© *Journal of Higher Education Outreach and Engagement*, Volume 18, Number 1, p. 89, (2014)
 ISSN 1534-6104

Assessing the Student, Faculty, and Community Partner in Academic Service-Learning: A Categorization of Surveys Posted Online at Campus Compact Member Institutions

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Abstract

Service-learning is an instructional strategy used by faculty at hundreds of institutions, including those that are members of Campus Compact, an organization committed to service-learning and community/civic engagement. For this study, researchers examined a variety of online survey assessment tools used in service-learning projects. The study's purpose is to demonstrate what questions, concepts, and categories are currently being utilized for evaluation of (1) students, (2) faculty, and (3) community partners from 121 Campus Compact member institutions, using Gelmon, Holland, Driscoll, Spring, and Kerrigan's *(2001)* taxonomy. Six unique concepts emerged from the study that diverged from Gelmon et al.'s taxonomy. This research provides a survey tool that is readily accessible for educators' use when constructing service-learning assessment. The article concludes with recommendations to educators for use of assessment surveys.

Introduction

In concert with community engagement, service-learning as an educational discipline has grown extensively in the past 20 years, supported by Campus Compact, a "national coalition of more than 1,100 college and university presidents representing some six million students who are committed to fulfilling the civic purposes of higher education" *(Campus Compact, 2011a)*. The presidents of Brown University, Georgetown, Stanford, and the president of the Education Commission of the States founded Campus Compact in 1985. They collaborated to construct five basic principles pertaining to service-learning and civic engagement in higher education: (1) students, faculty, staff, and higher education institutions participate in public and community service; (2) civic concern issues are committed to the forefront in civic discourse; (3) initiatives promote productive collaborations between colleges and communities; (4) opportunities are developed that increase student, faculty, staff, and alumni involvement in citizenship-building

service activities; and (5) the classroom supports service-learning *(Campus Compact, 2011b)*.

Service-learning is gaining recognition as an essential component of promoting civic engagement in the classroom. In its formative years, Bringle and Hatcher *(1995)* defined service-learning as a course-based, organized educational activity that has a reflection component and enhances civic responsibility. "Civic engagement is important to service-learning because when service-learning programs address specific knowledge and skills, civic development is made explicit to students as a core learning outcome" *(National Service-Learning Clearinghouse, 2011)*. As students experience civic engagement in the form of service-learning, they gain work experience, personal satisfaction, and potentially a higher level of ethical principles than they had previously *(Waters & Carmichael Burton, 2008)*. The present study adds to the understanding of service-learning by providing a foundation for a best practices survey tool that is largely quantitative in nature, offering the potential to shore up areas of methodological weakness that exist in service-learning literature *(Eyler, 2011)*. Generally, service-learning research that uses qualitative methods consists of descriptive program evaluations of outcomes. Bringle and Hatcher *(2000)* note a widespread deficiency in service-learning research, namely its "tendency to report specific findings, most typically from case studies (e.g., one class, one program, one institution) without making justified generalizations about practice, theory, and policy" *(p. 73)*.

The present study addresses this deficiency by encouraging research using principally quantitative data from survey instruments intended for numerous classes, programs, and institutions, contributing to generalizations about practice, theory, and policy. Gelmon, Holland, Driscoll, Spring, and Kerrigan *(2001)* developed an assessment strategy in conjunction with Campus Compact as part of a large service-learning and civic engagement assessment project. The resulting benchmark publication was disseminated to Campus Compact members and remains a primary assessment publication of Campus Compact more than a decade later *(Campus Compact, 2013)*. This work yielded a specific assessment matrix for measuring outcomes for students, faculty, community partners, and institutions. Its assessment strategies and recommendations for survey concepts form a useful framework for this study. Given the recognition of the Gelmon et al. text and the direct connection to Campus Compact, this study anticipated some of their recom-

mendations for survey concepts that would be directly reflected in online surveys collected from Campus Compact institutions.

To better understand the effectiveness and quality of service-learning initiatives for students, faculty, and university, assessment methods should be front and center as a vital part of the process *(Gelmon et al., 2001)* and need to be rigorously applied *(Astin, Vogelgesang, Ikeda, & Yee, 2000; Furco & Billig, 2002).* Sometimes universities invest significant resources into service-learning and community engagement; subsequent objective assessment of service-learning both informs the impact of service-learning on students, faculty, and university and provides accountability for these initiatives. Thus, this project seeks to document the approach that universities are promoting for assessment of service-learning and to provide an updated recommendation of survey items for assessment of service-learning for students, faculty, and community partners. First, this study describes service-learning assessment and discusses formative and summative assessment along with formal and informal types of assessment. Second, Gelmon et al.'s assessment approaches are explained. Finally, an extensive survey, obtained by culling online Campus Compact websites for service-learning assessment tools, is presented that could be advantageous for use by instructors and institutions.

