

Faculty members' perception of service-learning courses in curriculum

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Abstract

Service-learning (S-L) is intentional experiential learning incorporating an academic focus with application in the community. A survey was conducted at a regional public university examining faculty's perceptions and expectations toward this teaching strategy. Eighty-five faculty members completed a 64-item questionnaire designed to illustrate their involvement and perceptions of service-learning courses, along with perceived pedagogical benefits, challenges, and institutional support associated with service-learning. Results indicated that perceived benefits associated with students and community partners, such as enhancing student learning, supporting community, and strengthening the student-teacher relationship, was the primary factor driving participants to integrate service-learning into their curriculum. Survey participants also showed interest to begin or continue service-learning programs in the near future. However, participants were concerned about how service-learning related courses might impact faculty performance related to research and professional service. In conclusion, clear institutional policies and strategies for encouraging faculty involvement in service-learning are discussed.

Key Words: service-learning, pedagogical benefits and challenges

Introduction

Service-learning is a form of intentional, experiential learning that incorporates academic focus, as well as applying skills that are deemed useful in the workforce (Jacoby, 1996). Since the 1980s, this unique teaching methodology has received a high level of attention and has been adopted by many higher education institutions and secondary schools (Kraft & Eyler, 2014). Due to its popularity, in 1993 the Commission on National and Community Service provided a widely accepted definition, covering the components relating to active participation, meaningful partner(s), and curriculum and assessment requirements (Kraft & Eyler, 2014).

Service-learning incorporates knowledge obtained in the classroom to meet the wants and needs of the community. Service-learning programs can foster a sense of self-worth for students becoming active in their community. Most importantly, it helps students build a comprehensive academic portfolio by gaining work experience, networking, and building potential references for future employment. Those aforementioned points led many scholars to believe that service-learning can be adopted as an effective teaching strategy.

The benefits of students and faculty involvement in service-learning are documented (Bak, Mouers, & Wegner, 2012; Cronley, Madden, Davis, & Probe, 2014; Eyler, 2009; La Lopa, 2012). However, some identified barriers may affect the effectiveness of service-learning (Bulot & Johnson, 2006; McAndrew, 2001; Morgridge Center for Public Services, 2012b; Tennessee State University, n.d.). Few have examined the faculty component of service-learning (Gary, 2009; Demb & Wade, 2012). Also, only a few studies or discussions delineated faculty perceptions or experiences in service-learning. To assist the institution in achieving a sustainable and effective service-learning program, this study examined the faculty members' general perception toward the implementation of service-learning curriculum. The researchers attempted to use the identified findings to help develop better institutional strategies dealing with the potential challenges and constraints associated with implementation of the service-learning program. It was anticipated that the implementation of policies for recognizing the effort of service-learning engagement and needed support for conducting service-learning courses would be the key issues to manage.

Service-learning and its impact

Service-learning brings benefits to all of the involved parties including the students, faculty, institution, and community partners. Students who participate in service-learning are more likely to learn more efficiently, more effectively, and remember more of what they have learned than their counterparts (Colorado State University, 2006a; Cooke & Kemeny, 2014; Hou, 2010; McAndrew, 2001; Mpouf, 2007). Service-learning that brings students into the community can help students connect their classroom study with real-world environments. They are able to transform the knowledge learned from textbooks and lectures into actual work settings (Deeley, 2010; Eyler, 2009). While working with community partners on assigned tasks, students are more likely to develop tolerance, build critical thinking skills, foster leadership, and create a sense of civic responsibility (Cronley, Madden, Davis & Preble, 2014; La Lopa, 2012; Tennessee State University, n.d.; University of Michigan, 2013).

From faculty's perspective, service-learning can be beneficial, because it can support faculty to: (1) broaden areas for research related to current trends and issues within their field, and (2) connect with community partners by increasing students' awareness of current societal issues (Bloomgarden & O'Meara, 2007; Hebert & Hauf, 2015; La Lopa, 2012; Tennessee State University, n.d., University of Maryland, 2013). In other words, service-learning will help students foster a sense and an awareness of civic engagement. Service-learning has also been viewed as an innovative teaching method that transforms educators' role from a giver of knowledge to a facilitator of learning. More importantly, service-learning can help the community organizations to tap an under-utilized student volunteer base, address unmet needs, and identify talented candidates for future hiring (Bak et al., 2012; General School Network, n.d.; Tennessee State University, n.d.).

