

***The Effects on Student Outcomes of Service-Learning
Designated Courses:
An exploratory Study***

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The engagement of citizens in a democratic society is an ideal many modern societies aspire for in the enactment of their political, social, and educational programs, activities, laws, and policies. In higher education institutions, especially in the United States, teaching and learning have been one of the mechanisms through which active and democratic citizenship are exercised. Opazo and McIlrath (2019) posit “service learning is one such mechanism to achieve the ideals associated with the democratic citizen and the promotion of active citizenship.” (p.2) The concept of service learning in higher education is not new as it dates to the late 1800s with the social reform movements birthed by Jane Adams in the 1800s; and the education reform revolution spurred by John Dewey in the 1900s (Flecky, 2011).

Service-learning gained momentum in the United States’ educational system, in the 1980s, as a system for integrating experiential learning into the classroom experiences. Its primary aim was to engage students in active learning enterprise in schools and community settings. De facto, colleges and universities in the 1990s launched service-learning programs to enroll students in course-based learning projects where they can apply academic knowledge to social and community concerns. Service learning has since become one of the hallmark instruments used in higher education institutions to accomplish a civic service mission and to fulfill a historical commitment to public good in a democratic society (Opazo, H., McIlrath, L., 2019).

The philosophy and practice of service learning in higher education institutions are aimed at achieving a variety of teaching and learning goals and objectives

Abstract

Service-learning is integral to most American higher education institutions’ mission in fostering community and civic engagement in a democratic society. Service-learning designation courses are mechanisms used to link courses to communities and to integrate experiential learning into education. This exploratory study endeavors to investigate post service-learning course effects on student outcome indicators like connection of limited time community volunteering to academic course material; awareness of self and community needs; impacts on academic and career goals at a four-year public university in the United States. This research, which aims to boost the knowledge-based of service-learning designation courses’ impacts on students, theorized that to predict and measure the outcomes of service learning on students and courses the characteristics of student participants are critical indicators. The findings revealed that gender (female), age (older) and no prior community civic engagement students benefited the most from service-learning designation courses. The study highlights the significance of (a) diverse student characteristics like age and gender; and (b) experiential learning of younger students like freshmen and sophomores and those with no prior community service experiences in the design and development of service-learning designated courses.

including: “improving students’ academic learning and educational success, to enhancing students’ personal development, to furthering students’ social and intercultural understanding, to strengthening students’ career development, to nurturing students’ civic responsibility and participation, to centering students’ ethical and moral compass.” (Opazo, H., McIlrath, L., 2019, p. 13) Notwithstanding, there remains some misconceptions of the term service learning with potential implications for how its effects and impacts on students, courses and faculty are determined.

Opazo and McIlrath (2019) explained “the widespread misunderstanding of the term is due primarily to the fact that service learning is inherently a highly contextualized practice, [which] looks very different across institutional and community contexts.” (p.13) Thus, to contribute to the knowledge-based regarding the implications of service learning on students and course-based outcomes, this study investigated post service-learning course effects on student outcome indicators like connection of community engage learning to academic course material; awareness of self and community needs; and impacts on academic and career goals at a four-year public university in the Southeastern region of the state of Massachusetts in the United States.

The definition and analysis of the effects of service learning on student experiences and course-based outcomes are multifaceted and sometimes in incongruities. Some definitions focused on the connection service learning creates between educational environments and community settings. “It is a practice that links community service with learning activities and learning activities with community service.” (Opazo, H., McIlrath, L., 2019, p. 13) Expanding on this principle, Novelle et. al (2020) declared “service-learning is a pedagogical practice promoting active learning for students. Its overall goal is to connect classroom content to real-world experience while partnering and engaging with the community.” (p.3) Furthermore, Khan and VanWynsberge (2020) explained service learning as “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 personal values and civic responsibility (p.2).

Other concepts of service-learning highlight deeper ideals of civic and experiential engagement and learning. Flecky (2011) posit that service learning is “a philosophy of service and learning that occurs in experiences, reflection, and civic engagement within a collaborative relationship involving community partners,” (p.1) that centers on students, faculty, and community partners’ endeavor to conspire to specific educational and community feat. Therefore, it is “a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development” (p.2).