Assessment Defined

Bringle, Philips, and Hudson *(2004)* acknowledged the need for scientific research and subsequent measurement using standardized scales for assessing program evaluation of both service-learning and civic engagement. In this context, assessment is "a process by which educators use students' responses to specially created or naturally occurring stimuli in order to make inference about student knowledge, skills or affective status" *(Popham, 2005).* Given the premise that students, faculty, and the university would like to understand the effectiveness of service-learning to improve the quality of service-learning, objective assessment tools naturally follow as an essential part of the process *(Driscoll, Holland, Gelmon, & Kerrigan, 1996; Gelmon et al., 2001).* In this study, both formative and summative types of assessments and how educators can implement these kinds of assessment within service-learning courses are explained.

Formative Assessment

Formative assessments are formal or informal assessments that occur throughout the semester. These assessments are widely

accepted as a method of improving student learning (*Popham, 2008).* Students are encouraged to become partners in the learning process, rather than their grades being the focus of attention. "Formative assessment seeks to inform instruction and help students use the results to enhance their own learning. It is important because feedback given only at the end of a learning cycle is not effective in furthering student learning" *(Fluckiger, Tixier y Vigil, Pasco, & Danielson, 2010, p. 136).* This type of assessment supports learning and typically works in congruence with summative assessment. Sometimes formative assessment can take priority over summative assessment in a fundamental shift, even to the point of being used for validation and accreditation rather than summative assessment *(Ayala et al., 2008; Taras, 2008).* Empirical evidence seems to suggest that formative assessment can increase student motivation and learning if used correctly *(Black & Wiliam, 1998; Cauley & McMillan, 2010)*.

Formative assessments are further distinguished as formal or informal. Formal assessments are assessments that have been researched and tested and measure the success of a student's work and/or course or program overall. Because of this protocol, these assessments are frequently quantitative. Informal assessments are not formally researched, but have been used pedagogically and anecdotally. These kinds of assessments check the progress of students' understanding and provide insight into the depth of the students' comprehension. Formal and informal assessments differ mainly in being structured or unstructured. Formal structured assessments have been researched and tested before their use, unlike the informal unstructured assessments. Table 1 provides examples of these kinds of assessments.

Table 1. Examples of Formative and Summative Assessments

Formative Assessments	Summative Assessments
Formal	Formal
Structured class presentations	Community partner/peer evaluations
Structured peer evaluations	Exams or quizzes
Surveys	Final report, paper, or project
Structured writing evaluations	Portfolios/e-folios
Structured interviews	Surveys
Structured community partner observations	Structured Course evaluations
	Standardized assessment
	Structured midterm report

Informal	Informal
Reflective papers	
Journal writing	Journal writing
Class discussions	Unstructured self-report
Instructor observations	Unstructured service-work sheets
Community partner observations	Unstructured exit interviews
Online discussions	Unstructured performance-based evaluation
Unstructured interviews	Focus groups
Class activities	Class activities
Focus groups	

Informal formative assessment. Ongoing informal formative assessment provides feedback to students using informal methods such as making observations and questioning students about content. The teacher assesses the feedback and ascertains what instruction is needed to correct student errors and improve learning *(Cauley & McMillan, 2010).* Ash, Clayton, and Atkinson *(2005)* constructed academic learning objectives with associated guiding questions that could be applied for reflective lessons in the service-learning classroom. Their hierarchical learning objective levels are: (1) Identify and Describe, (2) Apply, (3) Analyze, and (4) Evaluate. From this model, Ash and Clayton *(2009)* developed the DEAL model, which has three steps:

> (1) Description of experience in an objective and detailed manner; (2) Examination of those experiences in light of specific learning goals or objectives; and (3) Articulation of Learning, including goals for future action that can then be taken forward into the next experience for improved practice and further refinement of learning. *(p. 41)*

Although articulation of learning often comes in the form of qualitative measures of assessment, quantitative methods, which also measure learning, can provide additional insight into the DEAL model.