Faculty's preference in favoring service-learning can be interpreted by desired involvement in community and in political activities as well (Pike, 2009). Faculty often believe that it will be a win-win situation for community organizations to collaborate with the institution for service-learning. By engaging in service-learning, community organizations will be able to: (1) expand their volunteer base; (2) reach out to talented potential employees; (3) address their unmet social and interpersonal needs; and (4) shape students' learning and a sense of civic responsibility (Simon & Cleary, 2005; Tennessee State University, n.d.; University of Michigan, 2013). They can also be a beneficiary through their involving process.

Support, concerns and challenges related to implementation of service-learning

Despite service-learning having proven to provide benefits to all involved entities, the implementation and adoption of this teaching methodology does not go unchallenged. First of all, preparing a service-learning course is very time consuming. Faculty members may not have adequate time and financial resources to reach out to the community partners in establishing contractual service agreements (Scott, n.d., Tennessee State University, n.d.; The Science Education Resource Center, 2012). In a service-learning setting, it is more difficult to control the students' learning goals and environment (Colorado State University, 2006b). In terms of student learning, students may not have strong motivation to engage in service-learning courses and fail their service commitment (McAndrew, 2001; Morgridge Center for Public Service, 2012b). Furthermore, students could show insensitivity during their service duty or get frustrated with the placement or community partner (Morgridge Center for Public Service, 2012b). In some cases, there may not be adequate institutional or departmental support for faculty members who wish to prepare or teach service-learning courses (Blout & Johnson, 2006; Tennessee State University, n.d.).

Studies have examined benefits and barriers of conducting effective service-learning courses, but there are not many studies that have examined faculty's view of service-learning (Blout & Johnson, 2006). Blout and Johnson (2006) utilized e-mail surveys supplemented with personal interviews to understand faculty's experiences of participating in service-learning and specifically, faculty's perceptions of the costs and rewards in employing service-learning in gerontology-related curriculums. It appeared that faculty were still willing to teach the service-learning courses without evident monetary or honorary rewards. Ultimately, being able to teach and learn in a service-learning setting was actually a valuable experience for those teachers.

According to Young, Shinnar, Ackerman, Carruthers, and Young (2007), institutions that implemented service-learning programs tended to share common practices and strategies at the institutional level in order to sustain their service-learning initiatives. Those practices focused on organizational tactics associated with four key points. They are: (1) funding, (2) administration, (3) faculty recruitment and support, and (4) student involvement and assessment.

Popular tactics for recruiting faculty members to engage in service-learning may include: (1) hosting annual workshops and luncheons, (2) setting up information booths in faculty orientation and campus meetings, (3) targeting teachers who had shown interest in becoming involved in service-learning, (4) having experienced service-learning faculty to mentor less experienced members, and (5) establishing a unit to consolidate resources and funding to entice faculty (Young et al., 2007).

Although the funding and grant money are vital resources for supporting service-learning programs, it is not a sole or primary means for keeping service-learning running (Young et al., 2007). It is important that all aspects of institutional commitment, administrative support, faculty effort, and continuous budgets are coordinated to sustain and expand the service-learning projects.

According to Pike (2009), faculty members' attitudes toward service-learning and their level of engagement can have a significant effect on the success of service-learning on campus. In order to examine faculty members' attitude about service-learning, Pike (2009) identified intrinsic elements (such as motivation and passion in helping others) related to faculty members' attitude about service-learning and civic engagement. In addition, extrinsic factors focus on perceived institutional support and commitment were identified as important to the success of implementing service-learning program. If an institution intends to implement service-learning as a mission or agenda, systematic assessment will be needed in order to understand campus culture, design opportunities and allocate resources (Pike, 2009). Evidently, some units (such as School of Social Work and Education) are substantially more favorable in their preference toward service-learning than others (i.e., School of Science).

