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Initiating and Extending Institutionalization of Service-Learning

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Abstract

Senior leadership at Ngee Ann Polytechnic in Singapore decided to make service-learning the signature pedagogy of the polytechnic and to infuse at least one service-learning module (i.e., course) in every diploma so that all students would have a service-learning experience. Evidence is provided that, in 3 years, the rapid institutionalization of service-learning met and exceeded all of Furco's (2002) dimensions for institutionalization at the quality building level, his intermediate level of institutionalization. In addition, a bold, visionary institutional strategic plan, the Service-Learning Roadmap, is presented that not only achieved this growth but also extends institutionalization beyond current models. Finally, implications and recommendations are offered to guide institutionalizing service-learning, thereby providing a model for other institutions globally.

Keywords: service-learning, institutionalization, civic engagement, strategic planning

Since the early 1990s, institutions of higher education around the world have been exploring ways to redefine their public missions (Bringle et al., 1999a; Dolgon et al, 2017; Global University Network for Innovation, 2014; McIlrath et al., 2012; McIlrath & MacLabhrainn, 2007; National Task Force on Civic Learning and Democratic Engagement, 2012; Saltmarsh & Hartley, 2011; Xing & Ma, 2010). Within the American context, Boyer (1990, 1994, 1996) challenged higher education to involve students in social issues, extend classrooms into communities, expand conceptions of scholarly work, engage in institutional change, and develop symbiotic relationships with communities. The expansion of this agenda beyond the American context, in turn, challenges institutions of higher education around the world to develop their own models of civic engagement in ways that reflect unique mission statements, institutional traditions and structures, historical and cultural context, and community assets (e.g., Aramburuzabala et al., 2019; Furco & Kent, 2019; Global University Network for Innovation, 2014; International Christian University, 2009; Ma & Chan, 2013; Ma et al., 2018; McIlrath et al., 2012; McIlrath & MacLabhrainn, 2007; Plater, 2017; Regina & Ferrara, 2017; Xing & Ma, 2010). Civic engagement can be defined as

> active collaboration that builds on the resources, skills, expertise, and knowledge of the campus and community to improve the quality of life in communities in a manner that is consistent with the campus mission. This indicates that this work encompasses teaching, research, and service (including patient and client services) in and with the community. (Bringle et al., 2007, pp. 61–62)

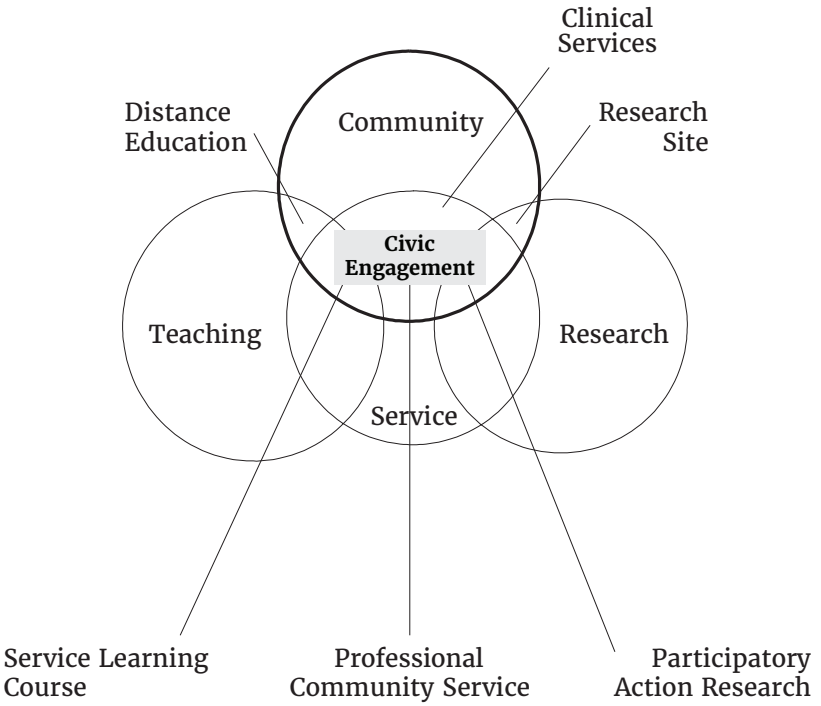
Not all activities in the community by members of the academy fit this definition of civic engagement because civic engagement is viewed as occurring not only in the community but also *with* the community.

A central component of revisioning civic engagement as collaborative activities has been rethinking teaching in ways that involve community members as coeducators

to design and implement service-learning courses that contribute to the development of civic-minded graduates who have lifelong habits of contributing to their communities (Hatcher, 2008; Steinberg et al., 2011). Figure 1 illustrates how the traditional functions of the academy (i.e., teaching, research, service) can occur in the community and that they can overlap. (The intersections of [a] teaching, research, and service and [b] teaching and research can occur both on campus and in the community, although they are not shown in this diagram.) Service-learning is the intersection of teaching and service and has the dual purposes of benefiting the community and fostering learning.

Service-learning, which is acknowledged as being a high-impact pedagogy (Finley, 2011; Kuh, 2008), provides a salient means for revising the curriculum to advance the civic mission of higher education, expand student learning, and enrich partnerships with communities. Meta-analyses support the value added by service-learning to different domains of student learning (Celio et al., 2011; Conway et al., 2009; Novak et al., 2007; Warren, 2012; Yorio & Ye, 2012). Finley (2011) found that service-learning (vs. the other high-impact pedagogies studied) had the greatest impact on learning, general education, personal development, and practical competence. Service-learning is the merger of teaching and learning in ways that expand the learning objectives to include civic learning within the context of the curriculum; it develops ways in which students and instructors can work in and with communities to the benefit of all (Bringle et al., 1999b). Service-learning is defined as

> a course-based, credit-bearing educational experience in which students (a) participate in mutually identified and organized service activities that benefit the community, and (b) reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of



Engagement of Faculty Work in and with the Community

Figure 1. Civic Engagement as Faculty Work in the Community

Note. Adapted from Bringle, Games, & Malloy, 1999b, p. 5.

> personal values and civic responsibility. (Bringle & Clayton, 2012, pp. 114–115; adapted from Bringle & Hatcher, 1996)

As service-learning becomes more prevalent around the world, the challenge is not only offering more and better service-learning courses but also institutionalizing service-learning, which goes beyond changing the curriculum on a course-by-course basis and includes institutional and organizational change to establish widespread campus support and participation. Evidence for achieving institutionalization of service-learning is found when

> it is part of the academic culture of the institution, aligns with the mission, becomes an enduring aspect of the curriculum that is supported by more than a few faculty, improves other forms of pedagogy, leads to other forms of civic scholarship, influences faculty roles and rewards, is part of the experience of most students, and has widespread support, understanding, and involvement of students, faculty, administration, and the community. (Bringle et al., 2001, p. 93)

Based on our familiarity with the literature (e.g., Aramburuzabala et al., 2019; International Christian University, 2009; Ma & Chan, 2013; McIlrath et al., 2012; McIlrath & MacLabhrainn, 2007; Meijs et al., 2019; Regina & Ferrara, 2017; Xing & Ma, 2010) and our work on service-learning in different regions of the world, we concluded that there are only a few examples outside North America of extensive institutionalization of service-learning across a campus through a centralized campus unit.