To this study, service learning is conceptualized as “a pedagogy wherein students engage in providing a service to the community that is linked to the academic objectives of a course” (Rinaldo et al. 2015, p. 2). Notwithstanding, whether service-learning fosters linkages between community and educational systems or serves as real-world laboratory for student civic engagement and public service, its impacts on learning activities and course-based outcomes require further investigation and understanding.

The effects of service learning on students and course-based outcomes have been studied in the past few decades with mixed results. Gao, G. et al. (2020) argued that service learning has positive outcomes on students' academics like testing and applying classroom knowledge to community issues, test scores, attendance, critical thinking, and communication skills; personal growth such as self-confidence, moral character and personal competencies for life and career success; civic engagement and social responsibility. Culminating, S. Ellerton, et al. (2016), in a study to investigate post-service-learning differences between two control groups of community college students, found statistically significant positive impacts of service learning on academics and general education skills, such as writing and teamwork, for service-learning participants compared to their counterparts. They also uncovered a faculty perspective of "deep learning and skill development strengthen the contention that community college students receive many benefits from participation in service-learning" (p.19).

Further research revealed some ongoing concerns with service-learning outcomes. Jones et al (2016) argued that although most students develop a high level of "community literate" insights during their service-learning, significant gaps were noticed in community literacy needs for students, academics, and professionals. Community literacy refers to "having the cognitive and social skills which determine the motivation and ability of [students], academics, and professionals to gain access to, understand, and use community knowledge and information that enable them to be "community intelligent." Being "community intelligent" mitigates ways for students and faculty to promote and maintain good community engagement practices that reflect and respond to community contexts, needs, priorities and expectations" (Jones et al, 2016, p. 193).

Thus, the lack of knowledge about "community intelligence" for students and faculty alike may have potential impacts on the outcomes of service-learning activities, learning goals and course-based objectives. Further investigations on the hidden effects of faculty and students' lack of "community intelligence" are warranted to fully grasp the effects of service-learning activities on academics, civic engagement, and personal growth. Furthermore, Martin et al (2017), in a study that assessed the emotions experienced by faculty while teaching service-learning courses, reported on the emotional lows of some faculty teaching service-learning courses. These include some faculty "experiencing negative emotions such as frustration, anger, anxiety, and disappointment" caused by problems linked to service-learning course elements like logistics; unpredictability of community partnership; and difficulty collaborating with community partners. The ability to maintain "a constructive relationship with community partners in order to adequately perform service" is vital to students' service-learning experiences and outcomes (Martin et al, 2017, p. 7). In effect, they posit that "understanding service-learning faculty emotions is important since they often relate directly to students' classroom [service-learning course] experiences (p. 11).

Therefore, faculty emotional predispositions, to deliver service-learning courses, are another aspect of community engagement course design and implementation that concealed drawbacks on the impacts that service-learning activities may have on student outcomes. Expanding on Martin et al. (2017) concerns, Olson, and Brennan (2017) examined service-learning program design approach and documented challenges related to defining, planning, and assessing community engagement

programs. They offered a “holistic program design approach to curricular-based engagement [that] uses concepts and principles from interactional field theory to frame curricular-based engagement as a venue for interaction and a means to achieve student and community development outcomes.” The aim of their study was to “help institutions of higher education rethink their role in local development and move them from a mindset of community engagement to one of community emergence” (p. 12). Olson and Brennan (2017) study offered a new concept of service-learning grounded in emergence versus engagement in community.

The above studies highlight ongoing issues with service-learning that have significant implications for student outcomes. What about the students immersed in limited time community service volunteering hours embedded in service-learning required courses? Seider et al (2012), in a study that examined differential outcomes for American college students engaged in community service-learning involving youth and adults, argued that “college students engaged in adult-oriented service demonstrated larger shifts in public service motivation and belief in a just world than their peers engaged in youth-oriented service...even when the academic components of the Serve Program were identical for the two sets of students” (p.447-458). This study revealed that students who experience service-learning activities as meaningful and worthwhile are not always the ones who acknowledge gaining higher learning outcomes.

Beyond the discrepancies between service-learning activity impacts and learning outcome gains on students, lays another issue related to the number of community service hours required for meaningful effects on participants. Berger and Milem (2002), in a study that investigated how community service involvement affected the development of undergraduate students’ self-concept, found that “higher levels of involvement in community service did not have a positive effect on student self-concept” (p.13). This was a surprising discovery, considering how previous research asserted high levels of benefits of service-learning on student experiences. Berger and Milem (2002) then argued that the number of hours devoted to service-learning, or “a certain threshold of effort,” is critical to the effects of service-learning on student outcomes.

