projects. The study method used was the survey, which is the suitable method when the objective is to elicit the opinions, beliefs, or attitudes of a group of people (Buendía, Colás, & Hernández, 1998). The instrument used for gathering information was an adapted questionnaire (Folgueiras et al., 2013) that had been designed and validated in previous research (Escofet, Folgueiras, Luna, & Palou, 2016).

First, participation was assessed based on the taxonomy proposed by Trilla and Novella (2001), who distinguished four types or levels: *simple participation*: taking part in a process as a spectator without having intervened in it; *consultative participation*: being heard on issues of concern; *projective participation*, feeling the project as their own and participating in it all throughout; and *metaparticipation*: generating new participation mechanisms and spaces based on the demands expressed by the participants themselves. If we correlate these participation levels to the way students take part in service-learning projects, we can conclude that simple participation would imply that students carry out the service without having been involved in decision-making throughout the project, nor in identifying needs, nor in choosing activities, nor in evaluating the project. Consultative participation would imply that students are consulted when identifying a need, elaborating activities, or evaluating the project; their voice would be taken into account but would not have much bearing on the development of the experience. With projective participation, students would participate actively and make decisions throughout the project; that is, they would identify needs, create activities, apply themselves, and evaluate the project. With metaparticipation, students would generate new activities within the project or possibly even create a new project; they might also reflect on their participation and the right to participate.

Second, competencies were measured based on students' perceptions on the extent to which they believed they had acquired transversal competencies through participating in a service-learning project. That is, competencies are seen as the dynamic combination of knowledge, skills, attitudes, and responsibilities that students acquire throughout the educational process that takes place at a university. In order to determine what transversal competencies are involved at university level and

assess which ones are developed through service-learning projects, we first conducted a review of various proposals made by international universities through the Tuning Project. In addition to promoting transversal competencies, service-learning projects also foster the development of specific competencies that are relevant to different degree programs. Through these, students are required to apply knowledge and concrete procedures of professional practice for which they are being trained in a specific and real context.

Third, the instrument used (questionnaire) focused on the students' description and assessment of the usefulness of the service completed. We understand service in service-learning projects as the set of tasks that students carry out altruistically and that produce a result that contributes to mitigating a social need that had been previously identified. During the service, the work that is carried out is not the only significant issue; equally important is the impact the work has, either because of the social benefits it provides, or because of the civic awareness it instills in the participants (Puig et al., 2014). Service tasks can be conducted in different areas: health promotion, promotion of people's rights, citizen participation, cultural heritage, generational exchange, educational support, solidarity and cooperation, and the environment. In turn, services can be classified into types according to whether they involve people (whether individuals, institutions, entities, or associations), a geographical area (neighborhood, city, etc.), or a specific sustainability issue (for example, water quality or forest maintenance). Whatever the case, choosing what type of service students should complete depends on the specific topics or curricular content of the discipline they are studying. It is therefore important to envisage the learning outcomes that can or should be achieved by the students through their participation in service-learning projects.

Finally, a transversal fourth dimension was added, referring to students' general satisfaction with their participation in the project. Through open-ended questions at the end of the questionnaire, students were asked to discuss the impact that participating in a service-learning project had on them, both at a personal and at a professional level.

The questionnaire was administered to all students participating in service-learning projects in the Faculty of Education, University of Barcelona (Spain), during the 2016–2017 and 2017–2018 academic years. Administration of the questionnaire observed ethical research principles outlined by the Consortium of European Social Science Data Archives (2012), the Spanish Ethics Committee of the Superior Council for Scientific Research (Consejo Superior de Investigaciones Científicas, 2011), and the Bioethics Commission of the University of Barcelona (2010).

Participants were selected through accidental sampling, which consisted of the selection of easily accessible subjects out of a population of 162 students participating in service-learning projects during this period. The sample obtained totaled 65 students. The sample calculation was carried out a posteriori considering a confidence level of 95.5% for finite populations (p and q = 0.5), which entails a margin of error of ±0.081 for the extracted sample.

Results

The results below show, first of all, the sociodemographic features of the sample. The participating students were men (N = 12; 19%) and women (N = 53; 81%). They were in the following degree programs: Social Education (N = 14; 21%), Pedagogy (N = 19; 30%), Social Work (N = 15; 23%), and Early Years and Primary Education Teaching (N = 17; 27%). In terms of participation, 100% of students participated in a simple type, taking part directly in service-learning projects aimed at people or groups in the areas of health promotion (N = 18, 28%), educational support (N = 42, 65%), and solidarity and cooperation (N = 5, 7%).

Regarding competencies, it is worth noting, on the one hand, the students' assessment of the correlation between the activities carried out throughout the service-learning project and the achievement of learning outcomes related to their studies. Marking on a scale from 5 (a lot) to 1 (little), the students state that this relationship is high, as shown in Table 1.

On the other hand, it is also worth noting the perception that students have about the extent to which they have acquired transversal skills, as shown in Table 2.

As Table 2 shows, the competencies that students consider to have acquired to a greater extent are those linked to social

Table 1. Correlation Between the Activities Carried out Throughout the Service-Learning Project and the Perception of Achievement of Learning Outcomes Related to University Studies					
Correlation between learning and service	5	4	3	2	1
% Answers	29%	34%	24%	10%	3%

Table 2. Correlation Between Activities Carried out in the Service-Learning Project and Transversal Competencies					
Competencies	5	4	3	2	1
Learning and understanding ideas, concepts	6%	70%	18%	6%	0
Organizing and planning	18%	50%	32%	0	0
Analyzing and summarizing	12%	40%	24%	12%	12%
Making decisions	12%	50%	38%	0	0
Solving problems	24%	64%	12%	0	0
Mastering digital technologies	0	10%	15%	50%	25%
Searching and managing information	6%	12%	39%	31%	12%
Being able to communicate well orally and in writing	27%	39%	20%	14%	0
Learning foreign languages	6%	12%	18%	6%	58%
Expressing feelings	26%	39%	14%	14%	7%
Working in teams	46%	24%	18%	12%	0
Looking for improvement and quality	50%	32%	12%	6%	0
Acknowledging diversity and multiculturality	48%	45%	7%	0	0
Demonstrating ethical commitment	48%	43%	9%	0	0
Reasoning critically	60%	26%	8%	6%	0

commitment, problem solving, content knowledge, and teamwork. The competencies that scored lowest were those linked to searching for information, learning languages, and mastering digital technologies. It is worth highlighting, however, that students expressed that they put into practice most of the transversal competencies.

Table 3 shows results in relation to students' evaluation of the usefulness of the service. Results show that students highly rate all the service activities carried out throughout the various projects. All activities scored values of 4 and 5. Among the highest ranked benefits again were those linked to student commitment, self-knowledge, and also their motivation toward their university studies. Those that scored slightly lower were linked to the promotion of knowledge acquisition and the link between theory and practice.

Students were also asked about their satisfaction with the different elements that make their participation possible in service-learning projects. These results are also shown in Table 4.

Overall, student evaluation of their participation in service-learning projects was highly positive. Nonetheless, results highlight the need to achieve a stronger link between learning and service and to improve the coordination and monitoring functions carried out by the Service-Learning Office.

Last, and by means of open-ended questions, students were asked to discuss the impact that participating in a service-learning project had on them, both at a per-

Table 3. Students' Evaluation of the Service Performed					
Usefulness attributed to service	**5**	**4**	**3**	**2**	**1**
The service–learning activities performed were useful for working through curricular content.	29%	37%	21%	11%	2%
The service–learning activities performed addressed a real need.	48%	45%	7%	0	0
The service–learning activities performed enabled me to understand social needs.	48%	45%	7%	0	0
The service–learning activities performed allowed me to collaborate within an institution, association, etc.	46%	38%	13%	3%	0
The service–learning activities performed motivated me to get more involved with the faculty, town, neighborhood, etc.	46%	38%	13%	3%	0
The service–learning activities performed made me become more interested in social issues.	48%	43%	9%	0	0
The service–learning activities performed gave me more motivation toward my studies.	38%	43%	17%	2%	0
The service–learning activities performed made it easier for me to learn curricular content.	29%	37%	22%	11%	1%
The service–learning activities performed made me act according to my principles.	60%	26%	8%	6%	0
The service–learning activities performed enabled me to contribute toward the betterment of society.	46%	38%	12%	3%	1%
The service–learning activities performed allowed me to link theory to practice.	26%	38%	26%	8%	2%
The service–learning activities performed allowed me to learn about the professional context of my discipline.	29%	45%	12%	14%	0
The service–learning activities performed made me reflect on the content I learn at university.	31%	34%	18%	12%	5%
The service–learning activities performed helped to instill values in me.	68%	28%	2%	2%	0

sonal and at a professional level. Students expressed mostly positive perceptions at both levels.

The impacts that are described at a professional level can be divided between statements related to professional identity and those related to the learning acquired in relation to their professions. Thus, in terms of professional identity, students state:

Being part of this group has helped me to open up my eyes, to realise how easy it would be to become a "bad teacher," one that would close his eyes when facing students who are confrontational or have issues or challenges that the teachers must help overcome. Because we all know that it is easier to work with those who listen to you and behave well.

Table 4. Satisfaction With Participation in the Project					
Enablers to participation	**5**	**4**	**3**	**2**	**1**
Project approach	36%	47.5%	9%	6%	1.5%
Involvement of the social entity	32%	41.5%	18.5%	5%	3%
Self–involvement	14%	55%	28%	1.5%	1.5%
Learning outcomes achieved	45%	35%	15%	5%	0
Link between theory and practice	24%	44%	20%	9%	3%
Evaluation performed	34%	46%	17%	1.5%	1.5%
Learning tasks performed	35%	43.5%	15%	5%	1.5%
Resources to complete tasks	28%	37%	23%	9%	3%
Project timing	35%	39%	23%	3%	0
Project participants	45%	41.5%	9%	3%	1.5%
Coordination between the Service–Learning Office and the social entity	25%	32%	32%	5%	6%
Monitoring by the Service–Learning Office	40%	25%	24%	6%	5%
Service performed	52.5%	37%	9%	0	1.5%

But we also know how satisfying it is to help a student with difficulties to overcome them. (Student 2)

One of the things I like the most about this experience are those moments when you realise that you are actually helping a young boy or girl, and that he or she also appreciates it. They let you know it and they thank you, although often they do not know how to say it with words. All these feelings make me realise that I am studying in the right degree programme, and they give me the strength to keep going, to keep working hard in each module to continue learning more, making the most of each class to soak up all the knowledge and internalize it, so that I never stop learning and can continue thinking that I will always teach something new to my students. (Student 4)

Since I was little I have always wanted to be a teacher. In fact, I'm studying to become a teacher. If at any time I have questioned whether I really wanted to devote myself to teaching, now I know that I do, that I am doing the right thing. I'm in the right path. Although sometimes children make you angry, or you may find it hard to get them to do the work or you're feeling tired, they still always make you smile. I do not know how or why, but after each session I've always, absolutely always, left the class smiling from ear to ear. Although I've felt angry at times, I always had a great time during the sessions. Maybe I have helped them with reading, but they have helped me even more. (Student 5)

Comments regarding learning acquired in relation to their professions include the following:

I would like to express my great satisfaction with the Friends of Reading project, as it has been an intense experience in which I have been able to learn reading comprehension techniques and strategies to redirect and adapt myself when facing different situations. (Student 6)

In the professional field I have learned to be patient and try to explain things in the best possible way, without losing my nerve (something I have never lost). I have learned that I have to explain things providing the reasons behind

them, and to try to get the other person, in this case Gerard, to understand it and that this is important for him. (Student 1)

Regarding the impacts described at a personal level, they focus mainly on the students' verification of any improvement they have experienced:

That initial fear of being mistaken and that insecurity of mine in the first few days are slowly disappearing. (Student 7)

I would like to talk about the personal learning that I have been slowly experiencing. I am absolutely convinced that this year has been very useful and it has offered me many valuable experiences, even more than I could have imagined. Being a *Friend of Reading* has helped me improve my organisational skills—scheduling sessions, managing time, respecting established schedules, etc. On the other hand, it has helped me to develop some habits and to not lose my enthusiasm, to get really involved in the responsibility I have taken on. (Student 8)

And on a personal level, [I have learned] to have more patience and that there are times that no matter how good other people's intentions are, if you have to set limits, you'd better set them. (Student 1)

This has made me reflect on my insecurity. Maybe it's because of my young age, but I still do not know how to face certain situations on my own, although every time I try harder. I always rush to someone who can solve a problem for me, instead of making myself face it. (Student 3)

Conclusions

To summarize, the data obtained highlight some of the positive effects of student service-learning projects, chief among which is the positive perception that university students have regarding the impact of service-learning projects in terms of participation, competence development, service, and

experience.

In terms of participation, the study shows that students get directly involved in service-learning projects aimed at people or groups in the fields of health promotion, educational support, and solidarity and cooperation. Students participate in service tasks that are directly related to their university studies in the Faculty of Education.

Regarding the development of competencies, it is evident, on the one hand, that students highly value the link between the activities carried out in the service-learning project and the achievement of learning goals related to their studies. On the other hand, students report that they put into practice most competencies and they consider that the competencies acquired to a higher degree are those linked to social commitment, problem solving, content knowledge, and teamwork. The competencies with the lowest scores are those related to searching for information, knowledge of languages, and knowledge of digital technologies.

In terms of their evaluation of the usefulness of the service, students considered all service activities carried out in the different projects to be highly beneficial, highlighting in particular their increased commitment, self-knowledge, and motivation toward their university studies. Scoring slightly lower in terms of benefits are facilitation of the acquisition of knowledge and the link between theory and practice.

Finally, students' evaluation of their participation in service-learning projects was highly positive, although they pointed out the need to achieve stronger links between learning and service and to improve the way that the Service-Learning Office coordinates and monitors the projects.

Discussion of Implications of the Findings

University service-learning enables us to contextualize knowledge socially. Quality academic education is much more than learning new knowledge and developing skills. Such education is also concerned with training students in their future profession, placing them in the real, social context in which they will eventually practice their profession, and training them to analyze the social, ethical, and civic impact that their professional practice entails. Service-

learning enables students to live in, act in, and analyze real situations, which are similar to those that will shape their future professional practice; it helps them to do so with sufficient theoretical background and knowledge, so that their practice is not an occasional contact with reality but an active and engaged learning opportunity.

The results of our research show that students greatly value what this kind of projects offer in this regard. Student evaluation of their participation in service-learning projects is highly positive. Nonetheless, their answers also highlight certain issues that can be improved and explored in depth in terms of experiences lived, especially in relation to the need to achieve a stronger link between learning and service and, therefore, between theory and practice.

That is why it is essential to accompany service-learning projects with reflective practice. Participation in these types of projects must be accompanied by reflective practices that foster deep learning, so that the experience can be rethought and reconstructed by the students and integrated into the set of knowledge and competencies that are part of their academic formation.

Reflection becomes even more important in service-learning since it allows for the integration of the service with the academic learning by promoting the construction of knowledge and the development of cognitive abilities and capacity (Eyler, 2002). But also, "reflection plays a vital role in raising awareness and, therefore, it reinforces the notion that service learning can be perceived as a critical pedagogy" (Deeley, 2016, p. 83).

The value of reflection in university learning processes has been widely described by various authors (Barnett, 1997; Brockbank & McGill, 2008). In summary, it is considered that moving away from a traditional university teaching model and toward a model focused on student learning involves the incorporation of reflective practices, among other issues. Furthermore, it is argued that reflection is also necessary to stimulate and promote learning of a critical and transformative nature (Harvey & Knight, 1996) in the sense that "the student is encouraged to become a critical thinker, depending on the norms and requirements of his/her discipline" (Brockbank & McGill, 2008, p. 69).

Improving quality in service-learning projects and confirming the need to do so through tangible research results have become the focus of the work undertaken by the Service-Learning Office of the Faculty of Education at the University of Barcelona over the past 2 years. The reflective practice model developed by the Service-Learning Office is based on Kolb's (1984) experiential learning model. This model uses a journal as a reflective tool and details activities at various times following Eyler's (2001) reflection map.

Kolb's proposal emphasizes the value of reflection as one of the key elements for optimizing learning, as a dynamic mechanism that is intertwined with experience, examining it carefully and paying special attention to various important issues, such as the questions emerging from reality, the search for effective actions, the participants' experiences, the civic sense of their intervention, and the critical vision that is fostered by reality (Páez & Puig, 2013). In short, no matter how motivating a service-learning experience on its own may be, it will be rendered meaningless if it is not accompanied by spaces and moments for reflection that would allow us to overcome our emotions and advance in possible learning (Zabalza, 2011). It is, therefore, worth highlighting the value of systematic reflection as an organized process through which the challenges posed by the experience can be addressed with the aim of enhancing new learning (Páez & Puig, 2013).

Figure 1 specifies the tools and moments of the reflective process that are proposed by the Service-Learning Office of the Faculty of Education at the University of Barcelona. The training tools that are used to enhance the students' learning and their evaluation are the personal journal, the group sharing sessions, and a final reflective session.

A personal journal begins with the signing of a document that serves as a contract between each student and the Service-Learning Office. The document formalizes the learning and service objectives of the course, as well as outlining the tasks that are expected to be completed during the service experience. Students are then asked to identify a particular experience at the service site and to analyze that experience within a broader context in order to make recommendations for change and improvement. To do this, students are asked leading questions, and three to five relevant readings are suggested.
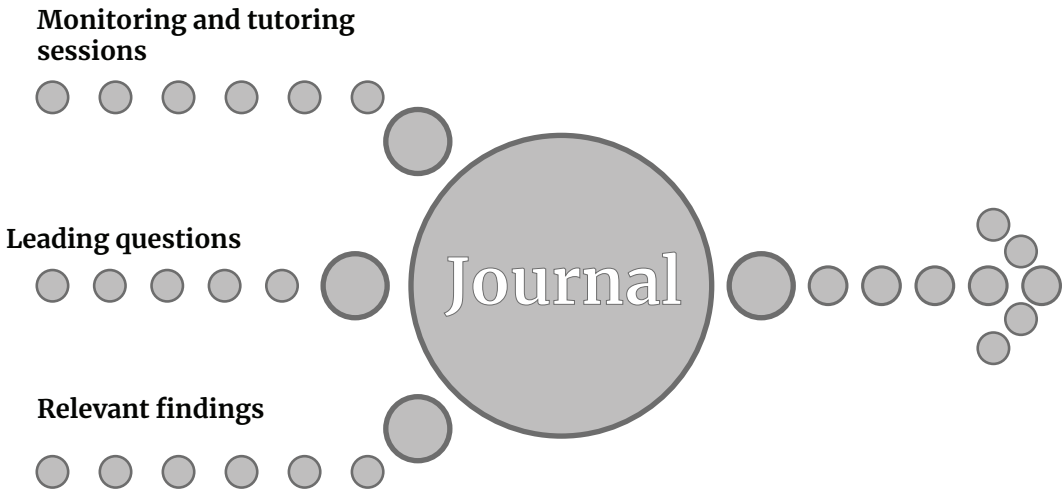
Monitoring and tutoring sessions

Leading questions

Journal

Relevant findings

Figure 1. Reflective Tools and Moments
Source: Service-Learning Office, Faculty of Education, University of Barcelona.

In addition, at the beginning of the project, students are provided with a suggested index (see Table 5) and a series of reflective exercises on some points that are believed to be key in the training of a future professional of socioeducational intervention in order to guide them and enhance their reflections throughout the service-learning. The aim is to help students to go beyond a merely descriptive vision of the experience in which they are living and delve deep into it instead. This is why it is essential for the journal to differentiate between the diary or log (that is, the section devoted to writing entries with a brief description of their day-to-day activities) and other moments and spaces devoted to exploring the learning derived from participating in the project.