Bringle and Hatcher (1996) in their Comprehensive Action Plan for Service Learning (CAPSL) delineated four constituencies: institution, faculty, students, and communities. For each of these constituencies, they posited the following steps for advancing institutionalization of service-learning: planning, increasing awareness, identifying prototypes, acquiring resources, initiating activities that result in expansion, providing recognition, monitoring, conducting evaluation, conducting research, and institutionalization. Steps that are taken to advance the institutionalization of service-learning and the rate of progress are influenced by many factors, but institutional type (e.g., 2-, vs. 3-, vs. 4-year vs. graduate institution; religious; private; public comprehensive; research intensive; metropolitan) is an important factor. Zlotkowski (1998) provided case studies of different approaches taken by different types of U.S. institutions. National and regional context also shapes service-learning. The Global University Network for Innovation (2014) presented overviews of work and case studies related to knowledge production, civic engagement, and service-learning for Africa, Arab States, Asia and the Pacific, Europe, Canada and North America, and Latin America and the Caribbean. Welch and Saltmarsh (2013) analyzed reports from 100 U.S. institutions that were recognized for their community engagement and identified key characteristics of community engagement centers and the types of activities in which they engaged to achieve institutionalization.

The purpose of this article is to provide an additional case study for the institutionalization of service-learning at a polytechnic institution in a non-Western setting. This article describes why and how senior leadership at Ngee Ann Polytechnic (NP) in Singapore decided to make service-learning the signature pedagogy of the polytechnic and to infuse at least one service-learning module ("module" is NP's term for course) in every diploma (i.e., degree program) so that every student would have completed a service-learning module during their course of study. The research question was whether or not there was evidence of institutionalization using Furco's (2002) dimensions for institutionalization to support the institutional steps taken by NP and, if so, at what level of institutionalization. In addition, the evidence for institutionalization provided a basis for a bold, visionary institutional strategic plan, the Service-Learning Roadmap, which extends institutionalization beyond current models (e.g., Bringle & Hatcher, 1996, 2000; Furco, 2002; Holland, 2001). Finally, implications and recommendations will be offered to guide institutionalizing service-learning at other institutions globally.

Background of Service-Learning at Ngee Ann Polytechnic

Ngee Ann Polytechnic (NP) has a student population of 14,000+ and offers 36 full-time diploma courses through nine aca-

demic schools and various part-time programs. NP emphasizes a holistic education that goes beyond textbooks and geographical boundaries. Programs are designed to enthuse students with a love for learning and equip them with the skills to thrive in the workforce of the future. Three mission hallmarks that distinguish NP students are (a) a passionate learner, (b) a big-hearted person, and (c) a global smart professional. Thus, the development of service-learning was aligned with NP's mission. The following sections provide a qualitative analysis of strategic steps taken to develop institutionalization of service-learning that are organized using the CAPSL model and quantitative evidence for the research question on assessing the degree of institutionalization.

Planning and Increasing Awareness

Consistent with Bringle and Hatcher's (1996) CAPSL framework that planning is a key early activity, the idea of adopting service-learning was first mooted in January 2015 as a follow-up to the Fourth NP Strategic Plan (2013–2022) to (a) develop a coherent and dynamic methodology that actively engages each and every student; (b) build a community of values-driven learners; and (c) create a supportive learning environment that promotes experiential, interactive, and borderless learning. NP's directors of academic units were in agreement that service-learning would support NP's graduate outcomes to produce students who are passionate learners, big-hearted persons, and global smart professionals. Service-learning, if well implemented, was viewed as developing students to be responsible, civic minded, and active citizens, as well as potential agents of social change in a world of increasing complexity and uncertainty. The decision was made to adopt the strategy that included the goal of every student having an opportunity to experience service-learning in at least one module from the academic year 2016 intake onward. A steering committee was set up in 2015, headed by the senior director/projects and with representatives from various departments and schools to coordinate training and curriculum advisement and to start the preparatory work to introduce the concept and pedagogy of service-learning to instructors. Bringle and Clayton's (2012) definition of service-learning was adopted as NP's institutional definition. Communications and updates to both internal and external stakeholders have been in the form of service-learning collaterals, webpages, social media (such as dedicated Facebook and LinkedIn accounts), enewsletters, and videos created on selected modules to highlight good practices.

Identifying Prototypes, Acquiring Resources, and Initiating Activities That Result in Expansion

In order to support the vision of NP for service-learning, the Office of Service-Learning (OSL) was established in October 2016 to lead and coordinate the activities to drive service-learning in five focused areas: capacity building, curriculum design, collaborations, communications, and developing student champions. The staff of NP's OSL currently consists of a head, three master trainers (overseeing curriculum design and capacity building), one staff member handling communications and collaborations, one staff member managing student volunteers, one staff member managing international service-learning programs, and two administrative support staff. Of these, five of the OSL staff are permanent, three are seconded based on an initial term of 2 years, and one is on a fixed-term contract. In addition, key on-site consultations were provided by Professor Robert G. Bringle of Indiana University–Purdue University Indianapolis and Professor William Oakes, director, EPICS Program and professor of engineering education, Purdue University.

In 2015, 70 staff were trained by an external consultant trainer as the pioneer cohort to implement service-learning as NP's signature pedagogy. Twenty-four service-learning modules were rolled out in 2016 enrolling about 2,000 students, and to date, 48 diplomas have at least one service-learning module and almost 17,000 students have had a service-learning module. During training, instructors were introduced to multiple strategies for reflection (e.g., group discussions, written products, project summaries, oral presentations). In addition, the DEAL model for critical reflection (Ash & Clayton, 2009) was identified as one of the structured reflection models introduced to instructional staff to facilitate reflection in service-learning modules. Efforts are under way to train more staff to use DEAL as one of the models for critical reflection within service-learning modules. OSL is also the centralized body at NP administering international service-learning programs. Every year, close to 600 students embark on about

28 cocurricular international service-learning trips. Most of the trips are led by staff from the respective schools and departments, with OSL leading some of the trips.

Recognition

On March 1, 2016, service-learning as NP's signature pedagogy was officially launched with an inaugural Service-Learning Awards Ceremony to recognize the early adopters of service-learning. Three categories of awards were launched: (a) Service-Learning Student Champions Awards; (b) Service-Learning Student Grants; and (c) Service-Learning Staff Champion Awards. The Service-Learning Award has been incorporated in NP's Staff Excellence Award as one of the award categories for instructional staff.