Formal formative assessment. Courses can embed formal formative assessment with clear protocols at decisive points in a semester, rather than relying on informal observations and student questions for assessment and feedback. This process has three phases: "(1) planning, designing, and developing the embedded assessments, (2) piloting the embedded assessments, and (3) refining the embedded assessments" *(Ayala et al., 2008, p. 317)*. Feedback is without question an indispensable component for the

application of formative assessment in the service-learning course and as an assessment concept has evolved over the years. In the 1970s, feedback was defined as "any of the numerous procedures that are used to tell a learner if an instructional response is right or wrong" *(Kulhavy, 1977, p. 211)*. However, feedback is more complex than simply classifying student responses as right or wrong. "Feedback should help the student[s] understand more about the learning goal, more about their own achievement status in relation to that goal, and more about ways to bridge the gap between their current status and the desired status" *(Sadler, 2010, p. 536)*. A teacher provides constructive feedback by communicating to the student an analysis of the student's response in a timely and efficient manner, with or without a rating/grade.

Summative Assessment

Summative assessments, traditionally generated at the end of the service-learning activity or at the end of the semester, sum up how students achieved assigned tasks and goals. These assessments are typically graded and used to evaluate the students' learning outcomes and achievements and for accreditation. Aggregated results of student work are used to evaluate school effectiveness and set goals or targets for the long term in some school systems *(Harlen, 2009)*. Four areas of interest that can emerge in summative assessment are assessment validity, assessment reliability, a positive impact on teaching and learning, and effective use of resources (e.g., time, cost). Assessment validity means that the summative assessment in fact is consistent with the learning objectives and outcomes and that it measures what it is supposed to measure for a specific purpose. The accuracy of the assessment outcomes determines its assessment reliability and signifies how well the instructor controlled assessment conditions and considered fairness when constructing a test or assessment of a given length or level of difficulty. Whether testing has an overall positive impact on teaching and learning is debatable, since research has uncovered some negative impacts:

- test performance can become more highly valued than what is being learned;
- testing can reduce the self-esteem of lower achieving pupils and can make it harder to convince them that they can succeed in other tasks;

- constant failure in practice tests demoralizes some pupils and increases the gap between higher and lower achieving pupils;
- test anxiety affects girls more than boys; and
- teaching methods may be restricted to what is necessary for passing tests (e.g. neglect of practical work; *Assessment Reform Group, 2006, p. 8)*.

Finally, the practicability of summative assessment is difficult to estimate, since both direct and indirect costs are involved *(Harlen, 2009)*.

Summative and formative assessments are not mutually exclusive and overlap in concept and practice. Summative assessment can be used to improve a student's time management by periodically having parts of a project due and graded throughout the semester, rather than the student waiting until the end of the semester to complete a project. Summative assessment characteristically incorporates concepts from formative assessment such as verbal or written feedback, peer assessment, or writing journal/reflection papers at regular intervals throughout the semester *(Trotter, 2006)*. "Formative assessment justifies summative assessment, clarifies how the parameters have been addressed, and what needs to be done" *(Taras, 2005, p. 470)*. This leads to a discussion of the delineation of summative assessment through the examination of the difference between formal summative assessments and informal summative assessments.

Informal summative assessment. Summative assessments are graded or ranked assessments; therefore, most summative assessments are formal and measure the student's progress at a given point in the semester using some type of protocol. Informal summative assessments are used less frequently than formal summative assessments. Formative assessments, such as journal writing and focus groups, can be utilized as informal summative assessments when the instructor attaches grades and due dates (see Table 1 for examples). Class activities that include both points toward a student's grade and in-class performance-based evaluation can serve as informal summative assessments.

Formal summative assessment. Many assessment tools are available for formal summative assessments, since these kinds of assessment can accumulate and may count toward the student's grade as a record of his or her progress. Formal student summative assessment tools include exams, quizzes, final reports or

projects, surveys, and structured midterm reports. On a broader scale within service-learning, self-reporting instruments are available for instructors to assess the student's view of service-learning or the student's or university's relationship with the community partner, such as those in Gelmon et al.'s *(2001)Assessing Service-Learning and Civic Engagement: Principles and Techniques*, Shumer's *(2003)* Self-assessment for Service-Learning, and Furco's "Evaluation System for Experiential Education" *(1997)*.

Reeb and Folger *(2013)* stress a need for "well-validated measures in service-learning research" *(p. 402)*, and using a wide variety of assessment tools for this purpose. Bringle, Hatcher, and Williams *(2011)*

> posit that a quantitative approach to research on ISL [international service learning] will yield fruitful results that can guide program design, improve practice, test theory, contribute to a knowledge base, and provide a basis for funding and support for program expansion. *(p. 275)*

Although surveys are not the only quantitative method for gathering data, surveys are widely used to collect quantitative data, gathering detailed information about respondents' demographics, knowledge, attitudes, and beliefs. A survey is an "empirical study that uses questionnaires or interviews to discover descriptive characteristics of phenomena" *(Reinard, 2001, p. 225)* which can yield fruitful results. Surveys used in service-learning are generally self-administered and can easily be administered online. Fink *(2009)* lists three reasons for conducting surveys: (1) setting policy or planning a program, (2) evaluating the effectiveness of programs, and (3) obtaining information to guide studies and programs. Surveys' strengths include the following: possible low financial cost to administer, good population coverage, convenience, and results that are precise if questions are well written. Some weaknesses of surveys include potential high financial cost for surveys if administered by phone or in person, inflexible design, lack of data due to lack of cooperation of participants (i.e., potential for nonresponse bias), artificiality of the respondents' answers, and potential self-reporting bias of respondents.