The journal is a living document that is supervised throughout the project. Via tutorials and their involvement in the whole reflective process, tutors play a key role in designing diverse and rich opportunities for reflection and in helping students to achieve the goals set, in facilitating the creation of spaces for analysis and synthesis of the activity based on the objectives, and in supporting students emotionally. All of this is done through listening actively, critically questioning everything that is being done, and providing quiet spaces for reflection.

In addition to personal spaces, group sharing sessions take place throughout the entire service—which can last a single term or the whole academic year—under the supervision of a member of the Service-Learning Office. These meetings enable students to share experiences and feelings and also to link the service to academic content; students are able to hear about each other's success stories and can offer advice and collaborate to identify solutions to the problems found in the service site. Finally, the experience ends with a reflective session that serves both as a conclusion to the service and as a celebration of the whole experience. This space aims to systematize the most relevant learning outcomes that have been achieved through the experience.

Finally, a rubric was created with a double objective: to facilitate guidance during the reflective process and the tutoring of reflective journals, and also to show students the key elements of the reflection processes promoted in the service-learning projects in which they were participating. The elaboration and validation of the rubric has enabled us to identify the various dimensions of reflection, as well as the evaluation items for the teaching staff and the didactic guidelines for the student.

To conclude, the reflective tools and moments above indicated are intended to lead to an improvement of service-learning projects as a training process. Even though educational benefits entailed by service-learning practices are not under question and a growing number of initiatives are undeniably being developed in this direction, to further advance service-learning, it is still worth highlighting the need to produce a body of knowledge on the success of service-learning that has been sufficiently proven and empirically tested, especially in the European context and at the university level.

Table 5. Index and Summary of Activities in the Reflective Journal
ABOUT ME
Describe your personal and academic background.
Detail your expectations in relation to the Service–Learning Project.
ABOUT MY SERVICE–LEARNING PROJECT
Context
Institution
Group
People involved
MY FIRST DAYS. CHALLENGES AND SOLUTIONS
Describe, in three words, what the beginning of the service was like for you.
Identify the initial challenges that you will seek to overcome with the person you are working with and within yourself.
Describe an initial situation that stood out for you from among the rest.
POSITIVE DESCRIPTION. Various issues are raised so that students can identify the best features of the socioeducational situation they are experiencing so that the educational link is enhanced.
Thinking about your supervision work, describe the most positive aspects in 10 lines.
Identify any issues related to your mentees' attitude that you believe need improving.
Explain how you will go about motivating your mentees in order to improve the above issues.
EDUCATIONAL LINK. Various questions are asked so that students can describe and explain the positive link to their education and the development of emotional attachment throughout the project.
Identify the key moments in the development of your attachment.
Discuss the main learning gains you are making.
CRITICAL INCIDENTS. A reflective activity is proposed with the aim of addressing problems, queries, or difficulties that may have arisen during the experience, and discussing feelings that were generated.
Think of a problematic situation and describe it in detail.
Explain how you went about solving it at the time and how you would do it now.
CONCLUSION AND FINAL REFLECTIONS. Suggestions and guidelines are put forward regarding the conclusion of each service–learning project.
Together with your mentees, write a list with the best moments you've shared.
Identify 10 key final ideas or reflections you've had about the project.
DIARY/LOG

Source: Service–Learning Office, Faculty of Education, University of Barcelona.

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Service-Learning in Courses of Psychology: An Experience at the University of Turin

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Abstract

Interest in the implementation of service-learning (SL) in university courses in psychology has risen in recent years. SL allows the students not only to read and talk about social problems, but also to act upon them and thus to learn from practice as well. The aim of this work is to present the service-learning experienced in psychology courses at the University of Turin, Italy. The experiences—named "The Volunteer's Helpdesk" and "Service Learning: Urban Area Analysis and Proposals for Action"—were analyzed following the Comprehensive Action Plan for Service Learning (CAPSL) model proposed by Bringle and Hatcher (1996) for implementing SL in higher education. The work presented is intended to contribute to laying the foundation for a broader reflection on how to implement SL in university courses in psychology.

Keywords: psychology, CAPSL model, laboratory, Italy

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Service-learning (SL) is a teaching method that combines school education with community service. It first surfaced in the 1960s in the United States of America (U.S.) and was subsequently widely disseminated in the late 1980s. The U.S. National and Community Service Act (1990) defined SL as "a method . . . under which students or participants learn and develop through active participation in thoughtfully organized service that is conducted in and meets the needs of a community" (§ 12511(40)(A)). The Act outlines that SL "is coordinated with an elementary school, secondary school, institution of higher education, or community service program, and with the community; and helps foster civic responsibility" (§ 12511(40)(A)(ii–iii)). It further stipulates that SL

> is integrated into and enhances the academic curriculum of the students, or the educational components of the community service program in which the participants are enrolled; and provides a struc-

tured time for the students or participants to reflect on the service experience. (§ 12511(40)(B)(i–ii))

In 2003, Furco wrote, "Over the last ten years, at least two hundred definitions of service-learning have been published, casting service-learning as an experience, a program, a pedagogy and a philosophy" (Furco, 2003, pp. 11–12).

Although each definition has its merit, we will adopt here that which was proposed by Jacoby (1999):

> SL is a form of experiential education in which students engage in activities that address human and community needs together through structured opportunities intentionally designed to promote student learning and development. Reflection and reciprocity are key concepts of service learning. The term community refers to the local neighborhoods, the state, the nation, and the global community. (p. 20)

This definition emphasizes that SL gives students an opportunity to participate in a structured service activity able to respond to the needs of an identified community (Acquadro Maran, Soro, Biancetti, & Zanotta, 2017). Reflecting on service activity is fundamental insofar as it allows a deeper understanding of the course content, a broader appreciation of the discipline, and a greater sense of civic responsibility (Bringle, 2017; Bringle & Hatcher, 1995; Kirk, Newstead, Gann, & Rounsaville, 2018). Unlike other experiences that usually, though not exclusively, provide for the student's engagement for the benefit of a community—such as training or volunteering—SL stands out for its intrinsic balance, merging service and learning in equal measure, and seeks to ensure reciprocity and equality of benefits between students and communities. Service activities are also strictly linked to academic content and are a constituent part of the school curriculum, and both educational objectives and civic and moral responsibility are contemplated for the students (Furco, 2002). The development of SL within the American education system was accompanied by a wealth of studies aimed at identifying and measuring its effects on the skills of students enrolled in schools offering different degrees and curriculum subjects (Celio, Durlak, & Dymnicki, 2011; Yorio & Ye, 2012).

Research conducted in Italy a decade ago yielded the suggestion to create a network for helping institutions, neighborhoods, and young adults to assess educational and community needs and provide appropriate organized responses. On these grounds, SL was introduced experimentally in a psychology course at the University of Torino (Acquadro Maran et al., 2009). Albeit with various vicissitudes, the initiative is still active. In this article we present this experience as well as the approach, the methodological principles, and the model on which it has been grounded, to let it be evaluated and possibly replicated in similar contexts. Thanks to the engagement of academic staff from other Italian universities (e.g., Bologna, Padova, and Firenze), a few SL projects have been launched and are currently active (see Guarino & Zani, 2017). This article will provide practical information to other SL projects that will be implemented in our country. Since 2018, SL has been in the testing phase by the Italian Minister of Instruction, University and Research (Miur, 2018) in three regions.

Implementing Service-Learning in University Courses

Introducing SL in the educational system and making it a fundamental part of the curriculum requires commitment and careful planning. The basic methodological principles that characterize a quality SL course, as proposed by Smith et al. (2011), are the following:

1. *Integrated learning.* The experience of service should be clearly addressed and connected to the educational content; all stakeholders must be able to recognize the link between service and teaching, based on a clear logic and methodology.

2. *Effective service to the community.* The needs toward which to align objectives, resources, and time should be clearly identified. If the expected timing of the project is longer than the duration of the course, which typically is due to the needs of the community and their evolution, the partnership between the educational institution and the community must be continuing, going beyond the activities of a single course.

3. *Collaboration between all the partners involved in the project.* They must work together during all the phases of the intervention: planning, preparation, implementation, management, and evaluation.

4. *Promotion of public spirit and community responsibility.* Students should be stimulated to think and critically evaluate their role in society, and the ties between the community and the educational system should improve and become more complex and fruitful.

5. *Reflection on the service to be carried out before, during, and after the experience.* Moments and methods are necessary for a synthesis capable of integrating self-awareness, knowledge of the disciplines of study, and knowledge of the community. An effective reflection should also be self-referent; that is, the experience must be evaluated with respect not only to the content, but also to personal values, attitudes, and goals.

6. *Evaluation and dissemination.* All the subjects involved should be able to analyze and interpret the results achieved, so as to also provide feedback and continuing quality improvement; the

dissemination of the results requires a celebration of effort and success that adds a "small touch" to the evaluation and disclosure process. (Kaye, 2004, cited in Smith et al., 2011, p. 320)

The principles proposed by Kaye (2004) and Smith et al. (2011) were adopted in SL projects in higher education, which turned out to yield benefits for all the actors involved (teachers, students, and the community; Burgo, 2016; Jurmu, 2015). Following these principles, we refer to the Comprehensive Action Plan for Service Learning (CAPSL) model proposed by Bringle and Hatcher (1996) for implementing SL in higher education. The CAPSL identifies four constituencies to be involved (namely universities, departments, students, and communities) and 10 areas of activity/outcomes that each constituency must carry out (namely planning, awareness, prototype, resources, expansion, recognition, monitoring, evaluation, research, and institutionalization). If everything works, the expected result is the institutionalization of SL within the universities.

The process is sequential with a necessary feedback loop: After an initial planning phase, the awareness of the nature of SL should be increased. This is best achieved through a practical example such as a prototype course. The development of SL requires the collection of resources and the planning of activities for each party involved. It is fundamental to document SL implementation by monitoring and evaluating the unfolding of the project. The results must be recognized publicly. The success of the project ultimately is reflected in the degree to which SL becomes institutionalized. The CAPSL model initially requires the identification of a group of key people—representatives of university bodies, university professors, student representatives, technical–administrative staff, community leaders—to be involved in the definition of the SL project, its theoretical foundations, and applicative guidelines. A person within the university should take management and administrative responsibility for the project in order to establish an office and pursue the planned operations (Bringle, Hatcher, & Jones, 2012).

The involvement of the faculty is crucial because SL requires the incorporation of a community service component into the academic courses. This does not imply that SL should be imposed on teachers, but that teachers and students should be given information about its nature, roles, and functioning. Bringle and Hatcher (1996) recommend the implementation of short–term SL projects, so that the parties involved may become familiar with the methodology. SL can be regarded as institutionalized when it is no longer dependent on a small group of teachers and is taken into account in decisions involving personnel: recruitment, promotion, and so on.

Students' involvement is also crucial. Hatcher, Bringle, and Hahn (2016) suggested the investigation of students' interest in volunteering and their awareness of relevant activities in the local community in order to identify how many might be involved in SL and which thematic areas are more likely to attract them. Students' involvement is also necessary during the planning phase to foster motivation within the university context (Bringle & Hatcher, 1996). Jacoby (1999) highlights that wherever SL is located within the institution, what really matters to its effectiveness is that it be based on a partnership between the academic staff and the students, since each party has viewpoints, knowledge, connections, and resources that enable it to bring a unique and fundamental contribution to the development of the enterprise. SL can bring benefits to the course in which it is implemented by, for example, increasing the students' satisfaction with the course, which affects the overall perceived quality of the course of study (Zedda, Bernardelli, & Acquadro Maran, 2017).

Finally, the participation of representatives from the community is needed to identify the relevant needs and resources for creating the SL activities (Kalles & Ryan, 2015). Proof that the university–community partnership is stable and effective may be traced in the continuity of the relationship, the consensus about the mutual needs and their satisfaction, the degree of collaboration, and the participation of faculty and students in community agencies. To the best of our knowledge, no attempt has been made in Italy to apply this theoretical framework and the CAPSL model. The novelty aspect of the work presented here thus is an attempt to apply the model in a course of study in psychology in an Italian university from inception to institutionalization.

Service-Learning in Psychology Courses

Altman (1996) hoped that social awareness would become an integral part of the university curriculum along with foundational and professional knowledge. He added: "I cannot imagine a field more suited to the idea of socially responsive knowledge than psychology. And is it not our goal to both understand behavior and promote human well-being?" (Altman, 1996, p. 376). SL is an apt pedagogical approach to engender the development of such awareness, as it may educate about social problems, enabling students to experience and understand relevant collective and personal themes through firsthand active learning and action.

Bringle, Reeb, Brown, and Ruiz (2016) considered SL to be the pedagogical method most effective for the development of a "psychologically literate citizen," namely "someone who responds to the call for ethical commitment and social responsibility as a hallmark of his or her lifelong liberal learning" (McGovern et al., 2010, cited in Bringle et al., 2016, p. 295). Discussing the British university system, Duckett (2002) invited applied psychology to reform its educational practices if it wants to achieve ideological coherence in its theoretical and empirical settings. Moreover, several expected SL outcomes are part of the mandatory "bag of skills" of a psychologist, such as the capability of understanding and sympathizing with individual and social problems while keeping an appropriate distance from them, willingness to listen to and help others, tolerance for diversity, and, in general, a certain ethical, moral, and human sensitivity (Maistry & Lortan, 2017). Dunn, McCarthy, Baker, Halonen, and Hill (2007) discussed how SL may provide a testing ground for several psychological principles and skills. Indeed, many relevant experiences are described in the literature. Examples include Brown (2011), Harnish and Bridges (2012), and Crone (2013) in social psychology; De Prince, Priebe, and Newton (2011) in psychological research methodology; Olson (2011) in neuropsychology; Heckert (2010) in occupational and organization psychology; Barney, Corser, Strosser, Hatch, and LaFrance (2017) in psychopathology; and McClure Brenchley and Donahue (2017) in health psychology. The systematically positive impact of SL, in terms of learning and satisfaction on the part of both students and teachers, of the contribution brought to the analysis of the problem, and of intervention success, was well described by Kuh, Kinzie, Schuh, and Whitt (2011). The authors highlighted that SL may help the students discuss the moral correlates of scientific research and how environmental concerns interplay with the supply of public utilities.

The Experience at Torino

The Department of Psychology of the University of Torino has been committed for about ten years to introducing SL as an opportunity for the development of students' skills and the improvement of teaching. We believe that there is a close connection between psychology and the community. On the one hand, psychology is a discipline that aims to tackle individual or collective problems affecting every facet of human behavior, and on the other hand, organizations and individuals in need of help could at the same time provide students with precious testing grounds. In this article, we will describe two SL implementations with different degrees of structuration to demonstrate how the commitment by the Department of Psychology has realized the institutionalization of SL. The description will follow the CAPSL model (Bringle & Hatcher, 1996) and specifically the sequence of phases described above.

First Project: The Volunteer's Helpdesk

The first SL project at the University of Torino was set up during the years 2008–2010. The target was a set of voluntary associations. In accordance with the CAPSL model (Bringle & Hatcher, 1996), the project started with a planning phase, namely a survey of the existing partnerships of the community of reference and of the students' interest in the activity (Acquadro Maran et al., 2009). The initial planning phase was implemented during a course of Industrial and Organizational Psychology: Several students turned out to be interested in the analysis of the community needs and in the codesign (with communities) of possible solutions and interventions. This allowed pinpointing the main organizational problem of the associations, namely that the size of their staff of volunteers was not on par with the increased flow of activities that they were tackling (support in situations of illness or need, actions upon social emergencies, and so on). Several students

were engaged in the study, along with four teachers and IdeaSolidale, an organization offering services (like training and other forms of support) to street–level voluntary associations.

The methods used were the scrutiny of archived data, interviews with the presidents of the associations, and focus groups with the volunteers. The issue was diagnosed to be one of low supply relative to demand: voluntary organizations invested too little in recruiting. They relied predominantly on the engagement of friends and relatives, which often proved unsuccessful in terms of both the size and the continuity of the staff. Two solutions that were not mutually exclusive were devised. First, it was suggested to the associations that they redesign their promotional and outreach initiatives as well as their recruitment procedures and that they offer more training, supervising, and support to the volunteers recruited. Second, the Volunteer's Helpdesk was set up at the university. This was cosponsored by IdeaSolidale, which advertised the initiative with the associations, and by the University of Turin itself, which granted a physical space where the associations and the candidate volunteers could meet. About thirty associations were involved during the 2 years of activity of the helpdesk.

The outcome of the intervention was positive for all the actors (Acquadro Maran et al., 2009). The voluntary associations benefited from the competence of the students (whose curriculum was in industrial and organization psychology), who conducted an analysis of their needs and demands and identified solutions that were both internal (redefinition of the staff's functions) and external (recruiting strategies). To the students, the initiative offered an organized space to reflect upon the relation between "knowing that" and "knowing how" and an opportunity to appreciate how the content of their studies could prove useful to the community. This first experience was used as a practical example, becoming a prototype course.

Second Project: The Laboratory "Service Learning: Urban Area Analysis and Proposals For Action"

Starting from 2017, SL has been officially included in the curriculum of the master's degree in psychology of work and well–being in organizations, with the introduction of a 40–hour laboratory titled "Service Learning: Territorial Analysis and Intervention Proposals." The laboratory was divided into a first theoretical part and a second applicative part. The latter involved a different second–level organization, Vol. To—Volontariato Torino—as the recipient community (Vol.To is an umbrella nonprofit organization whose members are street–level volunteer associations based in Turin and its province). Vol.To supplies a wide range of services to its members and has created and manages the Guidance Center for Volunteering Opportunities, a meeting point devised to match supply and demand for volunteers in the area. It is to this structure that the SL activities have been directed. The Guidance Center conducts about 1,300 interviews a year with a rate of efficacy (i.e., share of candidates who end up being permanently recruited) of about 40%. The recruitment and integration of the volunteers extends over several stages: the initial orientation interview, aimed at matching the aspirations of the candidates and the needs of the demanding organization; the volunteer's contact and interview with the organization(s) identified, and possibly the actual recruitment; and the start of a permanent collaboration. Each stage may turn out to be critical and often could lead to the termination of the overall process. Vol.To management asked for advice to improve the service and achieve a higher percentage of successes. The students were required to redescribe their academic skills as tools useful to the social and organizational operations of a community. The 40 available hours were divided into 6 classroom hours about SL and its applications; 15 hours of activities within Vol.To for the analysis of the demand, meetings with the management, and field observations; 15 hours of group work for the development of the intervention; and 4 hours for monitoring and reflecting upon the experience.

To conduct the needs analysis and provide useful advice, the students had to recall and integrate the knowledge acquired in different courses of their curriculum. The project yielded three tools:

1. A follow–up questionnaire investigating the volunteers' careers within the organizations, with the following objectives:

   - to have a precise measure of the success of the recruitment process;

   - to monitor the breaking points of

the process;

· to investigate the causes of failure; and

· to keep track of the relationships with the people interviewed, so as to keep alive the link between Vol.To and the community.

2. A satisfaction survey regarding the interview, to measure the volunteers' satisfaction with the service. The primary focus of the survey was on the interviewees' perception of having been understood and helped, and of having received clear information relevant to their expectations. The goal was to have a first-quality assessment of the Vol.To service in terms of the ability to meet the users' wishes and needs.

3. Advice about the guidance interview with some indication of how the assessment of the prospective volunteers' interests, needs, and personal motives could be better focused.