Monitoring, Conducting Evaluation, and Conducting Research

In 2017, a research study, "Impact of Service-Learning With Structured Reflections on Civic Outcomes, Academic Connections and Personal Growth in Polytechnic Students," was awarded a research grant by the Ministry of Education Tertiary Research Fund to study student outcomes for service-learning in the School of Humanities & Social Sciences. The 2-year research study examined 832 student participants from eight diploma programs. Of these, 351 participated in pretest surveys when they first joined the school before embarking on any service-learning module, and a posttest survey at the end of a service-learning module (Choo et al., 2019). A civic outcome score was measured with nine survey items that asked about interest in social issues, civic involvement, and involving others in communities. Results revealed that there was a significant difference in the students' perceived civic outcomes after taking the service-learning module. The 351 participants completing pretest–posttest surveys demonstrated significantly greater improvement in their civic outcomes scores in the service-learning (experimental) condition than the no-service-learning (control) condition (see Choo et al., 2019 for complete results). Key recommendations from the research included having a well-designed training program for module leaders, lecturers, and other stakeholders; supporting instructional staff in module implementation; increasing touch-points of interaction with the community; and strengthening the understanding of civic learning of both staff and students. The study affirmed that structured reflection was a key factor for enhancing civic outcomes, academic connections, and personal growth. In addition, the findings supported the conclusion that students were becoming more responsible, civic-minded, and active citizens, confirming the standing of service-learning as a high-impact pedagogy with the potential to develop the desired graduate outcomes.

Since 2017, a module experience survey with questions constructed to assess students' service-learning experiences has been conducted every semester over the past four semesters. The survey has six questions about students' enhanced understanding of module content, relevance of academic knowledge in the community context, reciprocity of engagement with the community, civic aspirations, insights gained from reflections, and student voice. The overall average of the six quantitative questions demonstrated an upward trend across the four semesters on a five-point scale (scores of 3.91, 4.07, 4.15, and 4.18, respectively), suggesting that the quality of service-learning outcomes was improving. Though it does not tell the whole story (Choo et al., 2019), the survey results supported the quality of the early service-learning modules and identified modules that needed more attention. This enabled the OSL trainers to work further with the respective module leaders on module improvement and staff training.

Evidence of Institutionalization

Although the journey of implementing service-learning as NP's signature pedagogy has been meaningful and fulfilling, the sustainability of the vision and activities depends on how well service-learning can be institutionalized so that the level of acceptance and commitment toward the vision is a shared common goal, rather than being entirely dependent on executive management and a small group of advocates. The process of institutionalizing service-learning is reflected in the buy-in and commitment from many different stakeholders, including senior management, instructors, administrative staff, students, and community and industry partners (Bringle & Hatcher, 1996; Welch & Saltmarsh, 2013).

Survey

Furco's (2002) Self-Assessment Rubric for the Institutionalization of Service-Learning

in Higher Education identifies the following components for institutionalizing service-learning: philosophy and mission of service-learning (definition of service-learning, strategic planning, alignment with institutional mission, alignment with educational reform efforts), faculty support for and involvement in service-learning (faculty knowledge and awareness, faculty involvement and support, faculty leadership, faculty incentives and rewards), student support for and involvement in service-learning (student awareness, student opportunities, student leadership, student incentives and rewards), community participation and partnerships (community partner awareness, mutual understanding, community partner voice and leadership), and institutional support for service-learning (coordinating entity, policy-making entity, staffing, funding, administrative support, departmental support, and evaluation and assessment). Furco's rubric identifies three stages of achievement: critical mass building, quality building, and sustained institutionalization.

A survey was constructed that presented respondents with each component of Furco's framework and asked them to indicate where they thought NP was on the rubric in terms of the development of service-learning on campus. The survey was distributed to NP administrators, school and departmental management, and instructional and support instructional staff. The response format included a slight modification of Furco's rubric: it gave respondents the opportunity to choose an intermediate response between critical mass and quality building, and between quality building and sustained institutionalization. The survey also asked respondents for their familiarity with service-learning using the following choices: (1) *No familiarity with Service-Learning*; (2) *Heard of Service-Learning but don't know much about it;* (3) *Some knowledge of Service-Learning;* (4) *Good knowledge about Service-Learning;* (5) *Provided consult and/or taught Service-Learning modules, have extensive knowledge of the theory and practice of Service-Learning.*

Results

Responses to the survey were obtained from 106 participants: six top management; 22 directors and heads; 26 deputy directors and assistant directors; 43 service-learning course/module leaders and instructional staff; and nine support staff. Single-sample *t*-tests were used to answer the question "Was rated institutionalization significantly greater than 3.0 (i.e., quality building level)?" The survey results demonstrated that, in 3 years, the rapid institutionalization of service-learning significantly exceeded the quality building level (3.0 on the 5.0 scale) for all five of Furco's components of institutionalization:

- philosophy and mission of service-learning, mean = 3.99, $t(105) = 13.03$, $p < .01$;
- faculty support for and involvement in service-learning, mean = 3.42, $t(105) = 5.23$, $p < .01$;
- student support for and involvement in service-learning, mean = 3.37, $t(105) = 4.05$, $p < .01$;
- community participation and partnerships, mean = 3.20, $t(105) = 2.18$, $p < .05$; and
- institutional support for service-learning, mean = 3.84, $t(105) = 9.64$, $p < .01$.

In addition, the correlation between familiarity and the total institutionalization score (i.e., summed across Furco's five dimensions) was nonsignificant, $r(104) = .19$, $p > .05$.

Discussion

Although Furco's rubric has been used as a means for engaging a campus in discussions and strategic planning for developing enhanced institutionalization, this research used it as a measure of institutionalization, much like Bringle and Hatcher (2000) did when they used their CAPSL model to assess differences in institutional support for service-learning. As Furco and Miller (2009) noted,

> An assessment process provides the means to conduct a status check of the campus's overall current level of community engagement institutionalization by offering a structure and framework for collecting and reviewing information so that informed decisions can be made about an institution's engagement strengths and weaknesses. (p. 48)

To our knowledge, this is the first use of

Furco's rubric to measure institutionalization in a setting outside North America (Furco, 2007, used a related rubric in the United States). In addition, this research on NP's institutionalization is unique in the type of evidence of institutionalization of service-learning that was collected for an institution outside North America. Virtually all other case studies of institutionalization of service-learning have been anecdotal, with little empirical evidence of institutionalization (e.g., Ma et al., 2018; Meijs et al., 2019; Xing & Ma, 2010).

Furco (2007) concluded that no progress was seen on 43 campuses that had been working toward institutionalization of service-learning for 3 years. In addition, Furco and Miller (2009) concluded that institutionalizing community engagement would take 15 years. In contrast, NP demonstrated significant advancement in 3 years of work to institutionalize service-learning. Although the data collected on institutionalization are limited in answering any questions about why NP's institutionalization was so rapid, the steps NP took are well aligned with the CAPSL planning framework. Ti et al. (in press) suggested that the following early steps were important: centralized strategic planning, endorsing service-learning as a signature pedagogy, establishing clear campus goals, and endorsement by upper and middle management. In addition, they and others (Bennett et al., 2016; Bringle & Hatcher, 1996, 2000; Furco, 2002; Holland & Furco, 2004; Vogel et al., 2010; Welch & Saltmarsh, 2013) have stressed the importance of internal funds to support a centralized office, staffing it with capable persons with service-learning experience, and engaging in capacity-building activities. Ti et al. (in press) described additional steps taken with students and community partners to support the institutionalization of service-learning. This evidence provides other institutions with a set of tools that can guide activities and that can be adapted through strategic planning to promote institutionalization.