In brief, over the past almost two decades most research studies on service-learning have argued the benefits of the experiences on student outcomes. Astin et al (2000), in a higher education report study on service learning, supported that service-learning courses have positive effects on “academic performance (GPA, writing skills, critical thinking skills), values (commitment to activism and to promoting racial understanding), self-efficacy, leadership (leadership activities, self-rated leadership ability, interpersonal skills), choice of a service career, and plans to participate in service after college” (p. 4).

The Bridgewater State University (BSU) service-learning programs aim to foster students, staff, and faculty connections to local and national communities especially in the Southeastern regions of the state of Massachusetts. The programs endeavor to promote students to become life-long engaged citizens in our regional, national, and global communities through courses and self-reflective service-learning activities that strengthen their personal and professional development in civic engagement. The university values service-learning as an effective teaching method that uses community service to help students gain a deeper understanding of course objectives. Service-learning designated courses are thus considered high impact teaching practices

designed to improve the success and retention rates of students (retrieved on June 20, 2019 from <https://www.bridgew.edu/student-life/community-service-center>). The courses include, both first year and upper-level classes, requiring a range of 10 to 45 to over 200 hours of limited time volunteering field work in each semester. The courses are vetted through an application process by a faculty board of members and identified through a course registration system. Faculty who teaches a service-learning designated course will be eligible to receive one additional faculty workload credit.

The rationale for this study is to contribute knowledge to the discussion of the incongruities found in the literature review regarding service-learning impacts on students in higher education institutions. The paper investigates student outcomes post limited time required service-learning volunteering experiences in five service-learning designated undergraduate courses at BSU. Understanding what and how the students themselves viewed the process and experienced its direct effects might shed some light on the relevance and meaningfulness of service-learning embedded courses. The purpose was to develop an exploratory study to examine post service-learning designated course effects on student outcome indicators like connection of community engage learning to academic course material; awareness of self and community needs; and impacts on academic and career goals.

Methods

This study is a cross-sectional design. An online survey was created using Qualtric, consisting of demographics questions, questions about students' service-learning experiences, and student learning outcome indicators like connection of community engage learning to academic course material; awareness of self and community needs; and impacts on academic and career goals. The content of the survey questionnaire was developed based on literature review on common questions, which in the survey, examine service-learning course outcomes.

Through registrar's records five courses designed as service-learning embedded courses from the academic year 2017-2018 were identified. These courses require students to perform limited time (e.g., ten hours or more in a semester) community services volunteering for the course requisite. Faculty members who taught these five service-learning designated courses were asked to distribute the online survey link to students who completed these courses. Participation of the survey was completely voluntarily, and no identifiable information was collected. The online survey remained open for 8 weeks (from November 28, 2018, to January 14, 2019), and totally 113 responses were recorded. However, the recorded 113 responses contain missing data and completed answers to questions range from 73 to 113. Data collected through the online survey software Qualtrics was exported and analyzed using SPSS.

Results

Sixty-two percent of respondents were younger than 25 years old. Across the entire sample, three quarter of respondents (75.7%) were female and 23.3% were male. More than half of respondents were white (58.6%), followed by Black or African American (17.1%), Cape Verdean (10.8%), Hispanic/Latino(a) (7.2%), and other races.

Although all five courses are social work courses, the Introduction to Social Welfare course is open to all majors. The largest percentage of respondents majored in

Social Work (67.3%), followed by Psychology (14.2%), and a variety of other majors, such as Sociology, Political Science, Criminal Justice, and others. In terms of academic years, about half (52.4%) of respondents were seniors, 29.5% were juniors, 12.4% were sophomores and 5.7% were freshmen. Across the entire sample, there were about a slightly more transfer students (52.4%) than non-transfer students (47.6%).