In addition to a precise needs analysis, the SL project included intermediate monitoring and evaluation, conducted jointly with the Vol.To staff to keep a shared track of the activities and work toward concretely helping the community. Finally, the SL laboratory offered the students a space for personal reflection, in which to focus on how the experience affected them and possibly their future professional or personal choices.

Students' satisfaction was assessed at the end of each class with the same questionnaire already in use at the University of Torino. It consists of 12 questions about general satisfaction with the class (4 items), the teacher's skills (4 items), the overall workload (1 item), the adequacy of the preliminary knowledge (1 item), possible supplementary classroom activities (1 item), and a final summary score (1 item). However, a further open question was added, asking what the participant had learned on the cognitive, personal, and social levels. The questionnaire was anonymous and was administered at the end of the course by students enrolled in other courses who were trained for that duty. The teachers were not present during the administration of the questionnaire. The laboratory obtained the maximum degree of student satisfaction, scoring 10 (on a 0–10 scale, with 0 = not satisfied to 10 = completely satisfied), and was recognized as instrumental to their

growth in each of the areas that are typically affected, namely academic, cognitive, personal, and social. In particular, all the students confirmed that the field experience had allowed a better understanding of the relevant knowledge than was gathered from standard classroom learning and exams and that it had contributed to the development of cognitive and personal skills of reflection, decision making, and commitment. The laboratory was perceived as an opportunity for personal growth, enabling the students to understand their capability to contribute to the group and face their difficulties. To some, it had also yielded better knowledge about the social issues of the city where they lived. Above all, it had added to their awareness of their own potential and aspirations.

The following are a few of the students' statements in the questionnaire:

> I applied my knowledge of psychometrics to the development of the questionnaire, becoming aware of what could actually be used. (Male, 25 years old)

> My sense of effectiveness has grown a lot; while I was certain of my knowledge I was quite hesitant about how to put it to practice. Instead, looking at the questionnaire we had created, I felt proud of myself and more confident. (Male, 22 years)

> First of all I have made it clearer to myself how much I am able to engage in a project that required collaboration between peers. . . . I learned to be part of a group, to communicate more effectively, and to recognize the role played by each person and their contributions. (Male, 24 years old)

> In the team I felt shy and afraid of making mistakes, but I also tried to overcome my limitations, because I felt that my opinion was important. (Male, 24 years old)

> This experience pushes me to look for something where I can be useful on the grounds of my life experiences, skills and education. (Female, 25 years old)

To the Vol.To staff the project provided a

space for reflection upon and discussion of their own work practices, which in turn proved an actual contribution toward improving the service to its users.

Finally, to all the parties involved—the Department of Psychology, the students, and the communities—the opportunity has been created to develop a network of relationships that can be expected to prove useful for future collaborations. As suggested by the CAPSL model, considerable resources (in terms of attention, time, methods, and instruments) were dedicated to the evaluation of the project by all the parties involved. The results of the project were acknowledged by the students, representatives of university bodies, and community leaders. This success led to the institutionalization of SL in the master's degree in psychology of work and well–being in organizations.

Conclusion

This article aimed to describe SL, its distinctive characteristics and strengths, and the activities that may lead to the successful design and implementation of a SL project within the university system. The activities carried out in the Department of Psychology of the University of Turin were presented in light of the principles identified by Smith et al. (2011) and of the CAPSL model proposed by Bringle and Hatcher (1996). The results suggest that the integration between traditional teaching activities and community engagement may effectively contribute to a more complete and fitting training for students who wish to pursue a career in the psychological field. The salient feature of SL, which makes it different from other methods of civic engagement that can accompany the lives of students, is its full integration into academic curricula in terms of content, methods, teaching tools, and evaluation processes.

Based on mutuality, SL also requires a balance of benefits between students and community. SL thus differs sharply from both volunteering and internship. In the latter, at least in psychology courses, experiences and practices appear to be less closely integrated with theoretical content and subject to a milder control on the part of the supervisors and the users.

The benefits of SL for students, and therefore for the success of education, are now widely documented by decades of empirical research (Eyler, Giles, Stenson, & Gray, 2001) that have highlighted how contextualized actions of social responsibility are opportunities for improved learning of academic materials and for appreciable personal and civic development. In the face of unquestionable benefits, the implementation of SL requires of educational institutions significant efforts in terms of resources, know–how, and attitudes. This is now a critical issue for Italian universities, which have adopted several practices to allow students to gain experience and share knowledge and skills with the communities of reference, but typically not SL.

Although some SL programs are in the testing phase in schools, evidence of efficacy is not yet available (see the discussion in the Introduction). Even worse, the human and financial resources available to the Italian academic system have been severely dissipated, and the burden of activities worsened and shifted toward the managerial and the bureaucratic domains, by a dramatic sequence of neoliberal reforms during the past decade. Thus, the institutionalization of SL within the Department of Psychology may still be vulnerable, due in large part to neoliberalist, bureaucratic tendencies in the Italian higher education arena that may be unsupportive of SL as a "viable" pedagogy. Implementing SL requires time and human resources for the deployment of structures and systems in order to create and maintain partnerships with the community. The continuous management of the process and ad hoc interventions in content and teaching methods are also necessary for the effectiveness of SL. Last but not least, the institution as a whole must have a community orientation as well as a "democratic" mindset, open to sharing, leaving an active role to both the students and the community.

The work presented is intended to contribute to laying the foundation for a broader reflection on how to implement SL in university courses in psychology. We thus hope that the experience reported may be useful to other academic organizations as an instance of and good practice in SL implementation.

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The State of Service-Learning in Australia

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Abstract

This article provides an overview of the present status of service-learning in Australia. It explores the evidence for service-learning in Australia through published literature and a desktop audit that identified service-learning units/courses publicly available on university websites. Authorship of the article has provided a wider perspective to ensure the accuracy of its substance and conclusions. Service-learning is a relatively new curriculum approach in Australia in all but small pockets within universities and in faith-based institutions. However, in recent years, interest in civic learning outcomes for students has been behind efforts to include it more broadly in higher education approaches to engendering citizenship and social awareness as well as to expand the range of approaches to work-integrated learning. To capture this growing interest, an Australian service-learning network and summit is planned for November 2019.

Keywords: service-learning, Australia, work-integrated learning, higher education, community engagement

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Although experiential education, more broadly known as work-integrated learning (WIL), has a high profile in Australian higher education, service-learning represents an underappreciated pedagogy when compared with other parts of the world, including North America. In Australia, WIL has achieved widespread acceptance and encompasses concepts such as curriculum-based work experience, practice-based education, experiential education, and cooperative education. In contrast, service-learning is employed in just a few institutions in Australia, and it has only recently begun to gain ground as a curriculum option, usually falling within a broad range of WIL options. WIL and like experiences were largely developed to improve graduate outcomes in terms of work-readiness and engagement with theory. The growth of WIL in Australia was along a somewhat similar timeline to the growth of service-learning in North America, albeit in Australia it was the North American model of cooperative education that was being adopted.

Work-integrated learning in Australia is at a critical juncture. It has been 10 years since the publication of *The WIL Report* (Patrick et al., 2009), a seminal publication and the first large-scale national scoping study of WIL in Australia. At the time of publication, *The WIL Report* made a systematic case for the challenges and benefits of WIL for students, universities, and stakeholders. Service-learning was referred to as one form of WIL as it was enacted in Australia, falling under the description of WIL given in the *Report* as an "umbrella term for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum" (Patrick et al., 2009, p. iv). Service-learning and community engagement in Australia have been increasing in popularity over the last decade, with more institutions considering service-learning either as a WIL option or for its own value in terms of students' professional and personal development and understanding of their role in the community and as global citizens. The drivers for this increase were in place even before

Langworthy (2007) questioned the viability of an American model of service–learning being applicable in the Australian context.

In 2002 a major discussion paper was produced by the Australian Government, *Higher Education at the Crossroads* (Nelson, 2002). In it, several opportunities were presented to which a response by the sector of inclusion of community engagement (service–learning) approaches would have met with a positive response by the government. The Australian Collaborative Education Network (ACEN) held its first conference in 2006 to provide a venue for WIL practitioners to talk about their practice and research. In 2012, then Prime Minister Kevin Rudd (Packham 2009) proposed an "army" of university students and graduates who would be able to pay off their education loans through community service.

More recent interest in service–learning builds on longer standing, mature approaches to service–learning programs within faith–based higher education institutions and service–learning enacted in small pockets elsewhere. It has grown in an environment where not–for–profit organizations are experiencing decreasing government funding and requiring alternative approaches to fulfill client and organizational needs. Some 600,000 social enterprises are registered in Australia for a population of 22 million, and over 30% of Australians volunteer in some way in their community. Although service–learning remains somewhat overshadowed by more traditional forms of WIL, there is considerable growing interest across the sector in the outcomes such a curriculum can achieve for students in terms of professional and personal development, as well as their engagement with, and contributions to, the community.

This article reflects on the present status of credit–bearing service–learning in Australia by reviewing recent literature on service–learning in Australia, conducting a desktop audit to examine evidence for service–learning curriculum in Australian universities, and including, through authorship, perspectives from those few institutions with larger scale approaches to service–learning, namely Notre Dame University, Macquarie University, and Griffith University. We thereby identify the range of service–learning occurring in the Australian context. Evidence points to two origins for the adoption of service–learning in Australia: (1) direct course/unit requirements for placement experience that suits service–learning curriculum approaches and (2) approaches that break away from the purely course/unit–based experiences that support specific discipline–based learning goals to service–learning opportunities but, although not specifically discipline related, nevertheless enhance a wide range of academic skills, personal and professional development, and awareness of social justice and civic engagement.

Literature Review

This review begins by contextualizing service–learning as an approach to transformative education before exploring the literature surrounding service–learning programs in Australian universities over the past 10 years. Emphasis was placed on frequently cited work and recent research, with this corpus of literature examined for similarities, differences, and trends. Based on this process, three notable themes emerged from the literature: first, the disciplines that appear most inclined to experiment with service–learning programs in Australia; second, the prominent reasons for implementing service–learning programs; and finally, the lack of clarity and consensus around service–learning definitions and nomenclature.

Service–learning is based on the premise that university education can and should be about more than classroom and discipline–based learning. Service–learning represents transformational educational experiences that serve to develop students as "citizens" with "important human qualities" (Bok, 2009, p. 66). As David Scobey (2010, pp. 185–186) explains:

> No one is born a citizen. Citizens have to be made. We become not merely rights–bearing humans but public selves through a complex socialization that endows us with the knowledge, capacities, values, and habits that we need for the reflective practice of democratic life. . . . there is no citizenship without education for citizenship.

Indeed, Hutchings and Huber argue that educating "citizens" represents one of the oldest aims of learning in the Western tradition, but they admit that it does not always align with the other goals of modern

higher education (2010, p. xi). Simply producing trained workers takes a narrow view of the role of higher education; instead, universities should foster human qualities in their students, such as honesty, racial tolerance, and good citizenship (Bok, 2009). Participation in service-learning has been found to positively affect students' engagement with their communities and improve their social values, as well as contributing to leadership skills, self-confidence, critical thinking, and conflict resolution (Pickus & Reuben, 2010; Sax, Astin, & Avalos, 1999).

Although use of service-learning in Australia is relatively small and underdeveloped as compared to that in the United States and other parts of the world, Australian practitioners broadly agree on the theoretical underpinnings of service-learning as an approach to education. Taking a holistic view, service-learning seeks to produce graduates with a strong sense of civic values and responsibility, alongside academic and professional skills (Mabry, 1998). To facilitate the development of these civic values, service-learning programs must be designed so that equal emphasis is placed on learning and on service provision, so that the providers and recipients of the service benefit equally (Furco, 1996). This equality can be achieved through careful integration of service and learning, rather than the simple addition of service to an existing curriculum (Howard, 1998). Service-learning generally involves students' spending a certain number of hours in the community and then reflecting on their contributions either in writing or in discussion with their advisors or peers (Butin, 2010). The benefits of service-learning are well documented: Participation in service-learning contributes to improved graduate employability, increased cultural competence, and a stronger sense of civic responsibility (Cress, Burack, Giles, Elkins, & Stevens, 2010; Eyler, Giles, Stenson, & Gray, 2001). Indeed, the work of Eyler et al. (2001), in their far-reaching and extensive review of literature on service-learning in the United States, was a critical juncture in demonstrating the undeniable value of service-learning.

Although Eyler et al. (2001) demonstrated the critical mass that had accumulated around service-learning theory and practice in the United States, service-learning in Australia has yet to reach a similar level of maturity. Service-learning still represents a relatively new approach and, although the work that has taken place in the United States and elsewhere around the world has provided a valuable base, no systemic case for service-learning in Australia considers the various approaches and interpretations employed across the country. In 2007, Langworthy (2007) made the observation that Australia's political drivers, competitive context, and lack of history have previously limited the extent to which service-learning has been embraced, as compared to U.S. practice. Langworthy identified a variety of differences between the North American and Australian contexts in relation to any potential for service-learning to grow in Australia, specifically questioning whether American service-learning could "be transplanted to the Australian context where a culture of education for democracy and citizenship is at odds with a culture of education for private benefit and vocational outcomes" (p. 1) that was increasingly driving the policy agenda in Australian higher education. At the same time as Langworthy's paper was written, WIL was growing in the sector. The driving force for increasing WIL curriculum approaches was indeed the demand for employability skills. Given that it is 10 years since *The WIL Report* (Patrick et al., 2009) made the first systematic review of, and argument for, WIL in Australia, the time is ripe for further explorations of how service-learning has gained momentum in Australia in those intervening years.

The foremost trend in the literature surrounding service-learning in Australia is that it seems to focus on several key disciplines. According to the literature review, despite the widespread support of WIL across a range of fields (see Orrell, 2011), service-learning appears to be far more predominant in education than in other degrees, although it is known that there is considerable practice in the health sciences. Education degrees, in particular, seem to offer semiregular service-learning programs, with a significant body of literature focusing on the experiences of preservice teachers (Carrington & Saggers, 2008; Carrington & Selva, 2010; Chambers & Lavery, 2012; Coffey & Lavery, 2015; Salter & Halbert, 2018). This emphasis could be due to the value of service-learning in advancing literacy, numeracy, and other educational support in disadvantaged environments, which is how service-learning is often used in North America. Furthermore, discussions in education literature have

turned to topics of agency, fostering critical reflection among students, and integrating service-learning with later practicums. In contrast, service-learning in other disciplines is either still in initial scoping phases—the work of Evans and Sawyer (2009) on internet usage and small businesses, for example—or grappling with the logistics of ensuring equal commitment from all stakeholders, such as the challenges faced by the Carlton Tripartite Partnership in attempting to balance the somewhat incongruent needs of the institution with those of the local community (Warr & Williams, 2016). Education, by far, represents the most advanced corpus of literature identified for this article in terms of how service-learning is understood and employed in Australia.

The next major area for discussion involved the reasons for introducing service-learning. One of the primary reasons for introducing service-learning programs appears to be increasing intercultural understanding and competence among students. This approach is seen in a large body of literature across disciplines as diverse as teaching (Carrington & Saggers, 2008; Carrington & Selva, 2010) and health (Jones et al., 2015; Long, 2014). In one of the very few examples of service-learning mentioned in the literature outside health and education, the Change Makers project (Downman & Murray, 2017) saw journalism students volunteer in a participatory journalism project with students at an ethnically diverse high school, with the aim of combating stereotypes and racism. Students did not receive academic credit for their participation in this project but overwhelmingly reported that it increased their cultural awareness. Similarly, the "Patches" program explored how service-learning can be applied to develop intercultural competency and encourage fostering inclusive education among preservice teachers (Tangen, Mercer, Spooner-Lane, & Hepple, 2011). The authors argue that there was a distinct change in mind-set, as the domestic students went into the experience with the mind-set that they were mentors providing a service and emerged realizing that they were "being of service" in an equal partnership of cultural exchange and learning. In both cases, students and supervisors observed higher levels of intercultural competence resulting from the service-learning initiatives.

Service-learning has also been employed to increase intercultural competence among Australian students closer to home. There is a corpus of literature that explores various service-learning projects that have focused on Aboriginal and Torres Strait Islander communities as beneficiaries of student service (see Bartleet, Bennett, Marsh, Power, & Sunderland, 2014; Bartleet, Bennett, Power, & Sunderland, 2016; Moreton-Robinson, Singh, Kolopenuk, Robinson, & Walter, 2012). A noteworthy example is the work of Lavery, Cain, and Hampton (2018). Following the experiences of preservice teachers in a remote Aboriginal school, Lavery et al. collected data over a 4-year period and found that experiential learning is essential in allowing preservice teachers to engage with Aboriginal students and provide appropriate teaching. They found that immersion as an approach to service-learning offers a sustained, hands-on learning experience. Preservice teachers overwhelmingly reported an increased understanding of Aboriginal culture and the realities of teaching in a remote location. Similarly, the school valued the experience: They appreciated the service work that took place and the ongoing relationship established with the university. This ongoing partnership between this very remote school community and the university has been sustained for 7 years and is likely to continue. A further cross-institutional, collaborative project focused on preservice teachers engaging in "arts-based service-learning" with Aboriginal communities (Power & Bennett, 2015). There was a firm focus on reciprocal engagement with the community in this program, which saw pre-service teachers developing their professional identity through transformational learning experiences and increased cultural knowledge (Power, 2012). Service-learning represents a key methodology for increasing the cultural competence of students in terms of understanding Aboriginal and Torres Strait Islander culture.

Service-learning also features within units of study for credit without being formally identified as service-learning. In one example, a series of case studies embedded within capstone journalism courses, Project Safe Space and Project Open Doors, describe a wise practice framework that facilitates journalism students working with communities affected by serious social issues such as domestic violence and disability. As with service-learning, wise practice seeks "collaborations, participation, empower-

ment and transformative change" (Petrucka et al., 2016, p. 181). Transformation most often occurs through student engagement with the community. Wise practice employs a variety of approaches aimed at "incorporating a contextually-relevant learning environment that still accommodates different learning styles with the widest application focusing on inclusion and acceptance" (Valencia-Forrester & Backhaus, 2018, p. 95).

Finally, there seems to be little agreement among the Australian literature on a firm definition of service-learning. This is best illustrated in the work of Dowman and van Etten (2012), who bounce between terms including "WIL," "service learning," and "environmental volunteering." They debate the various terms that could be applied to their program, working through WIL and volunteering literature. Indeed, their model, the Natural Science Practicum, perhaps blurs the lines by including two practical placements throughout the degree: 5 days of volunteer work in the first year, and a more formal 10-day work experience in students' third year. Although the student testimonials were largely positive, the authors recognized the anecdotal nature of the data and discussed plans for more formal evaluations of the practicum. Although this model was clearly integrated throughout the degrees, the Change Makers (Downman & Murray, 2017) program that was discussed earlier raises questions about whether students should gain academic credit for their service-learning work, and the implications of this decision for how service-learning is integrated into the curriculum. The lack of clarity here is further explored through the desktop audit of policies and how service-learning is employed across several Australian universities.

Based on this review, there are several themes running throughout the recent service-learning literature in Australia: the relative scarcity of service-learning literature outside the field of education; the use of service-learning as a tool to increase intercultural competence; and the lack of clarity over defining service-learning. These findings demonstrate that there is significant scope for expansion of service-learning programs and an understanding of service-learning across Australia. Although service-learning in education seems to be moving toward refining approaches to critical reflection and evaluation, other areas where service-learning is relatively new are still grappling with logistical issues. There have been many notable examples of successful programs that hint at further application across disciplines and locations, though little in the literature implies such expansions are taking place.