The Service-Learning Roadmap

As part of the strategic planning process, in April 2018, the Service-Learning Roadmap was envisioned to help staff and students continue the journey to develop the three hallmark outcomes of the NP student—a passionate learner, a big-hearted person, and a global smart professional. The Service-Learning Roadmap consists of three phases (see Figure 2).

Phase 1: Build Foundations With Service-Learning as Signature Pedagogy

As previously detailed, NP adopted Bringle and Hatcher's (1996) CAPSL model and Bringle and Clayton's (2012) definition of service-learning to develop the institutional capacity to reach the goal of one service-learning module in every diploma. NP is one of the few institutions of higher learning outside North America that has made service-learning mandatory or, as we prefer to characterize it, an *integral* part of the entire campus's curriculum and all students' educational experience (National Task Force on Civic Learning and Democratic Engagement, 2012; Ti et al., 2020). The development of service-learning was heavily dependent on establishing a central office that oversaw many of the functions identified by Bringle and Hatcher (1996) and Welch and Saltmarsh (2013) as fundamental to institutionalizing community engagement and service-learning.

Not only was the goal of curricular integration of service-learning into each diploma program's curriculum achieved, but also the evidence from the survey demonstrated that the campus community at all levels endorsed the significance of service-learning as an integral part of the curriculum. In addition, the mean levels of NP's institutionalization for Furco's five components had the same rank order as the components that Bringle and Hatcher (2000) found for CAPSL based on 179 American campuses: highest institutionalization for institution > faculty > students > lowest for community. This is consistent with the advice that strategic planning and institutional infrastructure are important first steps in institutionalizing service-learning, and that engaging in activities directed at instructors is a critical early step for developing service-learning and support (Bringle & Hatcher, 1996). Although each campus is different and context matters, we think these results provide a basis for guiding the institutionalization of service-learning on other campuses through strategic planning at the campus level, the commitment of resources to curriculum development, and prioritizing activities.

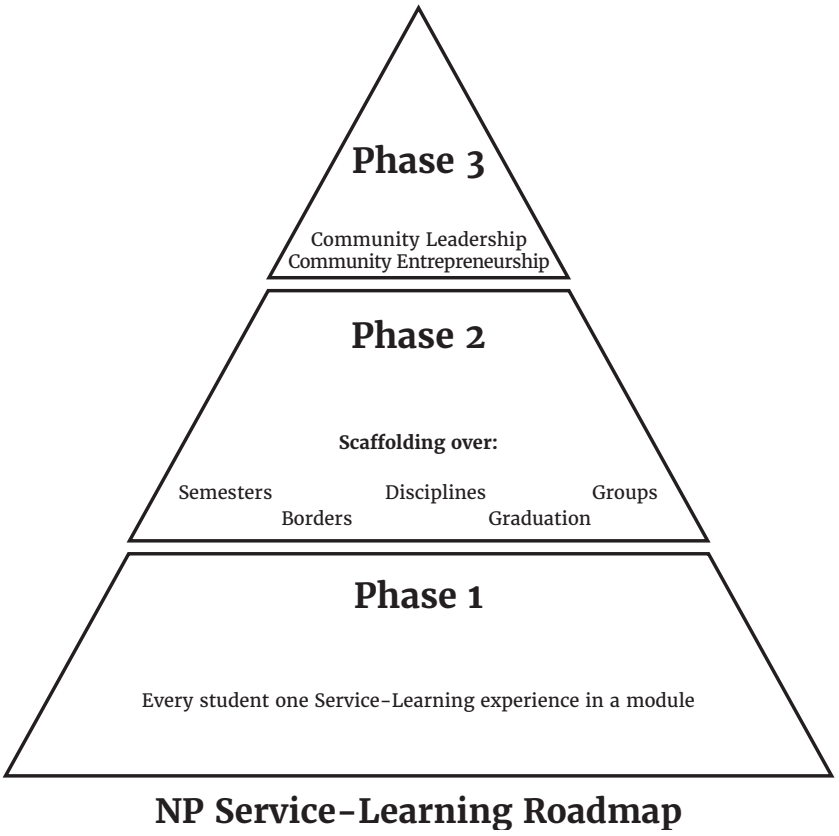


Figure 2. Ngee Ann Polytechnic's Service-Learning Roadmap

Phase 2: Scaffolding Service-Learning to Deepen and Broaden Service-Learning

Phase 1 is typically what institutions aspire to when they take steps to institutionalize service-learning. However, the Service-Learning Roadmap presents a vision beyond this level of achievement and extends previous frameworks of institutionalization (e.g., Bringle & Hatcher, 1996, 2000; Furco, 2002; Holland, 2001; Holland & Furco, 2004). Phase 2, currently being implemented, builds upon the goals of institutionalization from Phase 1 and extends institutionalization (e.g., breadth, depth, quality) to develop students' civic consciousness and engagement, curricular and cocurricular development, and community partnerships. Phase 2 identifies scaffolding of service-learning experiences as a key aspect of extended development of institutionalization. Here, *scaffolding* refers to the intentional sequencing of activities in ways that build upon and extend previous experiences. Phase 2 identifies five areas in which service-learning can be scaffolded.

1. Scaffold across semesters—students take more than one service-learning module across different semesters with enhanced academic and civic learning objectives in subsequent modules, including final year, capstone, and internship modules that address social issues.
2. Scaffold across disciplines—students from different disciplines come together to work on the same complex service-learning projects.
3. Scaffold across groups—community projects are longitudinally built upon from group to group within and across semesters.
4. Scaffold across the campus—connect service-learning projects to cocurricular activities and other campus initiatives.
5. Scaffold across borders—international service-learning modules are developed to complement domestic service-learning.

6. Scaffold beyond graduation—service-learning projects are developed in adult education and for alumni.

Phase 2 is designed to transcend the limitations of having students exposed to a single, compartmentalized service-learning module. Scaffolding aligns with the National Task Force on Civic Learning and Democratic Engagement's (2012) recommendation that "civic learning is infused across students' educational experiences over time in a developmental arc" (p. 43). The ultimate goal of scaffolding service-learning is to ingrain service-learning further into the culture of the institution and into community partnerships. Developing additional service-learning modules will expand the participation of instructional staff doing service-learning, further establish service-learning as an expected and regular part of the academic culture, and enhance the community understanding of civic engagement and service-learning. In addition, scaffolding sequential service-learning modules has the added advantage of building on students' civic attitudes and motives from previous experiences, allowing extension of course design parameters (e.g., reflection, assignments, readings) that build upon previous experiences, and permitting more complex learning objectives being intentionally designed into service-learning modules.