While discussing the concept of institutionalizing service-learning, there are several specific organizational factors that categorize an institution's choices and actions. They are institutional mission (promoting civic engagement and awareness, serving the community, and building partnerships), policies (items relating to faculty promotion, tenure, and hiring), organizational structure, student involvement, and community involvement and partnership building (Young et al., 2007). In the study of Young et al. (2007), all of the surveyed administrative directors indicated that service-learning was part of their school's goal or mission and that it is specifically designed to collaborate with the community and enhance student learning. Some also mentioned the need for service-learning to develop students' civic awareness and engagement in community-based research. Finally, those directors offered four main tactics for implementing campus-wide service-learning: (1) faculty and administrators' support, (2) a ground-swell of interest from all involved parties, (3) availability of grant opportunities and funding, and (4) student support. According to Schanubelt and Statham (2007), the institutions must consider social, cultural, political, and contextual realities in order to encourage faculty to fully embrace service-learning in their research and teaching activities.

Service-learning pedagogy can be implemented in various types of course curriculum (Buzinski, Dean, Donofrio, Fox, Berger, Heighton, Fuad Selvi, & Stocker, 2013). There are also many kinds of service-learning courses offered across disciplines (McMenamin, McGrath, & D'Eath, 2010). According to Pike (2009) and Cronley, Madden, Davis, and Preble (2014), service-learning courses are substantially favored and utilized in social work. However, medical schools seemed to report relatively low involvement in service-learning in their curriculum. At University of Maryland (2013), service-learning can be found in most disciplines as demonstrated by examples such as engineering design, landscape architecture, computer science, and biochemistry. Recently, the area of recreational and leisure study has put more emphasis on service-learning in curriculum design. Schwab, Greenwood and Dustin (2014) argued service as engaged scholarship should be the centerpiece in applied disciplines such as recreation and tourism. Their rationale was further strengthened by the study of Cooke and Kemeny (2014) as the results suggested students improved their understanding of the therapeutic recreation process through a 15-week trial of wellness service-learning course activities.

Many faculty members feel that assessing students' actual learning in service-learning courses can be quite a challenge. This concern arises because it may be easy to discover what students are working on as a form of service; however, is there any actual learning involved while performing the tasks and works? Since service-learning should be about student-learning after all, proper assessment methods and facilitation of learning must be carefully planned and addressed to counter the aforementioned concern. Without a proper strategy for assessing or documenting student-learning while engaging in service-learning, some educators would hesitate to spend their time and effort to utilize this teaching methodology. Eyler (2009) suggested that the most critical factor for achieving learning outcomes from service-learning is to provide opportunities for feedback and reflection.

Inservice-learning, opportunities for learning might be integrated into course or program structure, so learning does not occur only as a result of an action or experience from a single task or activity (Bartlett, 2013). Therefore, reflection must be designed by intention to facilitate the desired outcomes. If applied properly, context-appropriate reflection can transform work experience into learning experience as well. In general, more experts would recommend the teacher-guided reflection process to ensure the quality of learning (Lisman, 1998; McAndrew, 2001; Morgridge Center for Public Service, 2012a). Commonly used assessment methods include (but are not limited to) interview or survey, journal, research paper, case discussion, direct reading, presentation, and observation (University of Maryland, n.d.).

The studies of Gary (2009) and Demb and Wade (2012) examined faculty's beliefs toward service-learning and civic engagement. Gary's study (2009) introduced nine questions to identify extrinsic and intrinsic factors that encourage faculty's involvement in service-learning. Demb and Wade's study (2012) includes the intrinsic motivation of faculty participation (including personal and professional factors such as tenure requirements and academic rank in addition to race, gender, and academic discipline).

In addition to examining the influential factors on faculty's engagement in service-learning, the researchers would also identify the needed institutional support for faculty to carry out service-learning programs. Are there any gender differences concerning teachers' perception toward the benefits, impact, and implementation of service-learning? Since partnership building and community engagement have been two vital components of the institution's strategic goals, the researchers are particularly interested in the opinions of those who do not currently engage in service-learning (46%). In order to adopt effective strategies to promote campus-wide service-learning, the understanding of faculty's general perception toward perceived benefits and concerns associated with service-learning offer additional inputs to eliminate challenges and generate a higher rate of participation in service-learning. In addition, this survey could also serve as an initial attempt to identify the popularity and acceptability among the existing faculty members. The researchers further examined how one's teaching experience may affect their preference and acceptance toward service-learning.