Methodology

This study employed a multiple-method descriptive research approach in order to establish a broad impression of the service-learning landscape in Australia. Primarily exploratory in nature, this research utilized three key approaches to ensuring the accuracy of this article. The first two approaches were a literature review of academic work and a desktop audit. Following the literature review and desktop audit, the article and its findings were sent to authors in Notre Dame and Macquarie Universities with an invitation to edit and augment the content of the article. This last approach, although unusual in terms of a methodology, was intentional in terms of ensuring that this article is truly representative of service-learning in Australia.

Literature Review

A literature review was conducted to develop an understanding of the academic work taking place in the service-learning space. The focus of the literature review was on publications about service-learning in Australia published within the past 10 years. Rather than simply engaging in a systematic review of the literature surrounding service-learning in Australia, this narrative review explored key pieces of research in this developing field that have specific contemporary relevance and offer pathways for future practice and research. A literature review of this nature serves to provide a snapshot of the service-learning projects that have taken place in Australian institutions over the past 10 years, with specific reference to several key iterations. Key pieces of literature were identified based on the number of citations on Google Scholar and links to seminal service-learning pieces. Emphasis was also placed on more recent work in order to understand how the conversations surrounding service-learning have developed over the past decade.

Desktop Audit

The literature review was complemented by

a desktop audit that further elaborated on the quantum of service-learning occurring in Australia. The desktop audit provided a comprehensive overview of all institutions implementing service-learning and the degree to which they are committed to supporting or growing the curriculum. The desktop audit employed Bringle and Hatcher's (1995) commonly cited definition:

> Service-learning [is] a course-based, credit-bearing, educational experience in which students a) participate in an organized service activity that meets identified community needs 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 civic responsibility. (p. 112)

Based on this definition, a list of key terms was developed in order to conduct first a general web search and then a more specific search of institutional websites. The key terms that were used to conduct the searches were "service learning," "community engagement," "community internship," "skilled volunteering," and "civic engagement." To conduct the audit, the 42 higher education institutions in Australia were identified. The service-learning search terms were used systematically in conjunction with each university's name. Then they were used again in the search tool on each university's own website. When the search returned matches to the key terms that revealed a possible service-learning subject/course, we then investigated the subject/course outline as available to the general public online. We looked specifically for the following:

1. Do students earn credit toward their degree by participation in service-learning?

2. Is the placement/service within a community service, charity, or not-for-profit organization?

3. Is there an element of structured self-reflection involved in the service-learning program?

The results of the audit were analyzed in terms of revealing trends and common approaches, as well as to develop an overall impression of the scope of service-learning across the country.

Findings

The findings of the literature review are supplemented by the results of a desktop audit into service-learning approaches across several Australian universities. This aims to paint a more complete picture of the state of service-learning in Australia as a whole, as compared to the promising snapshot offered by the literature. The results of this audit were sent to all universities for them to comment on the findings or amend as appropriate. Service-learning was recognized at an institutional level at just over half of the 42 universities involved in the desktop audit, with over 200 identified contacts e-mailed; however, many of the respondents were only able to comment on service-learning subjects within their specific faculty. Upon closer inspection, despite the lack of institutional recognition, only four universities did not offer any form of service-learning units. Of those four, one did offer an award for community engagement and another ran a separate community engagement program outside classes. Based on this, it is clear to see that service-learning is reasonably, albeit thinly, widespread across Australian universities even if it is not recognized at an institutional level. It is worth noting here that the desktop audit did not extend to extracurricular service-learning but focused instead on service-learning embedded within the curriculum.

There was one area in which the findings of the desktop audit stood in stark contrast to those of the literature review. Based on the literature review alone, one might assume that education students represent the majority of service-learning participants. The desktop audit, however, revealed that this is not necessarily the case. International service-learning, or programs where students are given the opportunity to travel overseas to complete their service, are very popular in Australia, with many universities offering such programs in a range of countries, particularly in the Asia-Pacific region. There are also a high number of interdisciplinary or student-led service-learning units on offer where students can nominate partner organizations or arrange their own placements, as shown in Figure 1.

Related to the limited institutional recognition of service-learning, as well as the popularity of interdisciplinary or flexible
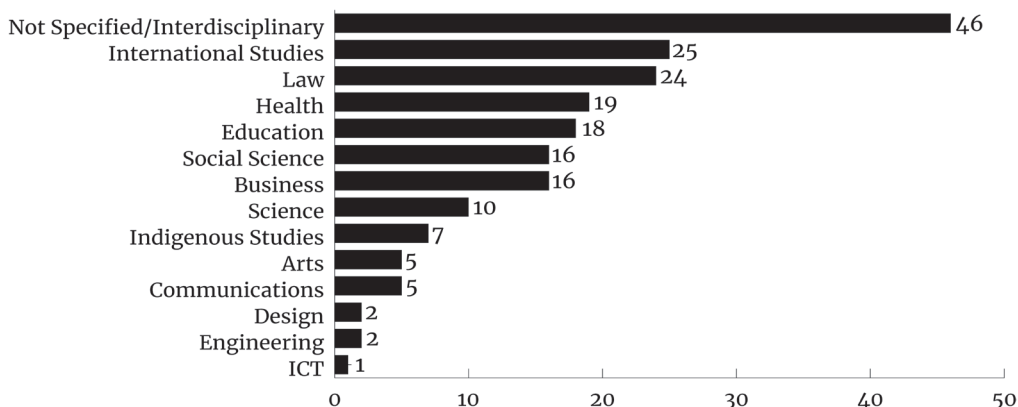
Service-learning units by discipline

Figure 1. Service-Learning Units Where Students Can Arrange Their Own Placements

service-learning units, is a lack of clarity surrounding a definition of service-learning that suits the Australian context. As evidenced in the literature through the Change Makers project (Downman & Murray, 2017) and the environmental volunteering (Scott & van Etten, 2012), there is little consensus about what exactly constitutes a service-learning program within a university. This was further confirmed through the desktop audit, which revealed that some courses at several universities may not offer academic credit for participation in service-learning. Although receiving academic credit for service is widely accepted to represent a key tenet of service-learning, the way credit was applied to the service-learning courses that were audited was inconsistent, with some courses receiving credit, others not, and others "subject to negotiation." Further, the lines between WIL and service-learning seemed to be blurred, with some universities offering "service" courses that have the option of placements with businesses or government organizations, which more accurately would be defined as WIL rather than service-learning. Despite this apparent confusion, there are well-developed examples of how service-learning can be integrated within a broader WIL curriculum.

The desktop search identified that UTS has a well-established cross-disciplinary community–university engagement program: UTS Shopfront. Their aim is to build strong and sustainable communities through research, education, and practice. The main program is curricular, with Shopfront facilitating community projects and internships for final year undergraduate and postgraduate students across all disciplines, for over 800 non-profit organizations. When reading about the program, the term "service-learning" is notably absent. This is indicative of the state of service-learning in Australia; there is a lack of clarity on what constitutes service-learning, and furthermore, there is discussion about whether service-learning is the most appropriate description. Other descriptions were commonly found during the desktop audit: community coursework projects, disciplinary coursework for non-profit organizations, community-engaged research, and community-engaged scholarship.

Macquarie University's Professional and Community Engagement (PACE) program represents another well-developed service-learning program, where relationships with all stakeholders are highly valued and require careful nurturing to ensure that involvement in PACE is truly mutually beneficial. Although the scope of PACE as currently practiced at Macquarie University extends beyond service-learning to also encompass other forms of community-engaged and work-integrated learning, each of the four key constituencies—institution, faculty, students, and community—identified by Bringle and Hatcher (1996) as the focus of activity for implementing a service-learning program in higher education plays a central role in the program. According to a recent analysis of the PACE program (Bringle & Plater, 2017), service-learning is unique among the types of experiential education in general and in PACE because of its emphasis on civic learning outcomes. Therefore, the prominence of service-learning in PACE is

an important indicator for institutionalizing community engagement.

This unique approach to service-learning in Australia, whereby emphasis is placed on civic learning outcomes, is further evidenced through Griffith University's Community Internship, which places around 600 students per year in well-defined, definition-compliant service-learning placements with a concomitant service-learning curriculum intentionally designed to provide students with opportunities to transform their understanding of the need for civic engagement. This approach is notable in that, according to research, community partners indicate 60% of students continue to engage as volunteers in their organizations. The University of Notre Dame and Australian Catholic University, as is common for many faith-based institutions, have historically had a strong approach to service-intentional goals across the whole curriculum of ensuring students realize their obligations as citizens.

Discussion

The results of the literature review, desktop audit, and shared authorship go some way toward describing the service-learning landscape in Australia. Service-learning in Australia is enacted under a broader umbrella of WIL, in contrast to U.S. practice, where cooperative education and service-learning are treated as, more or less, separate entities. Against this backdrop, the research revealed two key themes: inclusive education and relationships with community stakeholders.

Inclusive Education

Based on the review of key pieces of literature, the desktop audit, and broadening of the article's authorship, a number of themes emerged as areas for further discussion. The foremost was the need to develop service-learning programs that offer inclusive education. Interestingly, this was also observed in WIL more broadly at the time of *The WIL Report* (Patrick et al., 2009). Even though service-learning has been used to facilitate teaching inclusive education to early career teachers (Carrington & Saggers, 2008), designing curriculum to include the diversity of the broader student body represents a key challenge in service-learning (Harrison & Ip, 2013; Tangen et al., 2011). Similarly, as discussed earlier, Australian literature suggests that service-learning represents a key tool in fostering intercultural understanding. Nine of the universities audited offered units that gave students the opportunity to undertake service in Indigenous communities or working with Indigenous people, with only a few identified as focusing on supporting opportunities for Indigenous students. One example is Victoria University's Aurora Internship Project, which offers a program specifically focused on facilitating internships for Indigenous students. Though there have been recent successes in encouraging more inclusive education through service-learning (Downman & Murray, 2017; Lavery et al., 2018), given the increasing recognition of the diversity of the student body, more research needs to be undertaken into the experiences of students with disabilities, students from remote and rural areas, international students, Indigenous students, and students facing financial difficulties. Exploring how these students have been able to engage with service-learning will contribute to designing more inclusive curriculum to give all students the opportunity to participate in meaningful, relevant service-learning experiences.

Community Stakeholders

A further key area of interest that has emerged from a review of service-learning literature in Australia is the challenge of balancing the needs of students and community stakeholders. Although the benefits to students of such engagement are relatively well documented in the literature (Eyler et al., 2001), little empirical research supports claims that programs and partnerships result in reciprocal learning and engagement opportunities, especially from the perspective of community partners. For example, work by Hammersley (2012, 2017) challenges the unidimensional understanding of the mutuality of programs that fail to challenge dominant power relations embedded in traditionally uneven partnerships that tend to dominate the sector. It remains problematic to engage with service-learning without considering neo-colonialist ideologies underpinning the ways community service and volunteering are defined and practiced.

The focus of service-learning programs, therefore, should not be restricted to the learning outcomes of students. It is essential that service-learning be designed to provide

reciprocal benefits to all, not only students but also the providers and recipients of the service (Furco, 1996). Striking this balance is of the utmost importance within service-learning and represents a distinct challenge (Scott & van Etten, 2012). Given the number of stakeholders involved in service-learning, resourcing also emerged as an issue. Service-learning, and WIL more broadly, are generally considered to be "resource-intensive" (Harris, Jones, & Coutts, 2010). The roles and responsibilities of academic advisors and support staff, particularly how they balance the needs of students with those of community stakeholders, represent a distinctly under researched area in service-learning in Australia in terms of being able to advance this curriculum further.

Interestingly, some of the areas for future development and discussion in service-learning echo the findings of *The WIL Report* (Patrick et al., 2009) in terms of the major challenges. *The WIL Report* identified five major challenges to engaging with WIL: "ensuring equity and access," "managing expectations and competing demands," "improving communication and coordination," "ensuring worthwhile WIL placement experiences," and "adequately resourcing WIL." Several of these challenges, most notably "ensuring equity and access" and "managing expectations and competing demands," have also been identified through the course of this research into service-learning. Perhaps service-learning in Australia is facing the same critical juncture that WIL was 10 years ago. If so, then the trajectory of WIL in Australia may provide potential pathways forward for service-learning. Although the challenges faced by service-learning are, of course, different from those faced by WIL more broadly, exploring how WIL programs were developed to suit the diversity of the student body, or how the stakeholders in WIL projects have balanced their different needs and expectations, may provide important insight into how service-learning can begin to address these challenges, whether service-learning is seen as a standalone curriculum or part of the broader WIL approach.

Conclusion

The findings of this review go some way toward illustrating the state of service-learning practice and research in Australia. It is clear that service-learning as a transformational pedagogy has yet to reach the

widely accepted and implemented status that it holds in other parts of the world. Foremost, the lack of clarity around the definition of service-learning, both across Australian institutions and across courses within the same universities, needs to be addressed. When compared to how service-learning is interpreted and enacted elsewhere in the world, Australian literature and practice offer a mixed bag of definitions of service-learning, most notably in terms of where service takes place and if it is granted academic credit. Research that explores the value of these two core aspects of a working definition of service-learning would represent a valuable contribution to the field.

Further, there is evidence to suggest that existing predominant approaches to service-learning in Australia may not cater to the diversity of needs of the student body (Downman & Murray, 2017; Harrison & Ip, 2013; Lavery et al., 2018; Tangen et al., 2011). A more flexible, tailored approach is required to ensure that inclusive service-learning education can be offered to all students. This prompts the exploration of alternative approaches to course design, such as employing a wise practice framework. Wise practice places emphasis on participation and collaboration between stakeholders in order to facilitate empowerment and transformative change for all those involved (Petrucka et al., 2016). Inclusive education requires the proactive recognition of the diversity of the student body; rather than "integrating" diverse needs into a static curriculum, inclusion must be designed from inception (Harrison & Ip, 2013). Time-poor educators and the needs of different stakeholders complicate designing service-learning programs. Wise practice argues that "best practice" is not necessarily the "best option," particularly considering "the variety of unique [access], identity, cultural and situational environments" (Thoms, 2007, p. 8). Often the predominant approach to WIL and service-learning can be to value the feedback of students and community partners about the placement experiences, rather than for educators to focus on what students learn about themselves and their personal transformation of values (Wilson, 1989). Wise practice in service-learning acts to remove educational hierarchies and positions students, educators, and community partners as collaborators, working together to realize "the common good" (Sternberg, 2009). Students are thus empowered to take

a lead role in their own education (Petrucka et al., 2016). Doing so creates space for inclusion and transformation at the center of the learning experience, an approach that aligns closely with the transformative ethos of service-learning.

The predictions of Langworthy (2007) that "to be successfully adapted to the Australian university environment, programs must be strongly linked to vocational outcomes and graduate attributes" (p. 8) have proven to be true.

In addition to highlighting emerging areas of interest within the field, this review also points to issues requiring further research and investigation. In 2015, the Australian Government accepted the recommendations of a report on university funding and engagement. One of the key accepted recommendations was to "provide incentives to universities to increase and improve engagement and collaboration with business and other end-users" (Watt, 2015, p. i). Similarly, the Australian Government committed to $28 million over 4 years to expand Ph.D. internship programs to improve postgraduate employability (Department of Education and Training, 2017). There is a clear commitment to encouraging greater engagement with industry and the community, as well as to the role of WIL in the form of internships. Where does this leave service-learning?

The significant interest in service-learning among higher education institutions clearly demonstrates widespread recognition that this pedagogy has value. Innovative service-learning projects are taking place in universities across the country, work that was nationally recognized in 2017, when two university programs received the Australian Government Department of Education's prestigious Australian Awards for University Teaching (AAUT). Griffith University's Community Internship program was recognized with the AAUT Award for Programs That Enhance Learning, in the category Student Experiences and Services Supporting Learning, Development and Growth in Higher Education. Macquarie University's PACE was also recognized with the AAUT Award for Programs That Enhance Learning, in the category Educational Partnerships and Collaborations With Other Organisations. However, little to no work exists that provides an overview of the research available on the topic in the Australian context in order to make a systematic case for the relevance and value of service-learning. Given the increasing prominence of WIL and increasing interest in service-learning as part of the WIL approach within education policy spheres, this review offers a timely first step toward demonstrating the value of service-learning in Australia. Consequent to the work completed for this article, a national network of service-learning practitioners held a service-learning summit in November, 2019, responding to the desktop audit which showed that 84% of respondents agreed they would like a network approach, with 95% indicating that they see room for the growth of service-learning in their discipline or institution.

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Engaging With Complexity: Making Sense of "Wicked Problems" in Rural South Africa

Christopher J. Burman

Abstract

This article provides insights into the utility of applying theories associated with the complexity sciences to engaged research. The article reflects on a 4-year health-related engagement between the University of Limpopo and the Waterberg Welfare Society in the Limpopo Province, South Africa. The introduction presents the focus of the partnership and the outputs to date. The sections that follow introduce (1) background information about the partnership, (2) the notion of "wicked problems" and resilience, (3) theory relating to anthropogenic complexity that influenced the project, and (4) a description of the taming wicked problems framework, which was developed to facilitate the intervention. The discussion reflects on learning from the project in the context of engaged research, wicked problems, and resilience. It is suggested that building resilience to wicked problems represents a useful addition to engaged scholarship's armamentarium of toolkits from both conceptual and practical perspectives.

Keywords: community engagement, HIV and AIDS, medical pluralism, nonlinearity, project management, metaphorical order/chaos continuum

This reflection introduces an approach to engaged research that was designed to build resilience to "wicked problems" in rural South Africa, the taming wicked problems framework (henceforth the Framework). The Framework was designed to facilitate a community–university response to an intractable wicked problem identified by a community-based organization in the context of Mode 2 knowledge generation, with "Mode 2" understood to be knowledge cogeneration "for the sake of social change and transformation" (de Beer, 2014, p. 133). The Framework was developed from the perspective of transdisciplinary theory—inclusive of complexity sciences—to catalyze the emergence of novel ideas and associated social practices that would contribute to change and transformation. In this instance, the wicked problem identified by the community partner related to HIV and AIDS. Although the partnership has not solved the problem, it has developed resilience strategies to reduce its influence. The specific project impacts to date include an increase in adherence to antiretroviral medication and a decrease in internalized stigma among traditionalists living with HIV, both of which are priority areas in the current South African National Strategic Plan for HIV, TB, and STIs (South African National AIDS Council [SANAC], 2017).

The purpose of this reflection is to provide insights into the benefits of explicitly incorporating nonlinear dynamics into engaged research; to describe the opportunities that are afforded by working with ambiguous concepts such as serendipity and feedback; and to demonstrate how academe and community collaborated to develop a now self-sustaining resilience strategy to ameliorate the impact of a wicked problem in rural South Africa.

The reflection is structured in the following way. First the partnership and setting—contextualized by the changing

global/local HIV and AIDS environment—is presented. This is followed by an excursus into wicked problems, resilience, and non-linear complexity, then a description of the Framework. The Discussion section begins with a metatheoretical reflection relating to the ontological/epistemological positioning of the Framework, followed by implementation-level reflections relating to some of the learning from the project.

Background Information

Project History

The partnership has been reported on elsewhere, and only the key points will be highlighted (Burman, Aphane, & Mollel, 2017). The partnership is between the Rural Development and Innovation Hub, University of Limpopo, and the Waterberg Welfare Society (WWS). The partnership began over 10 years ago, and this ongoing project began in 2014. Ethical clearance was approved by the Turfloop Research and Ethics Committee at the beginning of the project, and appropriate ethical procedures and protocols have been applied throughout.