Scaffolding also has benefits for community partners. Communities care about outcomes that benefit the quality of life of community constituencies (Sandy & Holland, 2006). To implement at a community site multidisciplinary service-learning projects and service-learning activities that have continuity across semesters has the potential to enhance community support, build enduring partnerships, and increase community benefits.

Phase 3: Scale Impact More Broadly

Phase 3 is NP's aspiration to build community leadership and community entrepreneurship. As nations race to incorporate technology and intelligent decision-making into their cities, it becomes even more important to ensure that benefits of technology and globalization are shared across different socioeconomic classes and that the soul of a city–nation remains caring and inclusive. Though in unchartered territory, initial steps for Phase 3 have been taken toward this end. First, at the forum Our Social Future—Innovating for Tomorrow in October 2018, eight speakers from industry shared thoughts about innovative ideas and solutions in the social space. The conference was attended by about 400 delegates from the educational, social, and governmental sectors.

Second, in 2019, NP launched the credit-bearing Civic Internship Program that supplements the existing credit-bearing Internship Programme and that enrolls an estimated 15% of third-year students (more than 600) and works with close to 50 community organizations. The initial group of participating organizations have come from the fields of (a) healthcare, (b) business and economics, (c) engineering and technology, and (d) social and environment. This program involves placements with an organization that provide students with opportunities not only to practice their professional skills but also to work on an assignment or project that promotes the public good. Community leaders and role models are invited to advise, inspire, and challenge the Civic Interns to greater civic engagement. This approach of integrating service-learning with internships into hybrid pedagogies (Bringle, 2017) reflects an additional example of more deeply embedding the civic outcomes of service-learning in the academic curriculum and campus culture.

Third, separately, organizations from institutions of higher learning and the social sector have approached NP to train their staff in the fundamentals of service-learning, and there are opportunities both locally and overseas to provide leadership through capacity building in this area. Phase 3 is an aspiration, and NP is developing the best strategies to move this phase forward.

Recommendations and Implications

Institutional Development

The pace of implementation of service-learning as NP's signature pedagogy over the 3 years was brisk. The mandate of every student having at least one service-learning module meant that staff had to be quickly trained, community partnerships had to be forged, definitions and jargon had to be articulated and clarified, materials and resources had to be acquired and developed, administrative systems and policies had to be put in place, and, most important,

buy-in from stakeholders at all levels had to be developed. The sustainability of service-learning must transcend simply developing more service-learning modules and include steps enabling the rationale and the philosophy of service-learning to become part of the institution's academic culture for civic engagement more broadly. All of this is possible because the campus invested in an OSL that was staffed with personnel familiar with teaching service-learning modules and capable of developing instructors' capacity to design and implement such modules. Therefore, based on this experience and past research (Bennett et al., 2016; Bringle & Hatcher, 1996, 2000; Furco, 2002; Holland & Furco, 2004; Vogel et al., 2010; Welch & Saltmarsh, 2013), we recommend that a key step in moving institutionalization along is forming a campus entity that can clearly assume primary responsibility for improving the quantity and quality of service-learning courses. Furthermore, based on the results of achieving Phase 1, we recommend that other institutions consider CAPSL or a similar framework for organizing strategic planning of activities to develop institutionalization. Strategic planning and activities must work at multiple levels of the institution: executive leadership, deans/program directors, instructors, and students (Welch & Saltmarsh, 2013). Past research evaluating these factors has been limited mostly to American institutions, and future research needs to be conducted to see if these findings generalize to other contexts and institutional types around the world.

In addition to Holland (1997) and Welch and Saltmarsh (2013) finding that organizational structure had the most significant impact on the level of institutional commitment, Bringle and Hatcher (2000) and Welch and Saltmarsh (2013) found that locating OSL infrastructure in academic affairs is an advantage to institutionalization. Consistent with this research and NP's experiences, we recommend that the infrastructure to support service-learning be located in academic affairs.

The evidence for the degree of stakeholder buy-in is reflected in the perceived institutionalization across Furco's five components of institutionalization. Furthermore, the lack of a correlation between ratings and familiarity indicates that this buy-in is pervasive and not restricted to those most familiar with NP's service-learning. Although the results of the survey revealed that the perceived level of institutionalization of service-learning exceeded the quality building level for all five components, there must be further deepening and broadening, especially in the areas of community participation and partnerships, and student support and involvement in service-learning (Ti et al., 2020). Much of this can be strengthened through activities in Phase 2. This suggests that institutions interested in promoting institutionalization of service-learning should establish mechanisms for monitoring the current status of institutionalization and the areas that could receive subsequent attention to broaden and deepen institutionalization.

Faculty Support for and Involvement in Service-Learning

Sandmann and Plater (2009) identified the following four areas for which executive leadership is important: using mission to situate civic engagement, developing goals, articulating strategic plans for achieving those goals, and communicating their commitment. NP's journey to date reflects the importance of each of these, including relating service-learning to each of the three components of NP's academic mission for students (i.e., a passionate learner, a big-hearted person, and a global smart professional), strategic planning across time that includes institutionalizing service-learning, implementing infrastructure such as the OSL, carefully selecting staff to lead the initiative, and advocating the rationale for service-learning in multiple venues. We conclude that institutionalization of service-learning builds upon the role of executive leadership, but that the endorsement and support of executive leadership is necessary but not sufficient for advancing institutionalization (Ti et al., 2020; Welch & Saltmarsh, 2013). We therefore recommend that other institutions develop the support and commitment of executive leadership to civic engagement and service-learning, while, at the same time, working to develop support throughout all levels of the institution. Too little research attention has been devoted to the roles that executive leadership and middle leadership (e.g., deans, directors, chairs) play in the institutionalization of service-learning, and these roles should be investigated in future research on institutionalizing service-learning.

The results also illustrate the importance of initially working with instructors to modify

the curriculum. As Wood (1990) pointed out, "Educational programs . . . need champions. Those champions must be found in the faculty if an innovation is to be profound and long-lasting. Administrators should not be shy about seeking out faculty champions" (p. 53). After establishing OSL, training instructors to understand, design, and implement service-learning in academic modules has been the key focus. More than 400 academic staff have been trained, and this is an ongoing effort. Developing mechanisms (e.g., workshops, one-on-one consultation, departmental meetings, expert consultants) to expand service-learning beyond the few early adopters is an important step. The next phase in capacity building will be to develop service-learning trainers within the respective schools to decentralize expertise and embed it in the context of the academic disciplines in a school. Therefore, we recommend that institutions look for ways to enhance the capacity of schools and departments to support service-learning, contribute to expansion of service-learning, and commit to a more sustained level of institutionalization of service-learning. The challenges of initiating and expanding service-learning provide institutions with opportunities to study the motives and obstacles for instructors who practice service-learning, instructors who try it and stop, and instructors who are not attracted to implementing service-learning (Banerjee & Hausafus, 2007).