Table 1: Demographic Characteristics

	Frequency	Percentage (%)
Age (n=103)		
Younger than 25	64	62.1
25-29	20	19.4
30-34	8	7.8
35-39	7	6.8
40-44	1	1.0
45-50	2	1.9
Older than 50	1	1.0
Gender (n=103)		
Male	24	23.3
Female	78	75.7
Non-Binary	1	1.0
Race (n=111)		
American Indian or Alaskan Native	1	0.9
Asian	3	2.7
Black or African American	19	17.1
Cape Verdean	12	10.8
Hispanic/Latino(a)	8	7.2
White	65	58.6
Azorean	1	0.9
Brazilian	1	0.9
South American		
Major (n=113)		
Anthropology	1	0.9
Criminal Justice	3	2.7
Elementary Education	1	0.9
Management	1	0.9
Political Science	6	5.3
Psychology	16	14.2
Social Work	76	67.3
Sociology	5	4.4
Other	4	3.5
Academic year (n=105)		
Freshmen	6	5.7
Sophomore	13	12.4
Junior	31	29.5
Senior	55	52.4

Transfer status (n=105)		
Transfer students	55	52.4
Non-transfer students	50	47.6

When respondents were asked if they participated in community service-learning experiences prior to the course, the answers were about half and half (Yes-49%, No-51%). There were a considerable variety of community service respondents who volunteered with different community partners for the course including but not limited to Father Bill's and Main Spring (13.1%), School on Wheels (10.1%), My Brother's Keeper (9.1%), Gifts to Give (6.1%), Old Colony YMCA mentoring (5.1%), 100 males to college (3%), and others.

Table 2: *Service-Learning Experience*

	Frequency	Percentage (%)
Participated in Community Service before? (n=102)		
Yes	50	49.0
No	52	51.0
Type of community service volunteer with for the course (n=99)		
Father Bill's and Main Spring	13	13.1
Gifts to Give	6	6.1
My Brother's Keeper	9	9.1
Old Colony YMCA mentoring	5	5.1
School on Wheels	10	10.1
Sharing the Harvest	1	1.0
Others	55	55.6

Overall, respondents evaluated post service-learning course effects on outcome indicators positively. 68.9% respondents indicated that the community services had influence their understanding of the relevance of the course material and information to everyday life "a great deal" or "a lot." 83.8% respondents indicated that the community services experiences had influence their awareness of the needs of surrounding communities "a great deal" or "a lot." 74.3% respondents indicated that the community services experience had influenced their knowledge about applying learning to community issues "a great deal" or "a lot." About half (51.3%) respondents indicated that the community services experience had helped change their thoughts about a career path "a great deal" or "a lot." Similarly, 57.6% respondents indicated that the community service had influenced their decision about major choice "a great deal" or "a lot." 58.9% respondents indicated that community services experience had impacted their thinking and feeling about finishing college or graduating "a great deal" or "a lot."

Table 3: *Service-Learning Outcome Indicators*

	Frequency	Percentage (%)
Influenced understanding of the relevance of the course material and information to everyday life (n=74)		
A great deal	30	40.5
A lot	21	28.4
A moderate amount	18	15.8
A little	3	2.6
None at all	2	1.8
Influenced awareness of the needs of surrounding communities (n=74)		
A great deal	40	54.1
A lot	22	29.7
A moderate amount	9	12.2
A little	3	4.1
None at all	0	0
Influenced knowledge about applying learning to community issues (n=74)		
A great deal	30	40.5
A lot	25	33.8
A moderate amount	15	20.3
A little	4	5.4
None at all	0	0
Helped change thoughts about a career path (n=74)		
A great deal	22	29.7
A lot	16	21.6
A moderate amount	13	17.6
A little	13	17.6
None at all	10	13.5
Influenced decision about major choice (n=73)		
A great deal	21	28.8
A lot	11	15.1
A moderate amount	6	8.2
A little	14	19.2
None at all		
Impacted thinking and feeling about finishing college or graduating (n=73)		
A great deal	25	34.2
A lot	18	24.7
A moderate amount	20	27.4
A little	4	5.5
None at all	6	8.2

Furthermore, to examine what demographic characteristics predict service-learning course outcomes, a series bivariate analyses were performed between the six demographic variables and the six student outcome indicators. There was a statistically significant difference between gender regarding to the influence of community service-learning experience on student's decision about major choice ($t(71) = 2.15, p < .05$). Female students indicated that the community service-learning experience had influenced their decision about major choice more than male students. Prior community service-learning experience impacted respondents' thinking and feeling about finishing college or graduating ($t(71) = -2.11, p < .05$). For respondents who had no prior experience, the impact of the community service-learning experience in the course on college completion was statistically stronger than respondents who had prior experience. Age was a strong predictor on student outcome indicators. Older respondents indicated statistically stronger impact from the community service experiences on their awareness of the needs of surrounding communities ($r(74) = -0.24, p < .05$), on their knowledge about applying learning to community issues ($r(74) = -0.26, p < .05$), and on their thinking and feeling about finishing college or graduating ($r(73) = -0.25, p < .05$).