Gelmon et al.'s Assessment Approaches

As noted earlier, Gelmon et al.'s *(2001)* work on assessment provides a comprehensive approach to assessment of service-learning.

As part of this broader work, they developed an assessment matrix for students, faculty, and community partners.

Assessment matrix for student surveys. Gelmon et al.'s *(2001)* assessment matrix for student surveys consists of three broad categories. The first category, "affective student outcomes,"*(p. 23)* based on Astin's *(1993)* work, is concerned with students' psychological changes regarding service-learning and has four component concepts. (1) The awareness of community concept determines students' awareness of community concerns. (2) The involvement with community concept explains the quantity and quality of interactions between students and community partners. (3) The commitment to service concept considers students' attitude toward service and possibility of future service. (4) The sensitivity to diversity concept measures students' attitudes toward work with individuals from unfamiliar or new communities. These four concepts broadly measure a student's affective attitude toward learning about the specific community and the service opportunity.

The second broad category measures "impact on students' cognitive development" *(Gelmon et al., 2001, p. 23)* and has three component concepts: (1) The career development concept examines professional skills gained through the project or awareness of employment opportunities or career interests. (2) The understanding course content concept explores students' ability to connect course goals with the service project or experience. (3) The communication concept studies development of community skills or understanding of the role of communication in community-based projects. The importance of cognitive development highlighted in these three categories connects directly to the mission and goals of institutions of higher learning *(Eyler, 2000)*. These three concepts broadly measure students' perception of their own cognitive learning.

The third broad category is concerned with "students' understanding of themselves as part of a learning community" *(Gelmon et al., 2001, p. 23)* and has three component concepts. (1) The self-awareness concept examines students' recognition/awareness of their strengths and weaknesses when engaging with the community. (2) The sense of ownership concept considers students' autonomy and sense of responsibility when working with the community partner. (3) The valuing of multiple teachers concept describes students' awareness that both community partner and peers may occupy the teaching role along with the instructor. These three concepts broadly measure students' own sense of impact and contributions to the community, project, and class.

Assessment matrix for faculty surveys. Gelmon et al. *(2001)* present seven core concepts for faculty assessment to assess "both the influence of faculty on service-learning and the impact of service-learning on faculty" *(p. 47).* (1) The motivation and attraction of faculty to service-learning concept explores why faculty use service-learning and find it satisfying, which in turn helps faculty recruitment and sustained involvement in service-learning endeavors. (2) The professional development concept addresses the faculty needs for service-learning, including institutional support of their efforts. (3) The impact/influence on teaching concept assesses how service-learning pedagogy can enhance and impact an instructor's efforts to increase student engagement within the community. (4) The impact/influence on scholarship concept reflects that although service-learning typically increases faculty time spent on course preparation, it can also offer new venues of scholarship. (5) The other personal/professional impact concept (e.g., increased faculty volunteerism, mentoring of students) examines an instructor's impact in novel roles within the campus, community, and classroom. (6) The barriers and facilitators concept (e.g., obstacles, workload) identifies facilitators that can ease the instructor's service-learning workload and barriers to needed support. (7) The satisfaction with service-learning experience concept explores ideas such as how instructors who use service-learning provide students with outcomes of community work commitment, new joys of learning, and innovative insights in their prospective careers. These seven concepts assess faculty's own sense of impact on the community, institution, and class.

Assessment matrix for community partner surveys. Gelmon et al. *(2001)* offer two broad, assets-based categories to assess community partners. The first category examines benefits for the community partner and includes three component concepts. (1) The capacity to fulfill organizational mission concept (e.g., types of services presented, number of clients provided for) explores how service-learning could positively affect organizational capacity and strategies. (2) The economic benefits concept (e.g., recruit staff, identify new funding) examines economic benefits or burdens that organizations might experience from participating in service-learning courses. (3) The social benefits concept (e.g., increase volunteer numbers, gain volunteers beyond semester project) assesses the impact that service-learning and the use of students for an activity or project could have on community issues, new connections, and other social benefits. These three concepts reflect

how the service-learning project or activity shapes the community partner's organization.