Curricular Development

The presence of service-learning modules in all diplomas was a significant aspiration and achievement, in contrast to most approaches to service-learning development that are reactive to faculty interest and scattered unevenly across the curriculum (Bringle & Hatcher, 2009). Therefore, we recommend that other institutions engage in activities that improve the quality of all aspects of service-learning courses, enroll other instructors beyond the initial cohort, clarify civic learning outcomes for students, improve reflection assignments, and commit additional attention to community partners. Bringle and Hatcher (2009) also acknowledged the importance of linking service-learning to other campus curricular initiatives (mission, strategic planning, academic success, student retention) and cocurricular civic programs on campus. We recommend that institutions identify ways in which service-learning can enhance other campus initiatives, rather than compete with them. Developing hybrid pedagogies that integrate service-learning with other high-impact pedagogies (Bringle, 2017), such as civic internships and international service-learning modules, and thinking about how service-learning and community engagement can be continued with alumni and integrated into continuing education initiatives are examples of building upon the institutional goals for service-learning beyond its initial implementation.

The monitoring, assessment, and research supported by NP's Ministry of Education grant provided a significant early step that made it possible to ascertain the students' perceptions of the quality of the service-learning modules (Choo et al., 2019). CAPSL describes developing the capacity for monitoring and evaluating the quality of service-learning as an important component of institutionalization because doing so can identify areas that warrant future improvement and provide a basis for establishing the efficacy of service-learning to internal and external audiences. Subsequent attention to direct evidence of student learning and evidence of community outcomes will strengthen the case.

Community Participation and Partnerships

The rapid implementation over the 3 years meant that many community partnerships and projects had to be very quickly negotiated, and most of them would have started at a basic level. Although Choo et al. (2019) found strong support from a survey of some community partners, it was not unexpected that campus respondents to the survey perceived community participation and partnership as an area that could be further developed (Bringle & Hatcher, 2000; Welch & Saltmarsh, 2013). Faced with challenges such as large cohorts (some diploma cohorts have 500 to 600 students in service-learning modules), relevance of a module's academic content in addressing community issues, completion of projects within the academic semester, and coordinating schedules of both students and identified community members, it was considered a good start. However, good institutionalization of service-learning warrants the development and refinement of partnerships for maintaining community participation and support as well as student and instructor fulfillment (Sandy & Holland,

2006). The OSL is currently developing and preparing to implement a new survey for all service-learning community partners. We recommend to other institutions that they advocate for community partners to be coeducators before, during, and after a service-learning course is designed and implemented. In addition, it is important to develop mechanisms for monitoring and evaluating community partnerships. This type of information will provide a basis for studying the quality of relationships that have formed, the transitions that occur in these relationships over time, and community perspectives on service-learning activities (Bringle et al., 2009).

In Phase 2, the strategies to scaffold students' service-learning engagement and experiences will allow for deepening and broadening community participation and partnerships. The strategy to scaffold projects across groups of students and across semesters will mean that different groups of students from different cohorts and disciplines can work with community partners on larger and more complex projects that address a similar theme. We therefore recommend intentional dialogue and consultation with community partners to cocreate projects and activities to increase the involvement of the community partners in terms of awareness, community voice, mutual understanding, and assessment. Doing so should result in greater impact for the service activities rendered to the community and the learning outcomes of the students. For example, in some NP training to date, community partners have codesigned staff training programs with OSL staff (Ti et al., 2020). Such collaboration will contribute to, enhance, and confirm what research shows community partners value most about their association with service-learning: being coeducators of students (Sandy & Holland, 2006).

Student Support and Involvement in Service-learning

This category of Furco's (2002) framework includes student awareness, student opportunities, student leadership, and student incentives and rewards. One reason for the lower score on this component (vs. institutional development) on the campus survey could be the limited channels of communication to all students in the initial years. In order to reach more students with greater frequency, additional steps have been taken. The NP website now has a service-learning page that presents videos on service-learning modules and student testimonies. In addition, service-learning is covered by the deputy principal's presentation to prospective students and parents during NP's annual open house. Service-learning is included in NP's *Ultimate Course Guide*, and incoming students are also informed about service-learning in NP's *Student Life Booklet*. In addition, all students enrolled in a service-learning module watch a video and a slide presentation that cover what service-learning is at NP and what students can do to gain more from their community-based experiences. A student e-newsletter that highlights service-learning is published two to three times a year and distributed to all students. These steps reflect the importance of mechanisms to establish service-learning as part of the student culture on a campus through effective communications. Other institutions will need to creatively develop their own steps for ensuring that students understand that service-learning is a pervasive and expected part of the curriculum (National Task Force on Civic Learning and Democratic Engagement, 2012).

Phase 2 scaffolding of service-learning will offer students more opportunities to engage in service-learning projects of their choice, which can build upon the Phase 1 module projects. The Phase 2 projects can provide stronger ideation models, more sustainable partnerships, deeper solutioning considerations, broader scope, and more extensive reflection on their civic engagement. The various options of scaffolding (i.e., students taking a second module with service-learning, working on final year or capstone service-learning projects that address social issues, participating in a civic internship with organizations that help to promote public good, embarking on international service-learning programs, initiating cocurricular projects that address social issues) give students the opportunity to have a stronger voice and to develop their leadership potential. Thus, institutions can explore methods of expanding initial steps at institutionalization in educationally meaningful ways for students.

The effects of implementing institutionally pervasive service-learning modules for every student raise questions about students' attitudes and motives toward these requirements, as well as the nature of changes in attitude toward service-learning

and toward their short-term and long-term civic engagement that take place after one or more service-learning modules (Moely & Ilustre, 2018). Ascertaining the optimal way to design programs for students that influence lifelong habits of civic involvement is an important issue that warrants additional research.

Conclusion

After more than five decades of practice in the United States and a somewhat shorter history worldwide, service-learning has advanced civic engagement as an innovative way in which institutions of higher education can take steps to improve collaboration with community partners, contribute to the public good, enhance the curriculum and learning, and enhance students' civic learning as well as academic learning and personal growth. Institutionalizing service-learning is thus best viewed not as an end in itself but rather as a means for broader purposes.

The early institutional steps taken by NP are those activities that have been identified by research as key to successful institutionalization: alignment with mission, strategic planning, executive leadership, and infrastructure (e.g., Bringle & Hatcher, 1996, 2000; Morton & Troppe, 1996; Welch & Saltmarsh, 2013). Multiple forms of evidence support the conclusion that significant gains have been made for institutionalizing service-learning at NP. In addition to the evidence offered here, an external review by the Talloires Network awarded NP first place in 2020 with the MacJannet Prize, which recognizes exceptional student community engagement. What is also noteworthy is not only the rapid institutional advancement of service-learning but the Service-Learning Roadmap that extends the nature of institutionalizing service-learning in unique ways. We expect that the general steps taken at NP that have focused on the institution, instructors, students, and community partners will generalize to other institutions worldwide that aspire to go beyond individual service-learning practitioners implementing service-learning courses and consider how service-learning can be institutionalized, but this warrants empirical validation. In any case, other institutions can be innovative in developing their own strategies for furthering service-learning, civic engagement, and the public purposes of their institutions.