Discussion

The results of this study, like in previous research, support the notion that service-learning activities in higher education institutions have impacts on students and course-based outcomes. The purpose of this research to measure the specific effects of service learning on three student outcome indicators: (a) connection of community engage learning to academic course material; (b) awareness of self and community needs; and (c) impacts on academic and career goals at a four-year public university in the Southeastern region of the state of Massachusetts in the United States revealed the following. Students who participated in course-based service learning programs received these specific benefits: (a) service learning activities influenced student understanding of the relevance of the course material and information to everyday life; (b) impacted student awareness of the needs of surrounding communities; (c) shaped student knowledge about applying learning to community issues; (d) changed student thoughts about a career path as well as influenced their decision about major choice and (e) affected their thinking and feeling about finishing college or graduating positively. These findings support some of the previous discoveries found in the research literature.

This study did find three predictive indicators that were statistically significant in the measurement of the effects of course-based service-learning activities on student outcomes in this sample of four-year public university students: gender, age and prior community civic engagement. Female students indicated that service learning influenced their decision about major choice more than their male counterparts. Older students (i.e., > 21 years old) experienced the strongest positive effects of service learning across all indicators than younger fellows. Students with no prior experiences with community service volunteering acknowledged that the service-learning program shaped their thinking and feeling about finishing college or graduating more than those with previous community service civic engagement.

These results point towards a potential theoretical framework for understanding how service-learning may impinge the experiential learning of students. This study's theory argues that to predict and measure the outcomes of service learning on students and courses the characteristics of student participants are critical indicators for consideration. Meaning, to gauge future effects of service-learning designation courses on students, faculty and program administrators must account for participants' gender, age and prior experience levels in community civic engagement. The implications of the findings for high impact teaching practices underline the importance in the design and the development of service- learning course designated content to focus attention on student diverse characteristics in addition to learning objectives and outcomes.

In general, service-learning designated courses, at most traditional undergraduate postsecondary institutions, target upper-level undergraduate courses, i.e., junior, and senior status, which usually enroll older students (> 20 years old) and more females than males, especially in the social sciences. This study has uncovered that although older and female students are the most positively impacted by service-learning course-based activities, the effects of the programs are not reaching a critical audience in our higher education institutions like the lower-level freshman and sophomore students. Furthermore, the traditional design, planning and implementation of service-learning designated courses might not always include an understanding of participants' prior experiences with community civic engagement and its consequences on the program outcomes.

This research found that the level of previous student experiences with community involvement is critical to the outcomes of service-learning. Students with no prior civic engagement in community service were found to benefit the most from the experiential learning. Thus, the development of service-learning designated courses might invite for a two-tiered approach whereby students with prior community service experiences, versus their peer counterparts, are given different roles and assignments to maximize their experiential learning and produce more meaningful outcomes of their course-based service-learning activities. The application of this study's findings may be limited to social work and social science programs of study that utilize mandatory service-learning designated courses to provide experiential learning and field education training to upper classmen in their majors.

To conclude, this study offers some recommendations for potential ways some higher education institutions might conceptualize their high impacts teaching and learning practices through service-learning designation courses in the future: (a) the design and content of service-learning designated courses should go beyond the standard course learning objectives and outcomes to incorporate diverse student participant characteristics like age, gender and prior level of experiences in community service volunteering; and (b) service-learning programs could serve essential student development functions and opportunities especially for younger students like freshmen and sophomores who, as this study has shown, are least impacted by the experiential learning. In this vein, service-learning courses could be leveraged as academic and personal growth mechanism used to reach cohorts of first- and second-year students susceptible to low retention risks and who traditionally are not engaged in service-learning course-based activities until their junior or senior year. These younger students could stand to gain some benefits in early involvement in experiential learning and civic

engagement considering the long term positive outcomes of community service and learning on (a) student understanding of the relevance of the course material and information to everyday life; (b) awareness of the needs of surrounding communities; (c) knowledge about applying learning to community issues; (d) thoughts about a career path, decision about major choice and (e) thinking and feeling about finishing college or graduating.

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