The second broad category examines the community partner–university relationship framework and includes four component concepts. (1) The nature of the community–university relationship concept explores the nature of how the partnership was established. (2) The nature of community–university interaction concept (e.g., faculty member volunteering at community organization, partner helping with planning project in the classroom) investigates interactions between community partners and the university such as community partners acting as co-educators in the classroom or university representatives meeting with the community partner in some capacity. (3) The satisfaction with partnership concept is essential for both sides of the relationship and assesses how mutual effort in the service-learning project or activity is perceived. (4) The sustainability of partnership concept (e.g., key events, time constraints, meeting goals) addresses the desire for ways to continue a successful relationship between the university and community partner. These four concepts are integral to gaining a clear understanding of the community impact on the university–community partner relationship.

The present study investigated Campus Compact member online surveys that assess the service-learning experience from perspectives of students, faculty, and the community partners. When analyzing these online surveys, the researchers asked the following questions:

> Research Question 1: What student constructs from Gelmon et al.'s *(2001)* matrix for service-learning are being surveyed most frequently by Campus Compact members? Are there additional student constructs that extend Gelmon et al.'s assessment matrix?
>
> Research Question 2: What student constructs from Gelmon et al.'s matrix for service-learning are being surveyed least frequently or not at all by Campus Compact members?
>
> Research Question 3: What faculty constructs from Gelmon et al.'s matrix for service-learning are being surveyed most frequently by Campus Compact members? Are there additional faculty constructs that extend Gelmon et al.'s assessment matrix?

Research Question 4: What faculty constructs from Gelmon et al.'s matrix for service-learning are being surveyed least frequently or not at all by Campus Compact members?

Research Question 5: What community partner constructs from Gelmon et al.'s matrix for service-learning are being surveyed most frequently by Campus Compact members? Are there additional community partner constructs that extend Gelmon et al.'s assessment matrix?

Research Question 6: What community partner constructs from Gelmon et al.'s matrix for service-learning are being surveyed least frequently or not at all by Campus Compact members?

Method

Sample and Procedure

This study presents three comprehensive models of survey questions derived from available online Campus Compact members' survey tools that could help to assess service-learning and its constituents: Student, faculty, and community partner. To address the research questions, the authors collected all available online surveys of Campus Compact members. This sample totaled 174 surveys collected from 121 institutions of higher learning. The researchers downloaded all available online Campus Compact member surveys, dividing them into student, faculty, and community partner surveys according to respondent, and examined the surveys to determine what constructs were surveyed most and least frequently by Campus Compact members. In addition, the researchers explored what constructs could be added to surveys to begin building a systematic service-learning assessment framework for use by universities as a holistic model.

The 174 surveys analyzed in this study were harvested by clicking into all of the Campus Compact members' websites listed under "All Members" *(Campus Compact, 2012)*, and then searching for service-learning survey tools from each school's website. For example, in the "All Members" list, a research assistant could click on the link for Boise State University. Once at the university homepage, the research assistant could type service-learning or a similar search term in the search box to ascertain whether Boise

State University provides online survey tools for instructors. After landing on the service-learning home page, a researcher could then click on "forms" and find a form titled "Supervisor Evaluation of Student," a survey tool used for a community partner to evaluate a student. The surveys were qualitatively coded to create three models of assessment that can be used by instructors or institutions: student, faculty, and community partner.

The research assistant created extensive pages of data that included links to the Campus Compact member sites, then downloaded all available survey tools, scanned the documents, and sorted them by state in a database. One of the researchers double-checked the research assistant's work on the data for accuracy every week for two semesters. Specifically, the research assistant visited the national Campus Compact website (www.compact.org) and found the alphabetical list of links for all college and university Campus Compact members. After landing on the linked page for the college or university, the research assistant looked for a search bar to navigate the website, using search terms such as "service-learning," "community," "civic," and/or "engagement." Once the service-learning or community engagement page was found, the research assistant explored the page for terms such as "forms," "resources," or "program models." The research assistant recorded information from each website, including the name of the college or university, the URL, and contact information. Then the research assistant sorted the information into one of four categories as follows: (1) "no service-learning information"—meaning no portion of the school's website was dedicated to a service-learning program/department (n = 288, 25.1%); (2) "no online assessment"—meaning a portion of the school's website was dedicated to its service-learning program/department, but no online assessment tools were listed (n = 717, 62.6%); (3) "online assessment"—meaning one or more types of assessment surveys were available online and could be downloaded (n = 121, 10.6%); and (4) "website down"—meaning the Campus Compact member's website was unavailable (n = 19, 1.7%). Service-learning departments/programs have many different names from website to website: for example, community-based learning, center for community engagement, civic engagement, experiential learning, service-learning, center for community learning, office of service-learning and community action, and center for community involvement. The survey tools that were found on the websites included three types differentiated by respondent: student assessment of the service-learning program and/or community partner, community partner assessment of the

service-learning program and/or student, and instructor assessment of the service-learning program.