Nonetheless, it must be acknowledged that the steps taken to date are early steps that warrant subsequent attention to all activities focused on integrating service-learning into NP's educational culture. Furthermore, as Bringle and Hatcher (1996) pointed out, the steps outlined in CAPSL and those already taken might be sequentially prioritized, but they are never completed: Activities need to circle back on all of these areas in a nonsequential manner, as needed (e.g., planning is an iterative and recurring process). A strong test of institutionalization is the capacity for the initiative to survive changes in leadership, staff, instructors, and community partners. Therefore, much subsequent work will need to be devoted to broadening and deepening service-learning among all constituencies (i.e., instructors, institution, students, community partners) and the relationships between and among them (Bringle & Clayton, 2013). This illustrates that institutionalization is not a final goal or end state, but a process of quality improvement.

As Holland and Furco (2004) noted, service-learning is best viewed as a facilitator of other campus goals rather than a stand-alone program. Therefore, part of the focus by other institutions should not only be on more and better service-learning, but also more broadly across campus (e.g., student affairs, alumni, quality assurance, hybrid pedagogies integrating service-learning with other teaching strategies). This remains the challenge for NP and for other higher education institutions around the world aspiring to institutionalize service-learning to educate students to contribute to the public good across their careers and lives.

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References

Aramburuzabala, P., McIlrath, L., & Opazo, H. (2019). *Embedding service learning in European higher education*. Routledge.

Ash, S. L., & Clayton, P. H. (2009). Generating, deepening, and documenting learning: The power of critical reflection for applied learning. *Journal of Applied Learning in Higher Education, 1*, 25–48.

Banerjee, M., & Hausafus, C. O. (2007). Faculty use of service-learning: Perceptions, motivations, and impediments for the human sciences. *Michigan Journal of Community Service Learning, 14*(1), 32–45. http://hdl.handle.net/2027/spo.3239521.0014.103

Bennett, D., Sunderland, N., Bartleet, B., & Power, A. (2016). Implementing and sustaining higher education service-learning initiatives: Revisiting Young et al.'s organizational tactics. *Journal of Experiential Education, 39*(2), 145–163. https://doi.org/10.1177/1053825916629987

Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate.* Carnegie Foundation for the Advancement of Teaching.

Boyer, E. L. (1994, March 9). Creating the new American college. *Chronicle of Higher Education*, p. A48.

Boyer, E. L. (1996). The scholarship of engagement. *Journal of Public Service and Outreach, 1*(1), 11–20. https://openjournals.libs.uga.edu/jheoe/article/view/666

Bringle, R. G. (2017). Hybrid high-impact pedagogies: Integrating service-learning with three other high-impact pedagogies. *Michigan Journal of Community Service Learning, 24*(1), 49–63. https://doi.org/10.3998/mjcsloa.3239521.0024.105

Bringle, R. G., & Clayton, P. H. (2012). Civic education through service-learning: What, how, and why? In L. McIlrath, A. Lyons, & R. Munck (Eds.), *Higher education and civic engagement: Comparative perspectives* (pp. 101–124). Palgrave.

Bringle, R. G., & Clayton, P. H. (2013). Conceptual frameworks for partnerships in service learning. In P. H. Clayton, R. G. Bringle, & J. A. Hatcher (Eds.), *Research on service learning: Conceptual frameworks and assessment: Vol. 2B. Communities, institutions, and partnerships* (pp. 539–571). Stylus.

Bringle, R. G., Clayton, P. H., & Price, M. F. (2009). Partnerships in service learning and civic engagement. Partnerships: *A Journal of Service Learning & Civic Engagement, 1*(1), 1–20.

Bringle, R. G., Games, R., & Malloy, E. A. (Eds.). (1999a). *Colleges and universities as citizens.* Allyn & Bacon.

Bringle, R. G., Games, R., & Malloy, E. A. (1999b). Colleges and universities as citizens: Issues and perspectives. In R. Bringle, R. Games, & E. Malloy (Eds.), *Colleges and universities as citizens* (pp. 1–16). Allyn & Bacon.

Bringle, R. G., & Hatcher, J. A. (1996). Implementing service learning in higher education. *The Journal of Higher Education, 67*(2), 221–239. https://doi.org/10.1080/00221546.1996.11780257

Bringle, R. G., & Hatcher, J. A. (2000). Institutionalization of service learning in higher education. *The Journal of Higher Education, 71*(3), 273–290. https://doi.org/10.1080/00221546.2000.11780823

Bringle, R. G., & Hatcher, J. A. (2009). Innovative practices in service learning and curricular engagement. *New Directions in Community Engagement, 2009*(147), 37–46. https://doi.org/10.1002/he.356

Bringle, R. G., Hatcher, J. A., Hamilton, S., & Young, P. (2001). Planning and assessing to improve campus–community engagement. *Metropolitan Universities, 12*(3), 89–99. https://journals.iupui.edu/index.php/muj/article/view/19909

Bringle, R. G., Hatcher, J. A., & Holland, B. (2007). Conceptualizing civic engagement: Orchestrating change at a metropolitan university. *Metropolitan Universities, 18*(3), 57–74. https://journals.iupui.edu/index.php/muj/article/view/20316

Celio, C. I., Durlak, J., & Dymnicki, A. (2011). A meta-analysis of the impact of service-learning on students. *Journal of Experiential Education, 34*(2), 164–181. https://doi.org/10.1177/105382591103400205

Choo, J., Kong, T. Y., Ong, F., Shiuan, T. S., Nair, S., Ong, J., & Chan, A. (2019). What works in service-learning? Achieving civic outcomes, academic connection, career preparation and personal growth in students at Ngee Ann Polytechnic. *Michigan Journal of Community Service Learning, 25*(2), 95–132. https://doi.org/10.3998/mjcs-loa.3239521.0025.208

Conway, J. M., Amel, E. L., & Gerwien, D. P. (2009). Teaching and learning in the social context: A meta-analysis of service learning's effects on academic, personal, social, and citizenship outcomes. *Teaching of Psychology, 36*, 233–245. https://doi.org/10.1080/00986280903172969

Dolgon, C., Mitchell, T. D., & Eatman, T. K. (2017). *The Cambridge handbook of service learning and community engagement.* Cambridge University Press.

Finley, A. (2011). Assessment of high-impact practices: Using findings to drive change in the Compass Project. *Peer Review, 13*(2), 29–33. https://www.aacu.org/publications-research/periodicals/assessment-high-impact-practices-using-findings-drive-change

Furco, A. (2002). Institutionalizing service-learning in higher education. *Journal of Public Affairs, 6*, 39–67.