Methods

Participants

The participants of this study included 85 faculty members (31 males and 54 females) of a regional public institution in eastern Kentucky. Nearly 66% are tenured faculty. In terms of their experience with service-learning, 56% of participants (n = 48; 13 males & 35 females) had taught at least one service-learning course before (meaning that they had involvement in service-learning), and 36% utilized the service-learning instructional method for more than four years.

Procedure and instrument

In the spring semester of 2014, an online survey was given to the participants with the support of the Center for Leadership and Professional Development. One hundred twenty-two faculty had been invited to participate in this online survey. They were acquaintances of researchers and had attended at least one of the past workshops sponsored by the Center of Professional Training and Development. The number of invitees accounted for about 25.2% of total number of faculty (n = 484; 371 full-time and 113 part-time) on campus. The online survey was made available for completion from mid-January to early April, 2014. Upon the completion of the survey, each participant was eligible to enter a small pool for drawing a \$20 gift certificate as a token of appreciation.

Before the online survey was posted, the Institutional Review Board of the researchers' institution had reviewed and approved the project. Eventually, eighty-five faculty members (31 males & 54 females) completed the 64-item survey. This yielded a nearly 70% rate of return, representing 23% of all full-time faculty.

The survey questionnaire covered areas such as faculty's perceived: (1) benefits of service-learning, (2) potential impact of service-learning, (3) university-wide support on service-learning regarding the policies, systems, and programs, (4) specific support from Center for Regional Engagement, (5) motivation for using service-learning as a teaching method, (6) primary assessment methods for service-learning, and (7) the overall satisfaction in teaching service-learning, and (8) demographic/background questions. This survey was developed from five existing surveys designed to evaluate the effectiveness of service-learning concerning the strengths and weaknesses of service-learning (Gary, 2009).

Besides the demographic/background items related to faculty's gender, disciplines, and past teaching experience, etc. ($n = 6$), the participants were asked to rate 56 statements (items) related to aforementioned areas in a five-point Likert-scale (1 being "strongly disagree" and 5 being "strongly agree"). Those who have not taught service-learning courses before may skip items within areas (categories) of 4 to 7 (see Table 1). There was an additional open-ended question soliciting the participants' responses on further needs or concerns that institutional or academic units may support to conduct service-learning. Before the survey was posted online, all of the items were reviewed by the committee members of the University's Service-Learning Community ($n = 5$). A pilot study group was formed to test the reliability of the instrument by completing the same survey under two different time frames ($n = 30$). The test-retest method yielded a fairly high level of correlation on all Likert-scale items (Pearson $r > .800$).

Statistical analysis

The collected information from the online survey was originally stored in a Microsoft Excel file and later transferred to the IBM SPSS software program for analyses. The factor analysis categorized all of the Likert-scale items into nine constructs. The mean score of each identified construct, specific items, and demographic/background information were analyzed through descriptive analysis. The open-ended responses were reviewed by all authors and provided with a consensus summary of answers for each question.

Results

Factor and regression analysis

Factor analyses was performed to further categorize five surveyed areas (excluding demographic/background information) into nine constructs. Table 2 exhibited the names and mean score of those identified constructs. Detailed information of various items under each construct were also listed. Both "usefulness of the CRE support" and "overall satisfaction toward service-learning" received highest ratings among those nine constructs ($M = 4.15$ and 4.04 respectively). Notice that the rating of these two constructs were provided only by those who had been involved in service-learning before ($n = 48$). Within the area (category) of perceived benefits of service-learning, all participants rated the "benefits associated with students and partners" better than "benefits associated with teachers" (themselves) ($M = 3.70$ vs. $M = 3.32$).

Regression analysis (see Table 2) was conducted to identify the best predictor of the overall satisfaction toward service-learning. The result showed that "benefits associated with students and partners" was also the best indicator. Thus, it implies that a higher level of overall satisfaction rating towards service-learning experiences would come from someone who perceived that service-learning will benefit the students and community partners greatly.