WWS is a not-for-profit organization that was founded to counter the growing HIV and AIDS epidemic in 2006. It comprises teams of social workers, nurses, and peer educators who primarily work with communities living in deep rural areas (WWS, 2017). Waterberg district is situated in the west of the Limpopo Province on the border with Botswana. It is a deep rural district with a Gini coefficient of 0.67, representing one of the most unequal districts in the country (Mostert & Van Heerden, 2015). The most recent statistics indicate that HIV prevalence rates among antenatal women within the district during the period 2008–2013 remained stable at fractionally below 30% (National Department of Health, 2015), but more recent figures indicate a gradual average national decline in incidence rates, which is probably reflected in Waterberg district (SANAC, 2017). (Note, however, that the last South African National HIV Prevalence, Incidence and Behaviour Survey providing district-level statistics was published in 2012; an exponential increase in antiretroviral treatment coverage has occurred in the intervening period.) During the early phases of the project, the HIV and AIDS environment was going through a global shift due to the introduction of UNAIDS' 90-90-90 strategy to end AIDS by 2030 (Joint United Nations Programme on HIV/AIDS, 2014). The wicked problem identified by WWS was how to reframe their HIV risk reduction messaging in this changing context.

The Changing Global/Local HIV and AIDS Environment: 90-90-90

With the consolidation of evidence that antiretroviral therapy (ART) makes it "biologically possible to all but eliminate HIV transmission from those individuals already infected," as well as to extend the life expectancy of infected individuals exponentially (Bayer, 2014, p. 436), the South African National Department of Health officially adopted the 90-90-90 strategy, meaning "90% of all people living with HIV know their HIV status; 90% of all people with an HIV diagnosis receive sustained antiretroviral therapy, and 90% of all people receiving antiretroviral therapy achieve viral suppression" (SANAC, 2017, p. xv). In 2014, 90-90-90 represented a qualitative shift in the global/local HIV and AIDS environment, and WWS consequently wanted to update their educational and awareness materials accordingly. This required replacing the outdated "abstain, be faithful, condomise" (ABC) messaging with new educational and awareness materials aligned with the biomedical 90-90-90 paradigm.

Although in hindsight this may seem to be a straightforward task, the reality is that it was difficult. The difficulties included (1) very few of the project team understood the full implications of the biomedical logic that explained the opportunities that 90-90-90 provided, (2) the legacy of the ABC messaging was firmly embedded among the communities that WWS worked with, and (3) it was impossible to predict what type of educational and awareness materials would make sense to the intended beneficiaries in the changing HIV and AIDS environment. Despite a number of attempts to update the educational and awareness materials, WWS remained at an impasse, so it was decided that the partnership should focus on codeveloping new educational and awareness materials from the perspective of wicked problems and resilience.

Wicked Problems

The widely accepted consensus is that wicked problems "involve multiple interacting systems, are replete with social and institutional uncertainties, and [are those]

for which only imperfect knowledge about their nature and solutions exist" (Mertens, 2015, p. 1). Consequently wicked problems (1) are considered to be "any complex issue which defies complete definition and for which there can be no final solution . . . in that they resist the usual attempts to resolve them" (Brown, Harris, & Russell, 2010, p. 302)—but it is possible to develop resilience to the challenge by taming their "growl" (Churchman, 1967, p. B-141)—and (2) are especially resistant to resolution if only conventional, linear analytical approaches based on Newtonian reductionism are applied to attempt to change them (Sharts-Hopko, 2013). Furthermore, unintended outputs often emerge during interventions or programs designed to reduce the impact of wicked problems (Australian Public Service Commission, 2007) because "wicked problems are nonlinear, [so] any approach to tackle them must be every bit as nonlinear" (Pacanowsky, 1995, p. 37). Nonlinearity refers to the dynamics of complex systems as described below.

Complexity in the Context of Engaged Research

Ordered, linear systems are sustained by multiple cause–effect interactions between their parts, representing a form of functional complicatedness situated within a closed system, such as an airplane. Linear systems are considered to be ordered because they are at, or close to, equilibrium. They are therefore predictable but vulnerable to shocks, because if one part of the system becomes dysfunctional, the entire system can fail. An example of a complete system failure due to one part of a system becoming dysfunctional is an airplane that has had the front wheel removed prior to takeoff. In this instance, the entire system ceases to function. The analysis of ordered, linear systems is associated with the Cartesian positivist method—"systematic observation, replicable experiments, logically deduced hypotheses confirmed by evidence"—because the system functioning is mechanistic, the outcomes deterministic (predictable), and the parts of the system can be legitimately analyzed as independent units (reductionism; Dunn, Brown, Bos, & Bakker, 2016, p. 2).

Unordered systems, such as anthropogenic and ecological systems, are situated within open systems and contain some nonlinear connectivity between the agents in the system, which makes the system context sensitive. "Nonlinear connectivity" refers to the way feedback loops that either amplify (increasing the likelihood of a systemic change) or dampen (reducing the likelihood of a systemic change) potentials for change within a nonlinear system sometimes have disproportional effects, so that "minor changes [within one part of a nonlinear system] can produce disproportionately major consequences" (Snowden & Boone, 2007, p. 71). One real-world example of nonlinear connectivity is combination antiretroviral therapy, which involves "a cocktail of three drugs that works precisely because the immune response and viral dynamics are non-linear. The three drugs taken in combination are much more effective than the sum of the three taken separately" (Ramalingham, 2013, p. 228).

As a result of these dynamics, a nonlinear context-sensitive system may remain at a close to equilibrium position for much of the time but has the potential to move from the equilibrium point if the context alters. The ability of systems to respond to a changing context has been described as a form of "*relational* [emphasis added] complexity" (Healey, 2007, p. 525). For example, the passengers on an airplane mostly display linear characteristics during a routine flight (i.e., ignore the safety DVD, eat, sleep, read and/or watch a movie), but if the plane rapidly loses altitude, the passengers' response will typically catalyze the system to show a different type of functioning that, although not entirely predictable, is likely to be patterned (i.e., variable displays of panic and/or alarm).

The passengers on the airplane represent an example of the tendency of nonlinear systems to remain at a point close to order for long periods (a routine flight) while possessing the capacity to shift far from the equilibrium position if the context alters (rapid loss of altitude) toward the "edge of chaos" (Lorenz, 1972). Unlike linear systems, systems that contain some nonlinearity are resilient, which means that they possess the agility to recover from shocks and thus have the tendency to return to a new point of order after the shock. For example, if the pilot resumes control over the airplane and assures the passengers that there is no crisis, they will probably relax and continue with the flight in a routine way (i.e., the system returns to a close to equilibrium position), but the system will
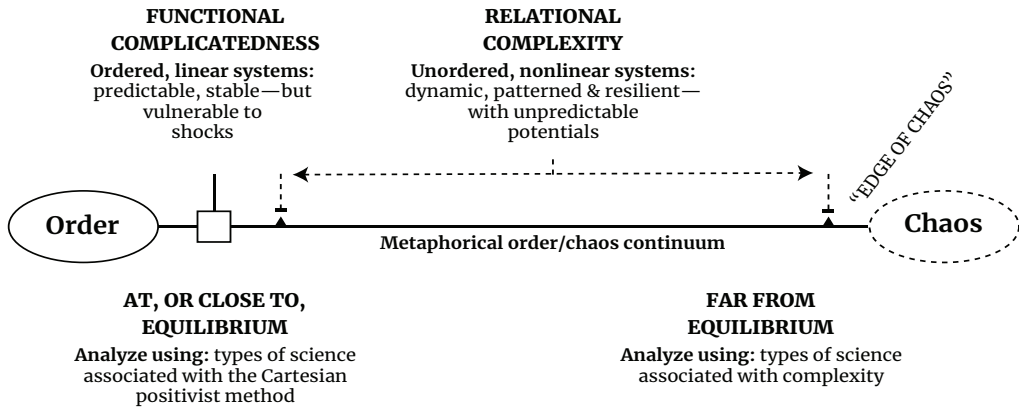
FUNCTIONAL
COMPLICATEDNESS

Ordered, linear systems:
predictable, stable—but
vulnerable to
shocks

RELATIONAL
COMPLEXITY

Unordered, nonlinear systems:
dynamic, patterned & resilient—
with unpredictable
potentials

"EDGE OF CHAOS"

Order

Chaos

Metaphorical order/chaos continuum

AT, OR CLOSE TO,
EQUILIBRIUM

Analyze using: types of science
associated with the Cartesian
positivist method

FAR FROM
EQUILIBRIUM

Analyze using: types of science
associated with complexity

Figure 1. Linear and Nonlinear Systems Contextualized by the Metaphorical Order/Chaos Continuum

not return to exactly the same pre–altitude loss equilibrium point due to the memory of the engine failure and anxiety associated with the altitude loss being embedded within the system. Nonlinear systems are best analyzed using techniques associated with the complexity sciences, which emphasize the "clear identification of the *limits* [emphasis added] to predictability" while "constructing an unknowable future" (Stacey, 2000, pp. 90, 92). The characteristics of linear and nonlinear systems are represented in Figure 1, using a metaphorical order/chaos continuum.

Linear systems remain anchored to a point on the metaphorical order/chaos continuum close to, or at, equilibrium regardless of changes in the context. Nonlinear systems tend to hover at a close to equilibrium point on the order/chaos continuum for long periods of time; however, they have the capacity to move along the continuum as their context alters. Typically, a change in context, such as an exogenous shock, catalyzes movement from the point of ordered stability (equilibrium) toward a far from equilibrium point close to, or at, the "edge of chaos." The movement along the continuum is both self–regulating and self–organizing, which means that the degree of movement is impossible to predict, although patterns of movement tend to be replicated (Pincus & Metten, 2010).

Systems that contain some nonlinearity are resilient because, unlike an airplane, they "can survive the removal of parts by adapting to the change" (Rickles, Hawe, & Shiell, 2007, p. 933) and are capable of qualitative changes if the system goes beyond a tipping point (Gladwell, 2000). These char-

acteristics go some way toward explaining why attempts at solving wicked problems often result in system recovery, in which the system returns to a position at, or close to, its original condition after an exogenous shock (such as attempts to solve the wicked problem). The qualitative differences in linear and nonlinear system functioning have implications for the management of engaged activities, as described below.

Managing Nonlinear Systems in an Engaged Context

Anthropogenic systems represent nonlinear systems (Kauffman, 2005), and, as noted above, nonlinear systems are context sensitive and are prone to unpredictable movement within the metaphorical order/chaos continuum. This requires a project management strategy typology that is cognizant of the uncertain potentials for movement.

> Simple contexts require straightforward management and monitoring. Here, leaders *sense*, *categorize*, and *respond*. That is, they assess the facts of the situation, categorize them, and then base their response on established [good, or best] practice. [In a complex context], we can understand why things happen only in retrospect. Instructive patterns, however, can emerge if the leader conducts experiments that are safe to fail. That is why, instead of attempting to impose a course of action, leaders must patiently allow the path forward to reveal itself. They need to *probe first, then sense, and then respond.* (Snowden & Boone, 2007, pp. 68–72)
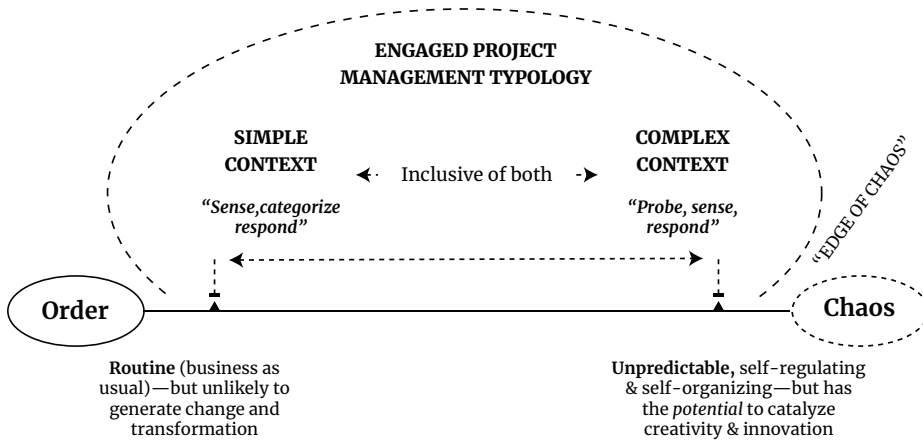
Figure 2. Managing Nonlinearity—an Inclusive Typology

The project management typology proposed by Snowden and Boone (2007) represents a functional heuristic. However, from the perspective of managing Mode 2 engaged partnerships that aim to build resilience to wicked problems, this methodology masks the opportunities that can be exploited to catalyze ameliorative change. When an anthropogenic system is close to equilibrium (order), it is reasonably predictable and thus straightforward to manage using good, or best, practices. However, when an anthropogenic system is far from equilibrium, it is unpredictable and requires a different management response. Implicit within the unpredictability is the potential for grassroots creativity and potential innovation to emerge. This opportunity is represented in Figure 2.

Notwithstanding the potentials of nonlinear systems to move along the order/ chaos continuum in response to a change in context, these systems tend to gravitate toward order because of their resilience (Chaffin & Gunderson, 2016). Nevertheless, a simple context requires conventional project management strategies—that is, good, or best, practices—because the interactions of the parts are proportional, hence predictable. In a complex context different management strategies—such as safe to fail experiments—are required because, at that time, the system becomes unpredictable, so a pragmatic project management strategy is to "patiently allow the path forward to reveal itself [as] instructive patterns emerge" (Snowden & Boone, 2007, p. 72). The unpredictability is a consequence of changes within the system that are mediated by amplifying and dampening feedback. This system is represented using Sohail Inayatullah's "iceberg metaphor" in Figure 3.
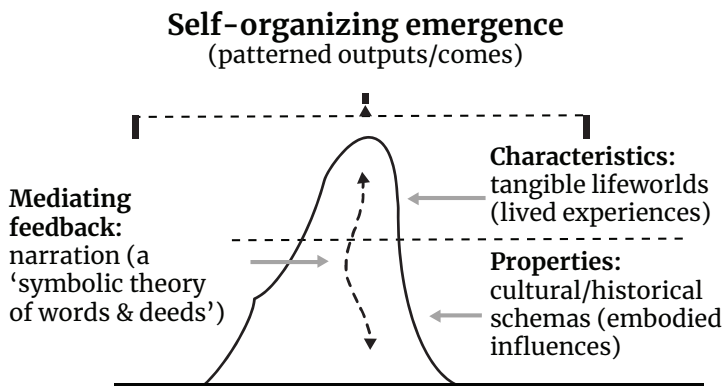

Figure 3. The Dynamics of an Anthropogenic System. Adapted from "Complex Adaptive HIV/AIDS Risk Reduction: Plausible Implications from Findings in Limpopo Province, South Africa," by C. J. Burman and M. Aphane, 2016, South African Medical Journal, 106(6), p. 571.

The visible characteristics of an anthropogenic system reflect tangible lifeworlds that people negotiate in variable ways. The submerged properties reflect historical, cultural schemas—including knowledge, rumor, and mythic schemas—which, collectively, have been described as a form of "sensorimemorabilia" (Burman, Mamabolo, Aphane, Lebese, & Delobelle, 2013, p. 22). The feedback within the system reflects how people make sense of the utility of the combination of both the characteristics (lived experience) and the properties (embodied schemas). Within anthropogenic systems, feedback typically manifests through narrative and storytelling, reflecting the "homo narrans" paradigm that describes narration as a "theory of symbolic actions—words and deeds—that have sequence and meaning for those who live, create, or interpret them . . . which has relevance to real as well as fictive worlds, to stories of living and stories of the imagination" (Fisher, 1984, p. 2).

In summary, during periods of stability, the dynamics of an anthropogenic system (the interactions of the properties and characteristics, mediated by feedback) produce patterned, stable emergence because the feedback is at a static equilibrium point. Periods of change, or transition, are typically catalyzed by an exogenous shock and represent systemic movement toward a far from equilibrium point due to changes within either the characteristics, the properties, or both, that alters the feedback dynamics. Resilience to exogenous shocks reflects the extent to which the influence of the change in either the characteristics or the properties—hence feedback—affects the overall functioning of the system. This basic understanding of the functioning of anthropogenic systems influenced the design of the taming wicked problems framework described below.

The Taming Wicked Problems Framework

The Framework has been through a number of iterations. Its current form is provided in Figure 4. The emphasis is movement within the metaphorical order/chaos continuum in order to stimulate and harness creative resilience strategies that can tame the growl of wicked problems.

The underlying rationale of the Framework was to catalyze ethical movement from ordered stasis—in this case, the deficit situation WWS had identified with regard to HIV risk reduction messaging—to a far from equilibrium position in order to stimulate bursts of creativity and possibly innovation as a first step toward taming the growl of the wicked problem. After the movement toward chaos, the ambition was to use a combination of scholarship and community-based project management strategies to identify nascent emergence that was of potential value to the partnership and, where possible, reinforce or dampen the emergent influences during the return journey toward order. The latter process was intended to ensure that the nascent emergence was embedded within the WWS system so that any creative, beneficent opportunities that had emerged during the period of destabilization could be harnessed and exploited by the partnership.

Defining the Project Boundaries: Agreeing on an End-Condition

At the beginning of the project it was impossible to predict what outputs were required to improve the HIV risk reduction messaging materials in the changing HIV and AIDS environment (the shift from ABC to 90-90-90). However, it was possible to agree on a set of parameters that the partnership could use to gauge progress by agreeing on an end-condition.

In this instance the agreed-on end-condition was influenced by the changes that the 90-90-90 strategy brought to the global/local HIV and AIDS environment. The ultimate goal of 90-90-90 is to reduce the aggregate global viral load to as low a level as possible. If this happened it would mean that of the people living with HIV today, very few could develop AIDS-related symptoms or be able to transmit HIV to another person. This biomedical logic provided a basis from which the partnership decided that during the project, any opportunity to reduce the aggregate *community* viral load would be considered a legitimate opportunity that could be used within the educational and awareness materials.

Systemic Destabilization Toward the Edge of Chaos: The Primary Probe

The word "probe" that is used to describe this phase of the Framework refers directly to Snowden and Boone's (2007) probe-sense-respond management strategy. The purpose of the primary probe is to begin the process of shifting the system from a close to equilibrium position—in this instance the deficit situation identified by WWS with

regard to HIV risk reduction messaging—toward a far from equilibrium position. In order to achieve this, the partnership identified a consultancy that specialized in HIV and AIDS training. The consultants' job was to provide a full account of the biomedical logic behind the global 90–90–90 strategy and to deliver the training in a participatory, iterative way to the senior management at WWS in order to catalyze movement toward a far from equilibrium position.

Systemic Reorganization: Discursive Spaces and Action Spaces

The systemic reorganization reflects the period during which the system absorbs the exogenous shock (in this instance, the information within the consultants' training materials) and begins to return from the edge of chaos back toward a new equilibrium point. The training (the primary probe) was a 2–day package, followed by a 2–day refresher 6 weeks later. The managers who attended the training agreed to critically discuss which aspects of the training they believed could be applied to their areas of work with their team members as a mechanism to increase the initial destabilization. These areas correspond to the "discursive spaces" shown in Figure 4.

There was no obligation to integrate any aspects of the training if the team members did not believe it would add value, but it was agreed that the managers would encourage their team members to use their intuition to identify components of the training that they believed would make sense to—and be

effective among—their client constituencies. Based on these discussions, WWS then began safe to fail experiments to introduce the learning from the training into their working environment—the "action spaces" shown in Figure 4. Safe to fail experiments are premised on the argument that when undertaking experiments in unexplored territory, typically 50% of the experiments are likely to fail, but the collective learning from both the failures and the successes can catalyze the emergence of innovative practices (Ahern, 2011). In this instance, the purpose of the safe to fail experimentation was to accelerate and expand the participants' creativity while the system was at a far from equilibrium position on the metaphorical order/chaos continuum, as shown in Figure 5.