Data Analysis

Subsequently, the downloaded surveys were sorted according to survey respondent (student, faculty member, or community partner) and then into formative and summative surveys within each respondent grouping. The data were sorted into six groups: (1) student formative surveys, (2) student summative surveys, (3) faculty formative surveys, (4) faculty summative surveys, (5) community partner formative surveys, and (6) community partner summative surveys. Then a research assistant conducted an initial coding to group together similar questions into types of questions: closed questions, open-ended questions, or both closed and open-ended questions (see Table 2). For example, summative student surveys from 13 different institutions included an open-ended question that asked, "Explain how this service-learning project met or exceeded your goals and objectives." Eight of the 13 surveys used this exact wording, and the remaining five had variations such as "Explain how this project met your goals for the course" and "How did this project meet your objectives?"

Table 2. Question Themes by Respondent, Type of Assessment, and Kind of Question

Survey Variables	Student	Faculty	Community Partner
Formative assessment			
Open questions	2	6	0
Closed questions	6	0	3
Both open and closed	0	0	3
Total Formative	8	6	6
Summative assessment			
Open questions	23	11	3
Closed questions	39	9	37
Both open and closed	11	5	16
Total summative	73	25	56

Note. N = 174.

This initial sorting process was supervised and double-checked for accuracy, followed by verification of the types of questions and thematic coding of the question types. Existing research on service-learning assessment guided the qualitative coding process in this study. The general theoretical concepts from chosen topic-oriented codes informed the perspective of the researchers, yet permitted recognition of emerging categories from the text *(Kelle, 2004)*. "A heuristic coding scheme for the structuring of qualita-

tive data may contain both general theoretical concepts drawn from grand theories and topic-oriented codes draw from stocks of everyday knowledge" *(Kelle, 2004, p. 450)*. For the purposes of this study, knowledge regarding assessment was drawn from Gelmon et al. *(2001)*, the primary text published by Campus Compact on assessment of service-learning and civic engagement. Categories used in Gelmon et al. served as a starting place for analysis, and then the qualitative coding process allowed emergent categories to be derived from the data beyond these specific categories. This particular approach to qualitative coding allows the researcher to engage in theoretical integration of existing theory rather than a grounded theory approach *(Corbin & Strauss, 2008).*

Initial coding categories for student surveys. Gelmon et al.'s *(2001)* assessment matrix for student surveys consists of three broad categories. The first category, "affective student outcomes," based on Astin's *(1993)* work, is concerned with students' psychological changes regarding service-learning and has four concepts: (1) awareness of community, (2) involvement with community, (3) commitment to service, and (4) sensitivity to diversity. The second broad category measures "impact on students' cognitive development" *(p. 23)* and has three concepts: (1) career development, (2) understanding course content, and (3) communication. The third broad category is concerned with the "students' understanding of themselves as part of a learning community" *(p. 23)* and has three concepts: (1) students' self-awareness, (2) sense of ownership, and (3) valuing of multiple teachers.

Initial coding categories for faculty surveys. Gelmon et al. *(2001)* present seven concepts for faculty assessment: (1) motivation and attraction of faculty to service-learning, (2) professional development, (3) impact/influence on teaching, (4) impact/influence on scholarship, (5) other personal/professional impact (e.g., increased faculty volunteerism, mentoring of students), (6) barriers and facilitators (e.g., obstacles, workload), and (7) satisfaction with service-learning experience.

Initial coding for community partner surveys. Gelmon et al. *(2001)* propose two categories to assess community partners. The first category examines service-learning's benefits to the community partner and includes: (1) capacity to fulfill organization's mission, (2) economic benefits (e.g., recruit staff, identify new funding), and (3) social benefits (e.g., increase volunteer numbers, gain volunteers beyond semester project). The second category is the community partner–university relationship that outlines: (1) the nature of the community-university relationship, (2) the nature

of the interaction between community and university partners, (3) the general satisfaction with the partnership, and (4) sustainability of the partnership.