<<Insert Table 2 here>>

More descriptive and open-ended results

In general, faculty members of the surveyed institution who had taught a service-learning course before expressed that service-learning is a beneficial teaching strategy for their students. Seventy-nine percent of them showed support in continuing a service-learning program. Seventy-five percent of the faculty members who utilized service-learning before were satisfied with their experience as well. Regardless, having past involvement in service-learning or not, participants seemed to perceive that service-learning may provide positive benefits for students and community partners ($M = 3.61$ on a five-point scale). In general, all respondents' ratings toward the general institutional support (in terms of policies, promotion, and strategies) on service-learning were low ($M = 1.57$). Those who had not taught service-learning before gave an even lower rating ($M = 1.54$) in this construct.

Open-ended responses further supplemented our understanding of expectations and overall impression toward service-learning (see Table 3). Twenty-seven who had been involved in service-learning before provided the following brief summaries. According to their short responses, the expected support for conducting a better service-learning experience seemed to reiterate and revolve around the concepts of "logistic and strategies" and "support in teaching and promotion." They expected more funding for travel ($n = 5$), clear policies, recognition, and instruction for proposed service-learning courses ($n = 4$), transportation arrangement ($n = 2$), and time release ($n = 2$). Nine people indicated that their colleagues and department held a receptive view toward service-learning, yet four people noted their colleagues and department had the opposing view.

<<Insert Table 3 here>>

In terms of assessment strategies used for service-learning courses, teachers most frequently used class discussion and reflection essays as the primary tools to evaluate students' progress and performance for their service-learning experience. Objective testing did not seem as widely accepted (23.3%). Table 2 displayed the most common identified methods for measuring student learning in a service-learning course.

<<Insert Table 4 here>>

Additional analyses

Significant differences among several different constructs based on participants' demographic categories were found through analyses of variance. It is not surprising to see that those who had taught a service-learning course gave higher ratings on several constructs, such as "benefits associated with students and partners," "benefits associated with teachers," and "perceived impact of service-learning" than those who had not taught a service-learning course. However, female participants had higher ratings on the following constructs: (a) benefits associated with students and partners ($M = 2.96$ vs. $M = 3.98$; $n = 85$); (b) benefits associated with teachers ($M = 2.61$ vs. $M = 3.61$; $n = 85$); and (c) personal gain and extrinsic influence ($M = 2.16$ vs. $M = 3.04$; $n = 48$). Tenure-track faculty had the highest rating in "benefits associated with students and partners ($M = 4.67$; $n = 14$)" Tenured faculty had the lowest rating for the same construct ($M = 3.42$; $n = 56$) ($p < .05$). Participants who have taught service-learning seven or more years had a higher rating in "benefits associated with teachers" ($p < .05$).

Discussion and conclusions

Among those 48 faculty members who had taught at least one service-learning course, their overall satisfaction rating was at 4.04 (on a five-point scale). The regression analysis indicated that faculty's overall satisfaction toward service-learning was best predicted by the construct, benefits associated with students and partners. Those who valued highly "benefits associated with students and partners," would show a higher level of satisfaction concerning their involvement in service-learning. Thus, those who were brought in to the service-learning philosophy and its benefits would be more likely to engage in this teaching methodology and be content with it. This notion is similar to the business example that repeated purchases would come from the loyal and satisfied customers. The challenge is about enticing those who have not involved in service-learning to try this teaching methodology.

Our findings support the comments of Bulot et al. (2006) that being able to learn and support others to learn are great rewards that keep service-learning advocates continuously teaching the courses.

As for understanding the practices for assessing student-learning for the S-L courses, the participants' perceived responses were similar to the findings of others (Lisman, 1998; McAndrews, 2001; Morgridge Center for Public Service, 2012a; University of Maryland, n.d.). The primary assessment methods listed include case discussion, presentations, reflection essays and journal writing. No specific discussion related to assessment of service-learning objectives was given in the open-ended comments.