Safe to fail experiments—experiments that are low risk and will not create significant adverse impacts if they fail—are increasingly applied in wicked scenarios (Zivkovic, 2015). Because wicked scenarios rarely have a single solution, it is pragmatic to look for multiple resilience strategies that can co-contribute to achieving potentially beneficent change (Dickens, 2012). Undertaking a series of safe to fail experiments increases the variability (ideas and opportunities) within the system, thereby increasing the chances of identifying multiple opportunities to reduce the system's stuckness (Huertas, 2014). Based on the collective learning from the safe to fail experiments, WWS gradually refined the way that they used the materials provided by the trainers in their work.
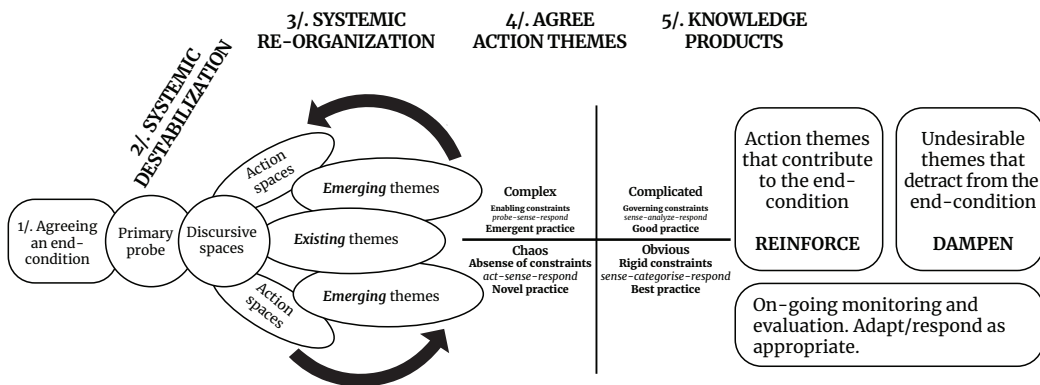

Figure 4. The Taming Wicked Problems Framework
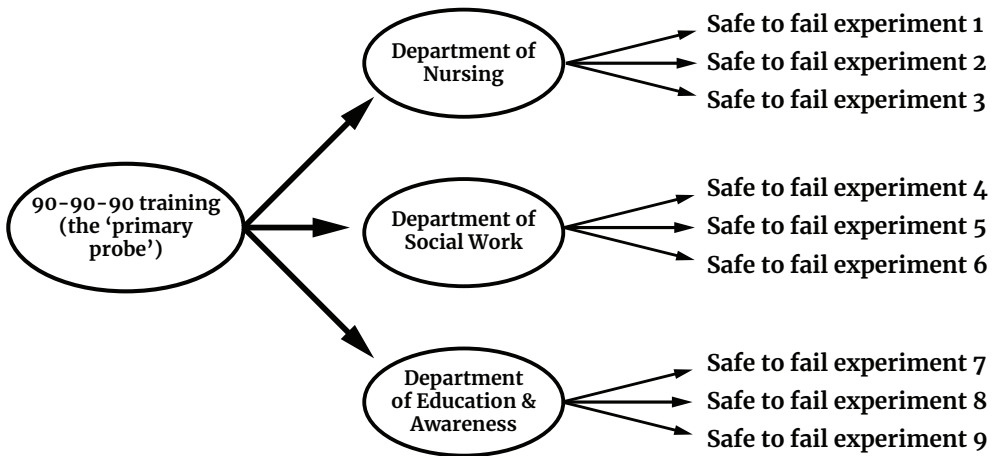
DISCURSIVE AND ACTION SPACES

Figure 5. Multiple Safe to Fail Experiments Influenced by the 90-90-90 Training

Identifying Action Themes: Monitoring, Analyzing, and Evaluating the Systemic Reorganization

This phase in the Framework represents the "sense" in Snowden and Boone's (2007) probe–sense–respond management strategy. Sense making is typically understood to mean how organizations (Weick, 1995) or individuals (Dervin, 1998) make sense of the world so that they can act in it. The university component of the partnership agreed to take responsibility for the initial sensing of the emergent changes that would be validated by WWS at a later stage in the project. Three types of sense making enabled the themes to become visible and eventually to be refined into action themes.

Sense making (Phase 1): Community focus. During this period WWS and their client constituencies were undertaking safe to fail experiments and simultaneously making sense of the impacts. Throughout this period the university component of the partnership did not influence which aspects of the training were going to be applied by WWS, but they did visit regularly and undertake formal and informal discussions relating to the project. The monitoring focused on which components of the training WWS personnel believed would add value to their educational and awareness materials and the responsiveness of their client constituencies to the new materials—corresponding to the discursive spaces and action spaces shown in Figure 4. During this period it became evident that the movement from the

equilibrium deficit situation toward chaos, as well as the subsequent reorganization toward a new close to equilibrium position, had involved what Brook, Pedler, Abbott, and Burgoyne (2015, p. 369) have described as "critical unlearning" of the information contained within the outdated ABC messaging among both WWS and their client constituencies. With time the unlearning gave way to reframing, as described by Goffman (1974), of the ABC influence in favor of the 90-90-90 strategy. These shifts were captured using conventional qualitative narrative collection techniques (recordings, note taking, translation, back translation, and so forth). Six months after the consultants' training, it was becoming evident from the qualitative findings that a saturation point was being reached, which suggested that the system was settling down into a new equilibrium position.

Sense making (Phase 2): Causal layered analysis (CLA). In order to identify potential themes, the university component of the partnership analyzed all of the qualitative data that had been collected during the interviews and discussions, using a qualitative methodology called causal layered analysis (CLA). CLA is associated with futures scientist Sohail Inayatullah, but an adapted CLA variation developed by community psychologists Bishop and Dzidic (2014) was applied. CLA is designed to provide a method for the "deconstruction and analysis of complex [anthropogenic] issues." The focus of CLA is the "[submerged] root of the issue" being scrutinized—as well as the surface

descriptors—so that opportunities "for genuine, transformative change to occur" may emerge (Bishop & Dzidic, 2014, p. 16).

Sense making (Phase 3): Partnership decision making. Once the interviews and discussions had been analyzed using the CLA method, feedback was presented to WWS at a 2-day decision-making dialogue. The purpose of the dialogue was to critically scrutinize the findings and make necessary adjustments prior to deciding which of the emergent themes would be focused on as action themes in the final stages of the project.

In order to identify the action themes that would be focused on, the following criteria were agreed on at the beginning of the dialogue. The action themes had to (1) contribute to reducing the aggregate community viral load; (2) be accompanied by some evidence that the emergent theme was producing some beneficent impacts in a reasonably predictable way (i.e., was showing signs of becoming ordered); (3) be themes that the client constituencies were repeatedly drawn to in a patterned way (i.e., the proposed action themes would not be random or ad hoc); and (4) require minimal resources to implement.

The dialogue was augmented by a joint analysis of the findings from the perspective of complexity using the Cynefin framework. The Cynefin framework (represented in the image underneath the words "agree action themes," Figure 4) has been applied in multiple projects involving anthropogenic complexity. The Cynefin framework was designed to enable decision makers to ascertain whether a particular challenge is ordered (linear), unordered (nonlinear), or contains combinations of both (Snowden &

Boone, 2007). In this instance the findings of the CLA analysis were triangulated with the Cynefin framework in order to problematize, verify, and then consolidate evidence for the transition from emergent themes to action themes. Only themes that had moved from an unordered domain toward or into an ordered domain were considered to be legitimate potential action themes that would be focused on in the final phase of the project (Burman & Aphane, 2016c).

Agreeing on the Action Themes

Based on the outcomes of the multiple forms of sense making and the 2-day dialogue, three action themes were selected to be focused on, as shown in Figure 6: (1) the "origins of HIV"; (2) that "HIV, if treated using antiretroviral therapy, was now a chronic disease and not a death sentence"; and (3) the "viral load" (Burman & Aphane, 2016a). Other themes were identified that detracted from the end-condition, such as the influence of the broader community and stigma, but the partnership believed that at that stage these themes were outside their immediate control. Consequently, these themes were "parked" but monitored throughout for any change.

Rationale for the action themes. The partnership decided that three topics were important action themes for WWS and their client constituencies: (1) the "origins of HIV"; (2) "HIV, if treated using antiretroviral therapy, was now a chronic disease and not a death sentence"; and (3) the "viral load." The viral load and the transformation of HIV into a chronic disease, not a death sentence, dovetailed with the biomedical logic of the 90-90-90 strategy. However, the relevance of the origins of HIV was far more am-
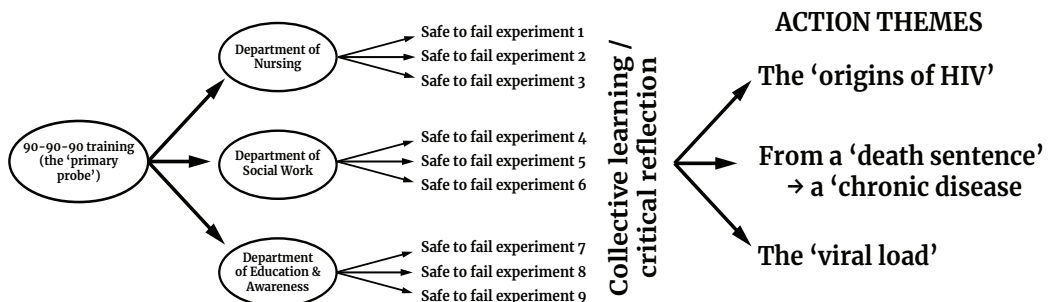
DISCURSIVE / ACTION SPACES

Figure 6. Identifying and Agreeing on Action Themes

biguous to the university component of the partnership and is worthy of more detailed explanation in order to provide context.

The origins of HIV: Some history. When WWS endorsed the origins of HIV action theme, the university component of the partnership requested clarification about why this theme was relevant. WWS's Education and Awareness Unit provided localised insights. (1) The origins of HIV—quite literally "where HIV originally came from"—is an issue that had been historically contested and debated by their client constituencies. (2) In the local language, Sotho–Tswana, the word *makgoma* is the name of a traditional disease that has similar symptoms to HIV-related coinfections, such as tuberculosis (Mabunda, Khoza, Van den Borne, & Lebese, 2016), and there is often confusion among the client constituencies as to whether particular symptoms are caused by HIV or makgoma. (3) The confusion between the origins of HIV and makgoma contributes to delays in testing for HIV and interruption of treatment among traditionalists in the area.

The localised conflation of HIV and makgoma reflects a phenomenon called *medical pluralism*. Medical pluralism reflects different understandings of disease causation which influences health-seeking behaviors (Dubois, 1961; Ibeneme, Eni, Ezuma, & Fortwengel, 2017). In the context of HIV and AIDS in eastern and southern Africa medical pluralism is associated with delays in HIV testing and the interruption of treatment (for a few examples see Kalichman & Simbayi, 2004; Leclerc–Madlala, Green, & Hallin, 2016; Moshabela et al., 2017; Pantelic et al., 2015; Shirindi & Makofane, 2015; Zuma, Wight, Rochat, & Moshabela, 2018). In Limpopo Province health care professionals also report that the high levels of nonadherence to antiretroviral therapy are "due to the use of traditional or alternative medicine" (SANAC, 2016, p. 77). The localised conflation of HIV and makgoma described by the Education and Awareness unit is one such manifestation of medical pluralism in South Africa which is reinforced by an excerpt from a local newspaper report:

> Culturally, we believe that you have makgoma (dirty blood) if your lover passes away, and if you don't get proper cleansing and rituals, anyone you sleep with will get so sick, and even have the same symptoms as someone with full-blown AIDS. So it is imperative to follow the correct rituals. (Disetlhe, 2014, quoting a representative from the National House of Traditional Leaders)

The impact of the action themes. Due to resource constraints, the partnership decided that the action themes would only be monitored in detail with WWS's Education and Awareness Department. By the end of 2015, the action themes had been firmly embedded within the educational and awareness materials that the Education and Awareness Department were using in deep rural areas with support groups for people living with HIV, many of whom were traditionalists. Initial findings from that monitoring indicated that combined use of the three action themes was opening spaces for critical dialogue relating to the client constituencies' personal experiences with HIV and treatment strategies. In turn, the dialogues and action themes were contributing to an increase in adherence to antiretroviral therapy and a decrease in internalized stigma among members of the support groups who were influenced by traditional values (Burman & Aphane, 2016b). Two years later, the action themes continue to have similar utility, and the information about the action themes has been requested by other support groups, indicating an increase in localized demand (Burman & Aphane, 2019).

From Action Themes to Knowledge Products

The partnership agreed that for an action theme to be developed into a knowledge product required that (1) there is empirical evidence that the theme either delivered or contributed to a tangible output, (2) the implementation strategy is low cost and replicable (i.e., ordered), and (3) there is sufficient external demand for the action theme to be developed into a financially viable product so that third stream income (i.e., income other than government funding and payments from students) can be generated from it. At the time of writing the action themes have been shown to achieve (1) and (2) but have not yet been developed into third stream income knowledge products.

Discussion

The discussion begins with a reflection on the metatheoretical positioning of the

taming wicked problems framework. This is followed by reflection on implementation-level issues that have emerged through the learning from this project.

A Metatheoretical Reflection

There has recently been a resurgence of interest in wicked problems in the context of shocks and resilience. It has been argued that wicked problems persist in part due to quasi-reductionist mind-sets that do not incorporate nonlinear dynamics into either the problem-framing or problem-solving efforts (Zywert & Quilley, 2017). Such mind-sets have been described as leading to a form of "technocratic tyranny" (Waltner-Toews, 2017, p. 1) enabled by the assumption, despite evidence to the contrary, that increased access to scientific information—implicitly derived through reductionist mind-sets—is the key ingredient required to tame the growl of wicked problems (Newman & Head, 2017).

The Framework was developed to put distance between the project design and the restrictive quasi-reductionist parameters that Zywert and Quilley (2017) and others have been critical of because—in the spirit of Pacanowsky (1995)—both anthropogenic systems and wicked problems contain some nonlinearity. In contradistinction, the Framework design set out from the premise that (1) anthropogenic systems contain both linear and nonlinear dynamics and (2) people, unlike machines, are capable of responding to a change in context (i.e., it is normal for anthropogenic systems to move within the metaphorical order/chaos continuum). Consequently, the Framework design aimed to maximize opportunities afforded by the naturalistic capabilities of anthropogenic systems (i.e., to move within the metaphorical order/chaos continuum) as a strategy to develop resilience to the wicked problem rather than to try and solve the problem.

Implementation-Level Reflections

The implementation-level reflections include brief statements about (1) the way that the Framework is designed to work with imperfect knowledge and serendipity, (2) the movement from global abstractions (the global 90-90-90 strategy) to social practices that make sense in particular localities, (3) the engaged values that developed during this project, and (4) the benefits that engaging with nonlinear complexity has brought to the partnership.

Negotiating imperfect knowledge and serendipity. Developing resilience strategies to the deficit situation relating to HIV risk reduction messaging that WWS identified required multiple journeys into Stacey's (2000, p. 92) "unknowable futures" by different project members within the metaphorical order/chaos continuum in pursuit of creativity and possible innovations. This necessarily required working with imperfect knowledge and exploiting emergent serendipitous opportunities if—and when—they occurred. Both imperfect knowledge and serendipity represent an essential, yet ambiguous, strategy for any type of engaged research. However, the Framework is implicitly hard-wired to reduce ambiguity using a series of filters because sense making—how people make sense of the world so they can act in it—was used to direct the early phases of the project. Figure 7 illustrates how the Framework incrementally filters abstract global knowledge toward a local level of granularity using a series of techniques that recursively constrain the global potentials toward local relevance.

At the beginning of the partnership, WWS was stuck at a self-proclaimed impasse—the "deficit situation" (Figure 7). At this point the system was close to equilibrium, with insufficient inputs to stimulate the levels of creativity required to catalyze change. The training—the primary probe—was designed to change the context and begin a process of moving the WWS system toward a far from equilibrium position in order to open creative spaces that would produce the basis for updated educational and awareness materials—and ultimately to aim for altered social practices. The training contained abstract, global biomedical knowledge about HIV and AIDS in the context of 90-90-90, as well as firsthand experiences (one of the trainers had been living with HIV for 32 years). The training prompted a shift in the systemic context from order toward chaos, and WWS responded with a combination of unlearning and reframing, which provided a basis from which they began to reimagine their working environment.

The initial constraint—the end-condition (a reduction in the aggregate community viral load)—was as abstract as the training, but it immediately moved the focus from global to local/community. From that point on—the destabilization, reorganization, and identification of action themes phases—the
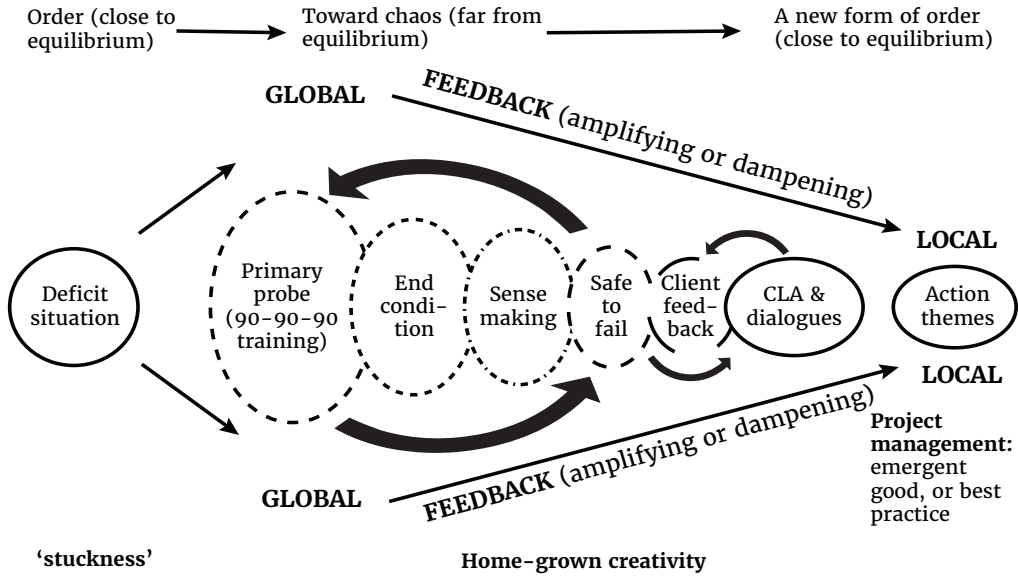
Figure 7. Facilitating and Managing Ambiguous Serendipity in a Wicked, Engaged Context

local/community abstraction was gradually further constrained though a series of iterative transitions defined to different levels of granularity by each of WWS's departments. These transitions were mediated by sense making during the safe to fail experimentation, ongoing dialogue and sharing of stories and information among participants, the causal layered analysis, and subsequent dialogue. It was also mediated by WWS's professional relationship with their client constituencies. These iterations both enabled and constrained the partnership to respond to empirical home-grown feedback—as opposed to expert-derived feedback—as it emerged. With each iteration the partnership gradually became increasingly focused toward localized relevance until the agreed-on action themes were selected. In order to emphasize this point, the following paragraphs revisit the "origins of HIV" action theme, using added details to demonstrate its relevance.