Cohen's kappa was computed to establish intercoder reliability, correcting for chance agreement. One coder coded the entire data set using the thematic categories and identified new themes based on data that did not fit into Gelmon et al.'s *(2003)*existing themes. Once the additional themes were established and clearly defined, a second coder then coded the entire student formative (n= 8), faculty formative (n = 6), faculty summative (n= 25), and community partner surveys (n = 6) for 100% overlap between coders. The second coder also coded 20 of the student summative surveys (n = 73) for a 27.4% overlap and 19 of the community partner summative surveys (n = 56) for a 33.9% overlap. Intercoder reliability of all categories for all survey types reached acceptable levels *(Cohen, 1960, 1968).* Table 3 shows values for Cohen's kappa by survey type and theme.

Table 3. Reliability Estimates by Respondent, Type of Assessment, and Kind of Question

Respondent/Question Type	Theme	Number of Questions	Cohen's Kappa
Student			
Formative open-ended	Self-awareness	2	1.00
Formative closed	Commitment to service	1	1.00
	Career development	1	1.00
	Understanding course content	1	1.00
	Understanding course details	1	1.00
Summative open-ended	Commitment to service	2	1.00
	Career development	1	1.00
	Understanding course content	1	0.77
	Self-awareness	4	0.91

Summative closed	Awareness of community	1	1.00
	Community involvement	1	1.00
	Commitment to service	1	1.00
	Leadership*	1	0.88
	Understanding course content	1	1.00
	Understanding course details*	2	0.86
	Understanding service learning method	1	1.00
	Benefit to community partner	1	1.00
	Resources	1	1.00
Faculty			
Formative open-ended	Course/project description*	3	1.00
Summative open-ended	Impact/influence on teaching	2	0.88
	Impact/influence on community partner*	1	1.00
	Satisfaction with service-learning experience	2	0.94
	Course/project description	1	1.00
Summative closed	Impact/influence on teaching	1	0.92
	Impact/influence on community partner	1	0.91
	Other personal-professional impact	1	0.87
Community Partner			
Formative open-ended	Nature of community-university partnership	4	1.00
Formative closed	Nature of community-university partnership	3	1.00
Summative open-ended	Capacity to fulfill organizational mission	1	1.00
	Nature of community-university partnership	2	0.87
	Nature of the community-partner interaction	3	1.00
	Satisfaction with partnership	1	1.00
Summative closed	Capacity to fulfill organizational mission	1	1.00
	Nature of community-university partnership	2	1.00
	Nature of community-university interaction	3	1.00
	Sustainability of partnership	1	1.00

Note. Unique concepts/categories added to Gelmon et al. (2001) concepts/categories. There were no faculty formative closed questions.*

Results

The results were grouped according to the following schema. First, students, faculty, and community partners each had their own section of questions as identified on the accompanying tables. Second, questions were bifurcated into formative and summative questions, and subsequently into open-ended and closed questions for each constituent. Categories of questions according to Gelmon et al. *(2001)* specifically for the student constituent are located after the colon in each entry in row 1 of Table 4. These student categories grouped questions as they related to the learning community category, affective outcomes category, or cognitive development category. Question concepts were derived from Gelmon et al. with six unique concepts emerging in this research: (1) leadership, (2) understanding course details, (3) understanding the service-learning instructional method, (4) course/project description, (5) impact/influence on the community partner, and (6) commitment to service-learning. Finally, the column "Schools with similar responses" addressed whether questions were used frequently or seldomly within Campus Compact member surveys.

Student Surveys Analysis

> Research Question 1: What student constructs in service-learning courses are being surveyed most frequently by Campus Compact members? Are there unique student constructs?

Seventy-three Campus Compact members used summative open-ended and closed questions for student surveys most frequently, and eight university service-learning programs used online formative assessment survey questions for students. For example, 28 school surveys asked the student these summative open-ended questions: "Do you feel a greater sense of responsibility to the community because of this experience?" (i.e., affective outcome category) and "Were you able to understand the connection between the service-learning project and your course subjects?" (i.e., cognitive development category). Three unique student concepts emerged: (1) understanding course details, (2) leadership, and (3) understanding service-learning as an instructional method. See Table 4.