Furco, A. (2007). Institutionalising service-learning in higher education. In L. McIlrath & I. MacLabhrainn (Eds.), *Higher education and civic engagement: International perspectives* (pp. 65–82). Ashgate.

Furco, A., & Kent, K. (2019). From the guest editors: State of service-learning and community engagement around the world. *Journal of Higher Education Outreach and Engagement, 23*(3), 1–2. https://openjournals.libs.uga.edu/jheoe/article/view/1516/1453

Furco, A., & Miller, W. (2009). Issues in benchmarking and assessing institutional engagement. *New Directions for Higher Education, 2009*(147), 47–54. https://doi.org/10.1002/he.357

Global University Network for Innovation. (2014). *Knowledge, engagement and higher education: Contributing to social change* (Higher Education in the World 5). Palgrave MacMillan.

Hatcher, J. A. (2008). *The public role of professionals: Developing and evaluating the civic-minded professional scale* [Doctoral dissertation, Indiana University–Purdue University Indianapolis]. http://scholarworks.iupui.edu/handle/1805/1703

Holland, B. A. (1997). Analyzing institutional commitment to service: A model of key organizational factors. *Michigan Journal of Community Service Learning, 4*(1), 30–41. http://hdl.handle.net/2027/spo.3239521.0004.104

Holland, B. A. (2001). A comprehensive model for assessing service-learning and community–university partnerships. *New Directions for Higher Education, 2001*(114), 51–60. https://doi.org/10.1002/he.13

Holland, B. A., & Furco, A. (2004). Institutionalizing service-learning in higher education: Issues and strategies for chief academic officers. In M. Langseth & W. M. Plater (Eds.), *Public work and the academy: An academic administrator's guide to civic engagement and service learning* (pp. 23–39). Anker.

International Christian University. (2009). *Lessons from service-learning in Asia: Results of collaborative research in higher education*. Service-Learning Center, International Christian University.

Kuh, G. D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter.* Association of American Colleges and Universities.

Ma, C. H. K., & Chan, A. C. M. (2013). A Hong Kong university first: Establishing service-learning as an academic credit-bearing subject. *Gateways: International Journal of Community Research and Engagement, 6*, 178–198. https://doi.org/10.5130/ijcre.v6i1.3286

Ma, C. H. K., Chan, A. C. M., Liu, A. C., & Mak, F. M. F. (Eds.). (2018). *Service-learning as a new paradigm in higher education of China.* Michigan State University Press.

McIlrath, L., Lyons, A., & Munck, R. (Eds.). (2012). *Higher education and civic engagement: Comparative perspectives.* Palgrave.

McIlrath, L., & MacLabhrainn, I. (Eds.). (2007). *Higher education and civic engagement—international perspectives.* Ashgate.

Meijs, L. C. P. M., Maas, S. A., & Aramburuzabala, P. (2019). Institutionalisation of service learning in European higher education. In P. Aramburuzabala, L. McIlrath, & H. Opazo (Eds.), *Embedding service learning in European higher education: Developing a culture of civic engagemen*t (pp. 213–229). Routledge.

Moely, B. E., & Ilustre, V. (2018). Service involvement and civic attitudes of university alumni: Later correlates of public service participation during college. *Michigan Journal of Community Service Learning, 25*(1), 30–42. https://doi.org/10.3998/mjcsloa.3239521.0025.103

Morton, K., & Troppe, M. (1996). From the margin to the mainstream: Campus Compact's project on Integrating Service with Academic Study. *Journal of Business Ethics, 15,* 21–32. https://doi.org/10.1007/BF00380259

National Task Force on Civic Learning and Democratic Engagement. (2012). *A crucible moment: College learning & democracy's future.* Association of American Colleges and Universities.

Novak, J. M., Markey, V., & Allen, M. (2007). Evaluating cognitive outcomes of service learning in higher education: A meta-analysis. *Communication Research Reports, 24*(2), 149–157. https://doi.org/10.1080/08824090701304881

Plater, W. M. (2017). Transforming the world in which we live: Laureate's transnational civic learning project. *Higher Education Research Communications, 7*(1), 16–26. https://doi.org/10.18870/hlrc.v7i1.374

Regina, C., & Ferrara, C. (2017). *Service-learning in Central and Eastern Europe: Handbook for engaged teachers and students.* CLAYSS.

Saltmarsh, J., & Hartley, M. (Eds.). (2011). *To serve a larger purpose.* Temple University Press.

Sandmann, L. R., & Plater, W. M. (2009). Research on institutional leadership for service learning. In P. H. Clayton, R. G. Bringle, & J. A. Hatcher (Eds.), *Research on service learning: Conceptual frameworks and assessment: Vol. 2B. Communities, institutions, and partnerships* (pp. 505–535). Stylus.

Sandy, M., & Holland, B. A. (2006). Different worlds and common ground: Community partner perspectives on campus-community partnerships. *Michigan Journal of Community Service Learning, 13*(1), 30–43. http://hdl.handle.net/2027/spo.3239521.0013.103

Steinberg, K., Hatcher, J. A., & Bringle, R. G. (2011). Civic-minded graduate: A north star. *Michigan Journal of Community Service Learning, 18*(1), 19–33. http://hdl.handle.net/2027/spo.3239521.0018.102

Ti, C., Tang, J., & Bringle, R. G. (in press). Developing institutional capacity for service learning: A Singaporean case study. In R. Shumer, C. H. K. Ma, & C. W. Y. Chan (Eds.), *Food for thoughts: Service-learning research in Asia.* Information Age Publishing.

Vogel, A. L., Seifer, S. D., & Gelmon, S. B. (2010). What influences the long-term sustainability of service-learning? Lessons from early adopters. *Michigan Journal of Community Service Learning, 17*(1), 59–76. http://hdl.handle.net/2027/spo.3239521.0017.105

Warren, J. L. (2012). Does service-learning increase student learning? A meta-analysis. *Michigan Journal of Community Service Learning, 18*(2), 56–61. http://hdl.handle.net/2027/spo.3239521.0018.205

Welch, M., & Saltmarsh, J. (2013). Current practice and infrastructures for campus centers of community engagement. *Journal of Higher Education Outreach and Engagement, 17*(4), 25–55. https://openjournals.libs.uga.edu/jheoe/article/view/1067

Wood, R. J. (1990). Changing the educational program. In D. Steeples (Ed.), *Managing change in higher education* (pp. 51–58). Jossey-Bass.

Xing, J., & Ma, K. H. K. (Eds.). (2010). *Service-learning in Asia: Curricular models and practices.* Hong Kong University Press.

Yorio, P. L., & Ye, F. (2012). A meta-analysis on the effects of service-learning on the social, personal, and cognitive outcomes of learning. *Academy of Management Learning & Education, 11*(1), 9–27. https://doi.org/10.5465/amle.2010.0072

Zlotkowski, E. (Ed.). (1998). *Successful service-learning programs: New models of excellence in higher education.* Anker.