A surprising sign was the result showing that tenured faculty members had the lowest rating compared to tenure-track and non-tenure-track faculties in "benefits associated with students and partners," "student learning and civic engagement," and "overall satisfaction." This phenomenon probably appears because the tenured faculty may not be concerned with how service-learning can help them obtain promotion or expand research ideas, since they do not have a sense of urgency to achieve tenure status anymore. Nevertheless, it is certainly not ideal to witness the most experienced group of teachers not valuing the benefits of service-learning or losing motivation to try different forms of experiential learning.

Findings showed, regardless of one's previous involvement in service-learning, all participants held a preferable view toward service-learning and believe it could bring positive impact. However, apparent challenges still exist if the surveyed institution attempts to promote and adopt a service-learning model into its curriculum. The participants had expressed fairly low ratings concerning university-wide support in "teaching and promotion" ($M = 1.57$ and "logistics and strategies" ($M = 1.37$, on a five-point scale). As illustrated in the open-ended comments, 13 responses addressed by those who had taught service-learning courses before, demanded clear promotional policies, adequate funding, and time release for supporting faculty's service-learning engagement.

Those types of support are exactly the necessary key elements to implement institution-wide service-learning programs as proposed by Young et al. (2007). This statement may seem to be conflicting with the previously discussed message concerning teachers' intrinsic motivation for involving in S-L. Although the intrinsic motivation such as desiring to help students and community partners is a powerful driving force to prompt one to engage in service-learning, it is not the sole factor that would keep motivating a teacher doing service-learning. It is human nature for everyone to be concerned about job security and advancement. Without proper institutional policies in addressing the connections among service-learning with research productivity and promotion, along with lack of financial and logistic support, teachers could decrease their willingness to involve service-learning easily. In other words, both extrinsic and intrinsic influence for engaging in service-learning should be equally emphasized and applied. Institution administrators must consider how to strengthen the extrinsic support that can boost teachers' intrinsic motivation as well.

Young et al. (2007) highlighted many of the strategies that an institution can adopt to recruit and promote service-learning. First, the advocates must address the concerns to their administrators as to how involvement in service-learning can impact faculty's performance evaluation and promotion. As mentioned by Demb and Wade (2012), Eylar (2009), and Young et al. (2007), these types of administrative support and commitment are critical to effectively encourage faculty members knowing about and being involved in service-learning. This means each department and college may need to form committees to reexamine how service-learning can be properly evaluated as a means of scholarly or service activity. Secondly, there should be a collective effort to encourage service-learning through intensive offering of professional development workshops, new faculty orientation sessions, service-learning expositions, and learning communities.

As previously mentioned, service-learning courses are offered in a variety of disciplines and are all different in nature. If the institution really wishes to maximize the efficiency in incorporating service-learning in various academic disciplines, it may be logical for certain divisions, such as nursing, education, public health, and social work to actively target and recruit faculty with service-learning experience. These divisions can also start the service-learning trial courses and programs. The key is to recruit and approach the believer of the service-learning philosophy. Due to the limited size of sample and institution, we hesitate to suggest the concept that female teachers may seem to be more receptive and willing to engage in S-L. Based on the findings of Buzinski et al. (2013), this suggestion may be a good idea to try, since more female teachers are in the fields of nursing, social work, and education that have proven to be more receptive to S-L. It is noted that the institution's Center for Regional Engagement has made an attempt to create "z-designation" courses that highlight a service-learning component. This program attempts to offer students more options to experience different hands-on learning experiences outside of the traditional instructor-oriented lecture-based classes. Apparently the surveyed institution has added many service-learning courses in the art, music, and education courses.

For future study, there is a need to test the relationships among overall satisfaction toward service-learning teaching experience and four other major constructs: (1) motivation for teaching the service-learning (two indicators), (2) perceived benefits associated with service-learning (two indicators), (3) identified impact of service-learning (one indicator), and (4) existing support for teaching service-learning (three indicators). The hypothetical path analysis for proposed model is presented in Diagram 1. The rationale of each construct is displayed in Table 4 that explains how each construct plays a role in service-learning engagement. We assumed that all of the aforementioned constructs may directly impact faculty members' overall satisfaction in teaching service-learning courses. More importantly, faculty members' motivation for engaging in service-learning are influenced by the other three constructs as well. Thus, the three constructs, perceived benefits, impact, and support can be considered as secondary (mitigated) factors that indirectly affect faculty members' overall satisfaction through their primary influence on motivation. In order to properly perform a confirmatory factor analysis (CFA) to test the proposed model, a far bigger sample than the current one must be obtained. The ideal sample size for performing CFAs is to follow the recommended ratio of one indicator (construct) to 20 respondents. Since the proposed model has a total of nine indicators (including the overall satisfaction), using the rule of "minimum 200" seems to be defensible (Kline, 2013). Ultimately, a sample size of 400 or more should be sufficient for retaining high level of validity and accuracy of analysis. If the proposed model can be statistically tested and approved, this should provide a great insight on how to execute a successful service-learning program by focusing on proper elements.