From global to local: Medical pluralism and the origins of HIV. Despite the use of imperfect knowledge and the adoption of serendipitous opportunities, the project moved from a global abstraction—the biomedical logic underpinning the 90-90-90 strategy introduced as the primary probe—through numerous iterations that have become consolidated into locally relevant social practices (a form of praxis). Movement from a global abstraction to localized social practices is relevant because many wicked problems originate from global sources

but manifest in particular ways in different geographical settings (Taleb, 2007), so it is necessary to build locally relevant resilience to these types of global challenges (for an example of the importance of building local resilience to a global HIV epidemic, see Piot et al., 2015; Wilson & Halperin, 2008). The Framework was able to facilitate this movement from a global abstraction (medical pluralism) to localized social practices (an increase in adherence to antiretroviral therapy and a decrease in internalized stigma among traditionalists living with HIV) through the combination of the three action themes.

With the benefit of hindsight, the most plausible explanation for the utility of the Framework relates to feedback within the anthropogenic system. Behavioral change associated with anthropogenic systems is typically associated with adaptive or, on occasion, exaptive responses to exogenous shocks (Johnson, 2010). In this instance, the action themes that were identified by the partnership initially represented weak signals with only the potential to contribute to building resilience to the wicked problem. By rapidly reinforcing the weak signals during the return journey toward a new form of order, the Education and Awareness Department embedded the weak signal—the combination of action themes—as a legitimate concept with "sequence and meaning for those who live, create, or interpret them" among the support groups (Fisher, 1984, p. 2; Figure 8).

Self-organizing emergence:
improved adherence & reduction in
internalized stigma

**Mediating
feedback:**
dialogue relating
to the **action
themes** among/
with Support
Group members

Characteristics: the legitimacy of biomedical
regimens to treat co-infections associated
with makgoma increases which → **an
altered tangible lifeworld experience**

Properties: (disease causation)
differentiation between traditional
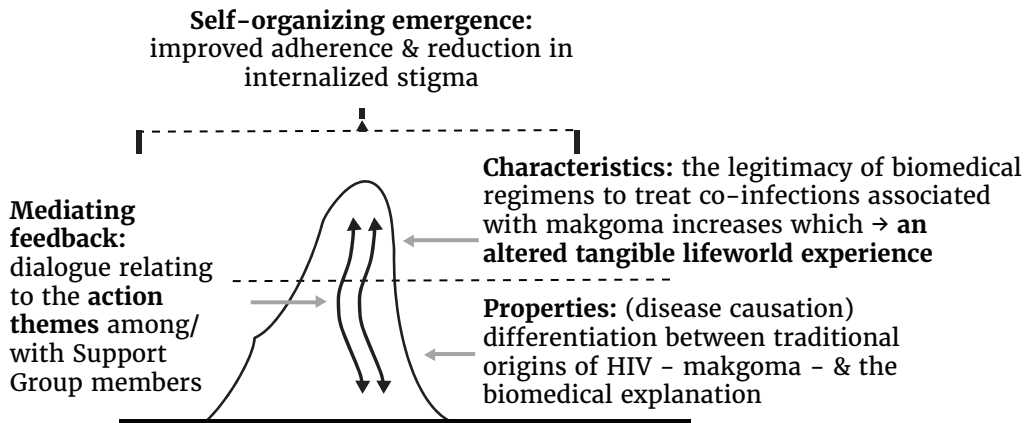origins of HIV - makgoma - & the
biomedical explanation

Figure 8. A Plausible Explanation of the Combination of Factors that Influenced the Change

From the perspective of the system dynamics that have been the focus of this article, this explanation seems plausible. However, far less certain—and, ultimately, far more relevant—is how the support group members received and responded to the change in their understandings about disease causation. This area of ambiguity will be investigated further, because if the intervention is to be shared it is likely to be a critical mediator of the potential utility of the action themes in other sociocultural contexts.

From global to local: The engaged values that facilitated the movement. Most texts relating to community engagement in South Africa include several descriptors concerning the relationship between academe and local communities that are becoming commonplace (horizontal relationships, coproduction of knowledge, mutually beneficial, responsiveness, joint decision-making, and so forth—for a synopsis see Beaulieu, Breton, & Brousselle (2018). In this instance, similar values developed. Table 1 describes the engaged values that emerged through the process of moving from a global abstraction to a locally defined level of granularity and associated shifts in social practices. The values that emerged were not a complementary add-on but a prerequisite for the partnership to reach its full potentials.

The benefits of engaging with nonlinear complexity. The primary benefit from the explicit attempt to incorporate both linear and nonlinear dynamics was the shift in the project leadership's mind-set from stuckness to creative potentials. At the level of

theory, the implication was that as the WWS system was stuck within a deficit situation (a closed system with insufficient ideas), the first steps toward unblocking the stuckness required loosening the constraints on the system so it moved from being a closed system to being an open system in order to generate conditions that might enable new ideas to circulate. This required destabilization of the system toward the edge of chaos and then doing what could be done to manage the transition back to order by focusing on the emergent feedback within the system.

At a more pragmatic level, the attempt to incorporate both the linear and nonlinear dynamics enabled the project leadership to frame the project as an exploratory journey that would have to be negotiated, rather than an activity with a road map guided by scientific evidence. For example, recognizing that the WWS system was undertaking an exploratory journey into the unknown justified the use of sense making as the primary source of influential action clues used to focus the earlier phases of the project. Ensuring that sense making was applied as "making sense of the world so you can act in it" enabled the partnership to move from a global abstraction (the biomedical logic of 90-90-90) to localized social practices by following the logic of the action clues rather than relying on externally imposed best, or good, practices. The incorporation of both linear and nonlinear dynamics also justified the use of different facilitation techniques at appropriate moments during the project. Although, at first glance, the incorporation of both linear and nonlinear dynamics into

Table 1. Values Associated with Engaged Scholarship That Emerged During the Project	
Phase	**Values**
1. Agreeing on an end-condition	Mutual refinement/agreement on the boundaries of the project = horizontal decision-making.
2. The training (primary probe)	The training prompted mutual unlearning, reframing, and eventually reimagining.
3. Sense making	Participation gave way to roles and responsibilities in that the university did not influence decision making during the systemic reorganization phases, which contributed to improved levels of trust within the partnership.
4. Safe to fail	Once again, the focus was on appropriate roles and responsibilities. Learning from the failures contributed to mutual unlearning and co-learning.
5. Client feedback	This was extremely important and reflects WWS's relationships with their client constituencies. Typically, prior relationships between a community partner and their client constituencies are rarely mentioned in engagement literature. In this instance, these relationships and the community network were critical mediators of the outputs during the project.
6. CLA	This says more about roles and responsibilities. The university students were able to use this exercise for academic purposes and the community did not become involved. It represented a mutual benefit for the partnership.
7. The community–university dialogue	The dialogue was open, honest, and focused. This reflects the relationships that had developed in the preceding months = co-decision-making.
8. Coproduction of knowledge products	The commitment to take the initiative further now represents a shared vision of the potentials of the findings and impacts of the engaged research.

the Framework design may seem slight, it did in fact "produce disproportionately major consequences" (to paraphrase Snowden & Boone, 2007, p. 71, once again).

Next Steps for the Partnership

The unintended adverse effects of traditionalism on the trajectory of the HIV and AIDS epidemic in South Africa have been documented since 2003 (Stadler, 2003), but to date there have only been fragmented, short-lived interventions designed to counter them (Leclerc-Madlala et al., 2016). Consequently, the current ambition of the partnership includes coproducing further empirical evidence to determine whether the action themes can be transferred into interventions in other districts and provinces. It is also hoped that knowledge products can be developed that will provide third stream income for the partnership.

Conclusion

The ambition of the project was to develop a framework that would provide the partnership with the agility to work with anthropogenic complexity, rather than try and fit mechanistic models underwritten by reductionism into wicked contexts. In the context of resilience, the taming wicked problems framework was found to be fit for the purpose. The partnership has not

solved all of the problems, but resilience to aspects of the problems has developed. It is believed that the system–level focus—one that was inclusive of both linear and non–linear system dynamics—is a functional addition to engaged research in the context of building resilience to wicked problems that could have utility in other disciplinary spheres.

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Acknowledgments

About the Author

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Berkey, B., Meixner, C., Green, P. M., & Eddins, E. A. (Eds.). (2018). *Reconceptualizing faculty development in service‑learning/ community engagement: Exploring intersections, frameworks, and models of practice*. Sterling, VA: Stylus. 348 pp.

Review by Paul H. Matthews

As a service‑learning and community engagement (S–LCE) professional with a substantive faculty development portfolio, I found reading and reflecting on the chapters of this edited volume worthwhile, providing me both a deeper understanding of some of the breadth and possibilities inherent in this work as well as several new ideas and challenges to the status quo of my faculty development activities. However, although the book's dozen chapters and ancillary introductions individually provide interesting standalone reading, they do not always cohere across the volume. Likewise, the editors' goal of providing description and analysis of approaches to faculty development around S–LCE is more fully accomplished than their simultaneous "invitation for the reader to reconceptualize our work in educational development and S–LCE" (p. xxvii) in transformative ways.

Structurally, the book includes 12 chapters, organized into four parts. It also includes a Foreword by L. Dee Fink, and both a Preface by coeditors Emily Eddins and Patrick Green, and a "narrative introduction" chapter from all four editors. Prior even to the introductory components, a chart of case studies presents the range of institutions and "takeaways" included in three midbook chapters, further priming the reader to assume that description of programming will be the primary focus of the volume. There is also a three‑page listing of the assorted acronyms used by the authors across the chapters, including numerous institution‑specific program names, which might have been better placed at the end, with the author biosketches and index.

In framing their volume, coeditors Becca Berkey, Cara Meixner, Patrick Green, and Emily Eddins note the ubiquity of faculty educational development responsibilities among the roles of most community engagement professionals. Their Introduction not only addresses the editors' thought processes around the genesis and organization of the volume, which they characterize as a collaborative ethnography with self‑reflective chapter contributions, but also includes a shared narrative inquiry and analysis of their own positionality that goes somewhat afield from the stated focus on faculty development. They do eventually circle back to their thesis of S–LCE professionals as hybrid "third‑space professionals" (Whitchurch, 2013) occupying a "borderland" (Anzaldua, 1987) of educational development in order to connect and manage the range of needs, responsibilities, and constituents inherent in the role. They further extend a "narrative invitation to you, the reader, to reflect on your own experiences, values, and identity within the context of your own professional narrative" (p. xxv), encouraging the reader not only to reflect but actually to write reflective responses to the editors' prompts.

Part 1, "The Landscape of Faculty Development and Community Engagement," includes two chapters, beginning with Marshall Welch and Star Plaxton‑Moore's excellent contribution. They effectively argue that the role many community engagement professionals now play goes beyond just "faculty" development. This more comprehensive role entails "*professional educational* development for multiple stakeholders and contexts" (p. 29, emphasis in original), also supporting administrators, community partners, and others. Likewise, this work encompasses community‑engaged teaching, scholarship, documentation, and activities. The authors

position the S-LCE professional at the hub of a conceptual wheel representing these contexts and stakeholders. They further flesh out this model with a competencies-based chart that includes factors to consider, impact measures, and the locus of change for each. Welch and Plaxton-Moore also provide a useful overview of the state of the field, with a literature review on S-LCE faculty development as well as a survey of professionals based on themes from the review, sketching out who takes part in development activities, common structures thereof, and frequent program content and structures. They note that many reported activities appear ungrounded in research on adult learning theory, and point out the contradiction that although S-LCE professionals generally cover assessment in what their programs teach, most programs do not actually implement effective assessment themselves—"both a pedagogical and ethical issue" for the field (p. 54). Finally, the authors advocate for rethinking the role of the S-LCE professional development from "developing and delivering effective 'workshops' limited to a few hours on the 'nuts and bolts' of course construction to using collective action to transform the institution and advance the public purpose of higher education" (p. 55). I found this recommendation, as well as their consideration of competency-based models, promising directions for the prospective "reconceptualizing" of educational development suggested by the book's title, and wish more of the volume had been structured to build on this chapter's lead.

In Chapter 2, Timothy Eatman draws upon his extensive experience with Imagining America to further take up the call for transformation. Reflecting on the changing U.S. higher education landscape, he considers how professional development, especially a "faculty as co-learners" model (p. 68) oriented toward publicly engaged scholarship, might help enhance the agency of faculty of all types to contribute productively to their institutional imperatives as well as to the public good. After providing examples of initiatives and campuses experiencing success in promoting publicly engaged scholarship through faculty development, Eatman concludes by advocating for the "power of story" (p. 75) both in strengthening faculty development models and in transforming and humanizing higher education.

The five chapters of Part 2, "Models of

Faculty Development in Service-Learning/ Community Engagement," constitute the bulk of the volume's case studies of program models. In Chapter 3, Emily Gravett and Andreas Broscheid prepare the reader with a good, if basic, summary of types, resources, outcomes, benefits, and drawbacks of possible short- and long-term faculty development programming. Appropriately, they draw upon models for instructional design, advocating for starting from desired learning objectives of faculty development to determine the most appropriate educational activities and programming. Gravett and Broscheid's typologies could be helpful in developing a self-assessment or checklist for centers and engagement professionals interested in surveying their own faculty development offerings. In fact, I found myself literally checking next to each type of professional development offered by our university (e.g., workshops, faculty learning communities, incentive and recognition programs) and likewise interrogating the possibility of new programming ideas (e.g., faculty/student partnerships, roundtables) based on their helpful overview.

In Chapter 4, institutional case studies from Boise State University, Georgia College & State University (GCSU), and Portland State University profile contexts, implemented program models, outcomes, and lessons learned from each site. Although case studies sometimes can run the risk of being too specific to be useful, here the authors take care to contextualize each setting but also to extrapolate and reflect, and in all three cases the framing of how their professional development offerings changed across time as programs matured was illuminating. I particularly benefited from the reflection on the framing of Boise State's programming as being responsive to differing faculty profiles (fast-track, planners, and deep planners), as well as to phases of their trajectory (entry, practice, advanced, and mentor phases). Portland State's evolution from focusing on individual faculty practitioners to broader group and structural supports (e.g., the engaged department) and GCSU's focus on "practitioner development"—including community partners as well as faculty—were likewise notable takeaways for consideration in my own practice. Chapter 5 takes a deeper dive into faculty learning communities (FLCs), with case examples of FLCs from the University of San Francisco (focused on community-engaged learning), Indiana University Purdue University-

Indianapolis (public scholarship), and Johns Hopkins (an online community of practice). These examples, especially those showing how FLCs can bring about campuswide change (e.g., promotion and tenure materials, curriculum change) led me to reconsider some of the goals and activities of the learning community our office facilitates as well, with an eye toward enhancing its impact and scope. Three more institutional cases (Saint Joseph's University, Marquette University, and University of Central Florida) are featured in Chapter 6 as "mission-driven, low-cost creative practices" (p. 159). This chapter overcame my initial skepticism, providing ideas and insights into value-added program elements such as faculty mentoring (Saint Joseph's), development of common critical reflection prompts and rubrics to support faculty course management (Marquette), and embedding service-learning training into larger university professional development conferences (UCF).

Coeditors Meixner, Berkey, and Green return in Chapter 7, the concluding chapter in Part 2, framing it as a transition between the case studies and the more conceptual chapters in the second half of the volume. They provide a short overview of the history of "educational development," again highlighting this more inclusive term endorsed by the Professional Organizational Development (POD) Network. Finally, they draw similarities between and advocate for more intentional collaboration among educational development professionals and offices (e.g., centers for teaching and learning) supporting pedagogical development more broadly, and the related efforts of community-engagement professionals who work with faculty, staff, students, and community partners in service-learning and engagement-specific activities.

Part 3, "Challenges and Opportunities in Pedagogy and Partnerships," includes three chapters that were, for me, the least successful in contributing directly to the overall volume's focus. In Chapter 8 Chirag Variawa reflects on teaching engineering courses using a service-learning component and suggests that structured frameworks such as universal instructional design are helpful in designing such courses. Including faculty voice in a book about faculty development would be a welcome perspective, but in this case the author does not appear to have taken part in—nor indeed to reference—

any professional development programming. Thus, the chapter reads more like an extended teaching philosophy narrative than a targeted contribution for advancing reader understanding of educational development per se. Chapter 10, "Reciprocity and Partnership," feels similarly out of place. Although the authors (Gabriel Ignacio Barreneche, Micki Meyer, and Scott Gross) provide a solid review/overview of common principles and challenges in community–campus partnerships, fleshed out with examples from their own institutions, there is only limited consideration given to the faculty development aspects of this work. In between, in Chapter 9, Stephanie Stokamer uses Pacific University as the setting to consider how institutional characteristics, priorities, and culture influence community engagement work, and subsequently, faculty development that supports this work. Given that this chapter was also essentially a case study, it might have been more effective earlier in the volume, for instance prior to the other cases in Part 2.

The final two chapters comprise Part 4, "Engendering Change in Educational Development," beginning with Chapter 11's focus on connecting faculty development to scholarship. Sherril Gelmon and Catherine Jordan structure their chapter around findings from a study on community engagement professionals' perspectives on why they undertake publication and other scholarly work. The authors advocate for the value of creating scholarship about S–LCE educational development activities, including in collaboration with faculty, students, community partners, and professionals on other campuses. They note that "by creating, delivering, and studying the impact of faculty development programs, S–LCE professionals have the opportunity to approach their work in a scholarly manner as well as to develop scholarship from their programmatic activities" (pp. 273–274). Their chapter also provides direct advice for those engagement professionals interested in undertaking such work, including an initial list of potential research questions around faculty development, considerations around publication, and advocacy for the importance of such scholarly work in one's role and position expectations.

In the volume's final chapter, Richard Kiely and Kathleen Sexsmith present their "transformative model for faculty development in S–LCE . . . intended to assist fac-

ulty and S-LCE professionals with critical reflection on their own assumptions about what constitutes robust S-LCE theory and practice" (p. 283). The authors argue that faculty development should go beyond a traditional focus on pedagogy and instead intentionally integrate considerations of teaching, community partnerships, knowledge generation (including scholarship of teaching and learning), and institutional culture within a context of relationship building and boundary crossing. They suggest that dissonance and reflection are important for faculty to gain a deep understanding of the field's "threshold concepts" (p. 288) of reciprocity, reflexivity, positionality, and critical reflection, and that tenets of *andragogy* or adult learning theory should likewise be applied in designing educational development activities for faculty. Finally, they suggest that this work should be undertaken with an integrative, metacognitive lens that fosters critical awareness across these four areas, helping faculty surface their assumptions and principles en route to transforming them.

Taken as a whole, then, *Reconceptualizing Faculty Development in Service-Learning/ Community Engagement* has substantial value for those who do the work of educational development in these spaces. It not only helps the reader survey the "lay of the land" through a diversity of cases and examples, but also spurs us to consider what we may be missing, overlooking, or not yet striving for in our professional development efforts. However, although many of the chapter authors call for "transformation" of and through this work, the volume

as a whole does not necessarily equip the reader to do so, instead primarily describing and categorizing faculty development activities. Even within that descriptive space, some elements are lacking, and the focus is clearly on the S-LCE professional's role and experience. For instance, despite recommendations by several authors to contemplate a broader range of stakeholders for educational development, such as graduate students or community partners, very little is posited to consider what such a reconceptualization might entail, much less a chapter authored from this perspective. Likewise, a section or chapter focused on the voices and experiences of faculty members or other recipients/participants in educational development programming would have been a welcome addition, rather than coverage restricted to targeting the experiences of professionals who lead such programs. Perhaps most surprisingly, some chapters seem to lack an orientation toward the topic of educational development entirely, focusing instead on ancillary service-learning topics that do not advance the overall agenda of the volume. Still, as part of the broader understanding of the important roles and responsibilities of community engagement professionals in higher education (e.g., Dostilio, 2017; Post, Ward, Longo, & Saltmarsh, 2016), this book is successful in stimulating deeper thinking around the challenges, possibilities, and practices of educational development as a tool for not only enhanced teaching and learning, but perhaps even for institutional change and "transformation."