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Table 1. Nine constructs identified through factor analysis

Category and Major Construct	Cronbach α	Category and Major Construct	Cronbach α
1. Perceived Benefits of Service-Learning (n = 85)	.965	85.456	
Benefits Associated with Students & Partners (6 items)--Service-learning helps teachers do the following: communicate with students more effectively, guide students to see the relevance of materials, help students relate to subject matters, and support community, etc.			3.61 (1.28) (overall) 3.70 (1.39) (S-L) 3.49 (1.46) (Non-S-L)
Benefits Associated with Teachers (5 items)—They show how service-learning impacts teachers' teaching style, broaden their professional portfolio contents, and enhance their research ideas.			3.24 (1.09) (overall) 3.32 (1.18) (S-L) 3.14 (1.24) (Non-S-L)
2. Perceived impact of Service-learning (n = 85) (8 items)—They cover items such as: courses that have been taught, faculty relationships with students, partners, and colleagues, personal research agenda, faculty career plans and ideas, and services provided for the community.	.950	75.077	3.47 (0.98) (overall) 3.52 (1.03) (S-L) 3.42 (1.21) (Non-S-L)
3. University-wide Support (n = 85)	.937	72.316	
Support in Teaching & Promotion (6 items)—They are related to assistance with curriculum development course assessment, and student placement, public recognition of effort, and credits toward tenure/promotion.			1.57 (1.40) (overall) 1.59 (1.49) (S-L) 1.54 (1.43) (Non-S-L)
Support in Logistics & Strategies (5 items)—Items are related to transportation assistance for students, faculty assistance for connecting with community partners, insurance assistance for students and funding for student support, travel and materials required for projects.			1.37 (1.33) (overall) 1.38 (1.46) (SL) 1.36 (1.39) (Non-S-L)
4. Usefulness of CRE Support (n = 48) (6 items)—Items cover helpfulness of staff, placement support, relationship building, paper work filing and documentation, and overall satisfaction with the support.	.970	89.337	4.15 (0.94)
5. Motivation for Teaching Service-learning Courses (n = 48)	.912	74.946	
Student Learning and Civic Engagement (5 items)—Examples include: desiring to learn new things and to connect with students, fostering civic responsibilities, and enhancing student learning.			3.89 (1.14)
Personal Gains and Extrinsic Influences (5 items)—Examples include: meeting tenure/promotion requirement, encouragement from others, using service-learning as a new research strategy, and enhancing contents of portfolio.			2.83 (1.20)
6. Overall Satisfaction toward Service-Learning (n = 48)(2 items)—Instructors are stratified with service-learning experience and will implement service-learning as a teaching method.	.918		4.04 (1.09)

S-L: response from those who had taught service-learning course before

Non-S-L: response from those who had not taught service-learning course before

Table 2. Identification of best predictor of overall satisfaction toward service-learning

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.013	.311		-.041	.968
BAS&P	.968	.072	.933	13.468	.000

a. Dependent Variable: Overall Satisfaction

Table 3. Additional expected support and commitment toward S-L (n = 27)

General Theme	Frequency Count
Relating to support in logistics & strategies	9
Relating to support in teaching & promotion	4
Faculty being receptive to S-L	9
Faculty not being supportive to S-L	4
Not sure	1

Table 4. Top-5 assessment methods for measuring objectives

Rank	Method and %
1	Class/Case discussion (88.2%)
2	Short reflection essay (62.5%)
3	Group oral presentation (53.3%)
4	Journal (44.8%)
5	Individual presentation (44.1%)