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St. John, E. P., Lijana, K. C., & Musoba, G. D. (2017). *Using action inquiry in engaged research: An organizing guide.* Sterling, VA: Stylus. 166 pp.

Review by Jessica V. Barnes-Najor

Engaged research is a broad term used to classify research endeavors that involve researchers and community members partnering to address a community-relevant question (Doberneck, Glass, & Schweitzer, 2010). Given the focus on community relevance, engaged research is generally used as a mechanism to support action to address questions posed by the community. Because many different disciplines and sectors employ engaged research approaches to gather information to support our understanding of what happens in natural settings, the terms used to describe the participatory process are varied and wide-reaching. Some of the terms used to describe such efforts include *community-based participatory research, community-based research, tribal participatory research, systemic action research, participatory action research, action inquiry*, and *participatory rapid appraisal* (Burns, 2007; Fisher & Ball, 2003; Israel, Schulz, Parker, & Becker, 1998; Kemmis & McTaggart, 2005; Wallerstein & Duran, 2017). In St. John, Lijana, and Musoba's *Using Action Inquiry in Engaged Research: An Organizing Guide* (2017), engaged research and action inquiry are used to describe distinct elements of the engaged process in the study of promoting social justice in education.

In the Introduction, St. John, Lijana, and Musoba provide definitions of *action inquiry* and *engaged scholarship* specific to their research field, and in the five subsequent chapters, the authors further define the terms and provide examples of these definitions in use. As stated in the Introduction, "*Action inquiry* provides a means for designing and evaluating intervention in education systems and practices to promote equity" (p. 1). The authors then define *engaged scholarship* as "a strategy that educators, administrators, and students can use in partnerships with researchers to build knowledge and skills to support and inform the change process" (p. 1). It is interesting that the authors define *engaged scholarship* as a strategy used by community (educators, administrators, and students). Others who have explored the features of engaged scholarship have described the processes and strategies as those actively used by community and research partners alike (Fisher & Ball, 2003; Israel, Schulz, Parker, & Becker, 1998; Wallerstein & Duran, 2017). This perspective is likely driven by the tightly bound disciplinary focus of the book. Although the work is focused exclusively on action inquiry and engaged research in promoting equity in the education system, many of the organizing principles and key points are relevant across disciplines. In this review, I will explore the organizing principles and key points in each of the five chapters, describing how they apply to engaged research broadly.

In "Getting Started," Chapter 1, the authors provide a broader definition of *action inquiry*, one in which *action inquiry* is "defined as observations, reflections, and information from research" (p. 5). Using this broader definition, they describe how the initial processes of action inquiry can be used to support efforts to reduce educational inequities. They outline three initial processes important for the approach within the field, which, when broadly defined, are certainly critical in supporting engaged research in any discipline: (1) Develop an actionable theory of change, (2) identify committed partners and form networks, and (3) gather information about community challenges and strengths.

Providing guidance for developing action within *action inquiry* in Chapter 2, "Focus on Barriers to Social Justice," the authors highlight ways to address underlying causes

of identified problems rather than focusing on the symptoms of those problems. The authors describe three necessary practices that can be described in broad, interdisciplinary terms: (1) Identifying barriers that can be addressed by intervention, (2) gathering existing data to inform the development of the intervention, and (3) analyzing data to understand challenges and identify potential interventions. Although these three practices can be used to support the initial planning phases for intervention projects across disciplines or sectors without using engaged processes, the examples in Chapter 2 illustrate how the collaboration within an engaged process allows resource and knowledge sharing.

In "Organizing for Change," Chapter 3, organizing is described as a core process within *action inquiry*. Four tasks critical for organizing change are presented, and examples are provided to illustrate how these tasks can be used to support equity in education. The four tasks presented are actionable steps that are important for engaged intervention research across disciplines. The first of these four tasks, organizing workgroups with a variety of stakeholders, is a critical first step, as these partnerships combine the knowledge of practitioners, policy advocates, and researchers to guide action. Within the alignment of partnerships, workgroups are then able to participate in activities related to the second task, identifying feasible projects that will provide rapid results. Once projects are identified, workgroups are encouraged to engage in the third task, planning and conducting evaluation activities that can guide and support the development of the project. The fourth task identified in this chapter is focused on the use and dissemination of findings. Throughout all four tasks, the partnership is integral to the success of the project. It is through the partnership that the work is conducted. This is reflected clearly in the case examples provided at the end of Chapter 3.

The emphasis on "action" within action inquiry, as described by St. John, Lijana, and Musoba, is a central tenet throughout the book. What is the purpose of research on education if not to help us make positive changes in our educational system? In order to make such changes, action must be taken. Chapter 4 serves as a guide for how research can be used to support taking action for creating change through policy

and practice. At the heart of action research is the notion that there is a team, or workgroup as discussed by the authors, consisting of community members, practitioners, and researchers who partner to codevelop an understanding of the problem, identify and assess potential solutions, and develop an action plan to address it. Research is described as an integral and parallel process that informs the workgroup. After providing case examples of how action research and action inquiry inform change agents in school settings, Chapter 5 presents an integrative summary of these processes through reflections on the authors' own experiences.

What is most intriguing about this book is the way engaged research, action inquiry, and action research are described broadly and then applied very specifically to the field of education and the challenge of equity in the U.S. education system. Consequently, this book might be most useful for those new to employing engaged research practices to address equity in the education system. For those considering reading the book, there are two primary critiques of the work to consider: (1) the challenging readability and flow of the text and (2) the lack of depth of the content. First, it is difficult for the reader to follow the examples provided, as they are described in pieces across different chapters, requiring the reader to move back and forth through the book. This is complicated by the use of a plethora of acronyms that are introduced in early chapters and then returned to in later chapters. Readers will need to look up the acronyms to recall their meaning and understand later portions of the text. Although this critique is focused on the readability of the book, it is related to the second critique regarding the depth of the content. Perhaps in part due to the lack of continuity and flow through the book, the reader never quite gets a sense of the whole or the big picture of what it means to use action inquiry in engaged research. The lists of the principles and ways to engage community in research that are offered across the chapters, without additional supporting text, lack the depth necessary to provide readers with an understanding of the intricacies of the interconnections within an engaged research project. Still, notwithstanding these criticisms, the book provides a helpful starting point for readers new to these concepts.

For those wanting a deeper dive into these concepts, a number of interrelated literature

bases extend St. John, Lijana, and Musoba's book. Recent work has illuminated the vast discrepancies in educational outcomes for students of different socioeconomic backgrounds, racial and ethnic backgrounds, and gender identities (Ahram, Fergus & Noguera, 2011; Skiba et al., 2011). School-based teacher teams working in tandem with researchers to use data to inform racial equity efforts (Coburn & Russell, 2008; Sun, Loeb, & Grissom, 2017; Sun, Penuel, Frank, Gallagher, & Youngs, 2013) serve as an interesting and tangible example of the work discussed by St. John, Lijana, and Musoba. These school-based teams work to change, at a fundamental level, how the education system functions, disrupting disproportionalities in pedagogy and student discipline practices (Lewis & Diamond, 2015; Sullivan, Artiles, & Hernandez-Saca, 2015). The goal of such efforts is to change the education system by addressing individual, collective, and structural policies and practices; such systemic changes are challenging to enact. Extending the model of school-based teams, some researchers are including teams in the process of codesigning systems change efforts (Bang & Vossoughi, 2016; Engestrom, 2011; Ishimaru, Rajendran, Nolan, & Bang, 2018).

These efforts highlight the importance of the principles and practices described in this book, and they also provide a more in-depth exploration regarding what we need to know about conducting engaged research to create systems change broadly. Although focused on supporting equity in educational systems, the principles and practices are similar across disciplines and sectors. Engaged research in disciplines as diverse as medicine, fisheries and wildlife, and psychology has moved toward practices that involve teams of researchers, practitioners, and community members (Collins et al., 2018; Hartley & Robertson, 2006; McGreavy, Randall, Quiring, Hathaway, & Hillyer, 2018; Schmittdiel, Grumbach, & Selby, 2010; Vaughn et al., 2018). The goal of these efforts is to cocreate knowledge that will inform the practices, policies, and regulations structuring the system of focus.

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Review by Roy Y. Chan

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With *Taking It to the Streets: The Role of Scholarship in Advocacy and Advocacy in Scholarship,* higher education scholar Laura W. Perna provides a comprehensive introduction to the central issues affecting higher education policy advocacy between academic researchers and policymakers. The 17 chapters of this edited volume present narratives written by nationally and internationally recognized leaders that explore the professional pathways and methodological approaches used by faculty to advance diversity, equity, and inclusion in higher education. The book arrives at a pivotal time for the field of higher education, during which scholars have been increasingly criticized for their inability to impact real-world policy problems with their policy research scholarship (Gordon da Cruz, 2018; Hillman, Tandberg, & Sponsler, 2015; Post, Ward, Long, & Saltmarsh, 2016; Tandberg, Sponsler, Hanna, & Guilbeau, 2018).

In Chapter 1, Perna frames the introduction of her book as a call for early career scholars to proactively disseminate and communicate research findings that resonate not only with the larger scholarly communities, but also with policy actors, both authorized (e.g., government, organizational, corporate) and unauthorized (e.g., teachers, students, administrators). Specifically, Perna calls upon the faculty to design community-engaged scholarship or publicly engaged scholarship that is applicable to college administrators, state policymakers, and the judicial system. She believes that policy, scholarship, and advocacy are vital mechanisms to effect social change, advance the public good, and strengthen democracy. Perna fleshes out several key themes raised in the succeeding chapters, with three guiding orientations: (1) "focus on policy analysis rather than politics," (2) "identify the best solutions from data and research," and (3) "recognize the roles and responsibilities of our positions" (pp. 3–7). She challenges researchers to remain cognizant and data focused as public intellectuals or intellectual leaders when bridging new connections between higher education research, advocacy, and policy. Perna demonstrates that scholars of higher education policy must work collegially and collectively between and within groups when designing policy-relevant research that advances the public good. The author notes the contemporary challenge of connecting policymakers to higher education scholarship but also offers practical solutions in this volume by linking critical models, methods, and research tools for historically underrepresented and underserved populations.

In Chapter 2, James T. Minor urges academic researchers to think and act as public intellectuals utilizing data-informed results or advocacy efforts to lead to improved policy outcomes for students. Pointing out that the role of scholarship in facilitating outcomes among research, advocacy, and policymaking is "more detached than connected" (p. 17), Minor emphasizes that higher education researchers must do more to strategically place their studies in policy environments in which their publication aligns with advocacy and policymaking activities outside the academy. Rather than pursuing purely individual intellectual interests, he urges higher education scholars to develop advocacy research agendas attuned to the interests of policymakers and other advocates, and thus more likely to influence policy issues. Minor concludes that, presently, "higher education research is a day late and a dollar short" (pp. 21–22). He challenges educator-scholars and practitioners to reevaluate the relevance of their research to ensure alignment with the agendas of policy leaders at the federal, state, and local levels.

In Chapter 3, Mitchell J. Chang extends the

argument that higher education scholars must be scholar–activists in the academy if they seek to make an impact in their area of scholarship. Only the second tenured faculty member of Asian descent at UCLA Graduate School of Education & Information Studies, Chang discusses his efforts to "gaze outwardly" to advance knowledge by (1) developing an experiential ground-level understanding of problems/issues, (2) publishing his work in a wide range of publications, including journals and newspapers, and (3) working with people outside his scholarly community to apply his research (pp. 25–26). Chang uses the example of C. Wright Mills's *Sociological Imagination* (1959) to suggest that educator–scholars develop research agendas guided by a broader vision and purpose to create social change in both the current and future world. Chang concludes that early career scholars must not only be engaged intellectually with a community of scholars but also should push traditional boundaries of academic discourse to advance diversity and inclusivity in higher education.

Donald E. Heller shares common ground with the authors of the previous three chapters. In Chapter 4 he provides an example of how scholars of higher education can influence public policy in order to improve college access and success of historically underserved communities. Through his work as both a scholar and scholar–activist, he highlights how educator–scholars must identify policy-relevant topics that are of interest, not just to oneself, but also to the greater community. Heller explains that having a passion for a specific research topic is perhaps the most important ingredient to achieve academic relevance and success. Drawing on his prior work with the Tennessee Higher Education Commission, he describes the tension between higher education scholarship and policy implementation in the adoption of the Tennessee Lottery Scholarship Program in 2002. Although the Commission did not adopt many of the ideas Heller proposed, policy leaders did consider a few areas of significance when assisting with the policy process of the financial aid scholarship program. Heller concludes that leveraging postsecondary research can best influence policy and practice if university-based scholars are willing to connect their scholarship with outside groups that are accessible to the public.

In Chapter 5, Simon Marginson provides a vivid example of the growing disconnect between policy advocacy and evidence-based policy investigation. From his experience as a policy researcher at three education organizations, he recognizes the ongoing tension between politicians (or public administration) and faculty researchers, and the division of labor between them. Marginson stresses that researchers must work with politicians to pursue empirical investigations that not only challenge our values and beliefs, but also allow their work to inform practice through social activism as intellectual leaders in higher education. He challenges researchers to be self-determining and to design equity-minded policies and procedures as the intellectual activists in the academy.

Christine A. Stanley calls upon the higher education communities to enact their diversity and social justice goals for disadvantaged groups in Chapter 6. Rather than pursuing individual intellectual interests, Stanley challenges researchers of all demographic backgrounds to engage in critical community-engaged scholarship and to be equalizers who advocate and inform change for the public good. From her research on the experiences of faculty of color in predominantly White institutions, Stanley argues that scholars must hold themselves accountable for inclusive excellence. She offers the late Maya Angelou as an example of a public intellectual who sought to critique systems of oppression and advocate for social change as a scholar. Stanley emphasizes that researchers have a moral obligation to use research for engaging with the community.

Based on her 25 years of experience as a faculty member, Ann E. Austin makes the case, in Chapter 7, for higher education scholars to design and disseminate data-informed research that advances the public good. Informed by her various roles and responsibilities at Michigan State University, she encourages educator–scholars to conduct publicly engaged scholarship in their research, translation, and advocacy. The author believes that engaged scholarship should be a scholar's ethical responsibility as a faculty member and that advocacy must be integral to that work.

Gary Rhoades further adds that community-engaged scholarship is necessary to fully engage nonacademic audiences (policymakers, administrators, practitioners) in public scholarship in Chapter 8. He asserts that

an inner dialogue between academics and nonacademics is vital to ensure that public scholarship remains accessible to different audiences, in different contexts, and at different points in time. Because faculty members are pressured to publish in top-tier journals, Rhoades suggests that it is vital for us to rethink our work as scholar–experts to ensure that all people are included in the scholarship. He helpfully explains that "choosing how, why, and to whom we profess" is an important step toward negotiating "between the norms and forms of professional neutrality in . . . scholarly work and public scholarship" (p. 58).

In Chapter 9, Estela Mara Bensimon offers compelling evidence that higher education researchers must create more powerful tools "in order for inequity to be viewed as a *contradiction* to professional and institutional values" (p. 68). The author argues that using theory–based tools, rather than reporting or measuring what is observed, can help scholars and practitioners shift their roles from being knowledge producers to consultants or facilitators of action when discussing topics like stereotypes, micro-aggressions, and racial biases. Bensimon encourages higher education researchers to utilize their knowledge as effective change agents to impact decisions and actions that can best facilitate racial equity in higher education.

The remaining chapters by Cheryl Crazy Bull, Shaun R. Harper, Sara Goldrick–Rab, Danial G. Solorzano, William G. Tierney, Adrianna Kezar, Adam Gamoran, Jeannie Oakes, and Anthony A. Berryman share themes that are similar to those of the first nine chapters, stressing that scholar–activism is risky and messy, but necessary to ensure justice, fairness, equity, and respect in higher education. The authors provide evidence that advocacy and academic rigor are not mutually exclusive but may instead be intertwined or integrated into higher education scholarship. In addition, the chapters express a strong belief that all scholars have an obligation to "ground . . . advocacy in research rather than opinion or anecdote" (Perna, 2016a, p. 331). Although risks are involved in pursuing advocacy work, the authors of this volume send a clear message that democracy is stronger when scholars and higher education practitioners include the voices of diverse people in their studies (e.g., women faculty, nontraditional students, marginalized popula-

tions) and take into account race/ethnicity, gender, age, sexual orientation, religion, generational status, socioeconomic status, family income, marriage status, dependency status, and/or place of residence.

The 17 contributors to this book share a collective vision that we as higher education researchers must have a moral and ethical obligation to use our privileged positions to engage in advocacy as proclamation and persuasion in order to connect research and policy in the era of posttruth and fake news. Perna provides evidence that academic researchers and policy leaders have the capacity to engage in critical community–engaged scholarship or public scholarship that can best combat the persisting inequities and injustices within higher education systems and structures. Although the book provides several great examples of why academic researchers should develop scholarly agendas that promote open pathways for equity-minded policymaking, I believe the book falls short on how academic researchers and practitioners can better connect their scholarship to the policymaking process in higher education.

I believe that the editor could have added more substantive content in the beginning or end of this book to articulate and frame the growing disconnect between policy and practice, and offered key recommendations designed specifically to address the inequities in higher education outcomes among underrepresented college students (e.g., low income, first generation, students of color, ethnic minorities). As evident from a wide body of literature, scholars of higher education policy have struggled to connect and present findings to state and federal policymakers that address the knowledge needs of both parties (Hillman et al., 2015; Perna, 2016a; Tandberg et al., 2018). These struggles consist of challenges in language usage, method and methodology, and differing perspectives, as well as goals and timeframes (Perna, 2016b). As noted by the editor when she served as president of the Association for the Study of Higher Education, "Despite the important role that state policies can play in meeting the nation's needs for increased educational opportunity, social mobility, and economic growth, too little scholarship offers theoretically grounded and empirical examinations of the influence of state actions on these outcomes" (Flores et al., 2016, p. 1). Because policymakers often conceptualize

research and policy in vastly different ways from academic researchers, the volume would have been strengthened by the inclusion of an additional chapter that offered some sort of guidance on how researchers can better advance their public policy agendas to serve as the "intellectual backdrop" for framing and guiding policy alternatives. As academic researchers typically analyze what has occurred after the fact, making their work largely reactive, policy leaders tend to be proactive and seek to advance their political agendas by shaping public policy (Flores et al., 2016). Because of their different approaches, I believe that this book would have been more beneficial if the editor had provided some real-world examples of how and when scholars and advocates can act assertively, based on the data available regarding a specific policy issue, and consistent with the preferences of their constituents.

Nevertheless, this book is timely and relevant for teacher–scholars and policy agents seeking to enhance community–university partnerships between higher education research, advocacy, and policy. The book clearly calls upon higher education researchers and practitioners to develop scholarly agendas that are *problem-directed* rather than *discipline-directed*, with the goal of addressing the knowledge-needs of policymakers and the policymaking community. The reflective essays will give readers some hope that higher education scholarship can be "taken to the streets" and used in policy-relevant ways that are *instrumental*, *conceptual*, and *political* to all constituencies (Flores et al., 2016). As stressed by Perna (2018), "merely conducting it [research] is not sufficient to create policy change. Advancing these goals also requires academic researchers to connect research and policy" (pp. 1–2).

About the Reviewer

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