Table 4. Formative and Summative Student Questions by Question Concept

Concept: Category	Question	Schools with Similar Responses
Formative Open-Ended Self-awareness/ Part of learning community	What are your significant accomplishments or successes of the past month/week?	2
	What were the challenges of the past month/week?	2
Total Formative Open-Ended		4
Formative Closed		
Commitment to service: Affective outcome	Do you feel it is important to give back and work to help your community?	3
Career development: Cognitive development	Will service in the community help you to choose a future career path?	3
Understanding course content: Cognitive development	Did you see the connection between the service-learning project and the course?	3
Understanding course details*. Cognitive development	Do you clearly understand your goals and objectives and/or responsibilities?*	3
Total Formative Closed		12
Summative Open-Ended		
Commitment to service: Affective outcome	What are your recommendations for using this project in the future?	17
	How do you define service-learning? What are your expectations of service-learning?	5
Career development: Cognitive development	What were the specific tasks and skills acquired as part of this project?	15
Understanding course content: Cognitive development	How was this experience connected to your classroom topics and knowledge?	14
Self-awareness: Part of learning community	Explain how this service-learning project met or exceeded your goals and objectives.	13
	What were the challenges of this project?	14
	What were the successes of this project?	12
Total Summative Open-Ended		107
Summative Closed		
Awareness of Community: Affective outcome	Do you feel a greater sense of responsibility to the community because of this experience?	28
Community involvement: Affective outcome	Have you ever volunteered before this course?	9

Concept: Category	Question	Schools with Similar Responses
Leadership*: Cognitive development	Did this service-learning course help you to develop your personal leadership skills?*	10
Understanding course content: Cognitive development	Were you able to understand the connection between the service-learning project and your course subjects?	28
Understanding course details*: Cognitive development	How many hours did you serve/work?*	12
Understanding service-learning instructional method*: Cognitive development	Do you have a clear understanding of service-learning?*	11
Community Involvement: Affective outcome	Do you feel that the work that you did as part of this project benefitted the community?	20
	Did your agency provide you with the support you needed?	21
Total Summative Closed		161

*Note.*Unique category/concept added to Gelmon et al.'s (2001) categories/concepts. There were no faculty formative closed questions.*

> Research Question 2: What student constructs in service-learning courses are being surveyed least frequently or not at all by Campus Compact members?

Campus Compact members used formative open-ended and closed questions for student surveys least frequently. For example, only two school surveys asked the student these questions: "What are your significant accomplishments or successes of the past month/week?" (part of learning community) and "What were the challenges of the past month/week?" (part of learning community). Several concepts in Gelmon et al.'s *(2001)* assessment guide were not found in the coding of student surveys, such as "sensitivity to diversity," "sense of ownership," "communication," and "valuing of pedagogy of multiple teachers."

Faculty Surveys Analysis

> Research Question 3: What faculty constructs in service-learning courses are being surveyed most frequently by Campus Compact members? Are there unique faculty constructs?

Twenty-five Campus Compact members used summative closed questions for faculty surveys most frequently, and six universities used online formative assessment survey questions for faculty. For example, 12 school surveys asked the faculty this summative closed question: "Will you continue to use service-learning as part of your course?" Eleven school surveys asked the faculty "Did service-learning enhance the course?" Three unique faculty concepts emerged: (1) course project/description, (2) influence or impact on community partner, and (3) commitment to service-learning. No closed questions were found for faculty formative assessments. See Table 5.

Table 5. Formative and Summative Faculty Questions by Question Concept

Question Concept	Question	Schools with Similar Responses
Formative Open-Ended		
Course project description	Describe how your course is structured.*	2
	What are the goals and objectives of your course?*	5
	How will the service-learning portion of the course relate to course objectives?*	2
Total Formative Open-Ended		9
Summative Open-Ended		
Impact/influence on teaching	Explain any changes you plan to make to future service-learning projects in your course.	0
	In what ways did service-learning enhance the course content?	6
Community partner impact/influence	How did your students contribute to your partner organization's goals?*	4
Satisfaction with service-learning experience	What were the successes of the project?	4
	What were the challenges of the project?	7
Course/project description*	Explain how the project met your goals and objectives*	7
Total Summative Open-Ended		32
Summative Closed		
Impact/influence on teaching	Did service-learning enhance the course?	11

Question Concept	Question	Schools with Similar Responses
Community partner impact/influence*	Was the service-learning component of your course a service to the community?	7
Other personal/professional impact	Would you recommend other instructors incorporate service-learning into their course?	4
Commitment to service-learning*	Will you continue to use service-learning as part of your course?	12
Total Summative Closed		24

*Note.*Unique category/concept added to Gelmon et al.'s (2001) categories/concepts. No formative closed questions were found.*

> Research Question 4: What faculty constructs in service-learning courses are being surveyed least frequently or not at all by Campus Compact members?

Campus Compact members used formative open-ended questions for faculty surveys least frequently. For example, only two school surveys asked the faculty these questions: "Describe how your course is structured" and "How will the service-learning portion of the course relate to course objectives?" Several of the concepts in Gelmon et al.'s *(2001)* assessment guide were not found in the coding of the faculty surveys, such as "motivation and attraction of faculty to service-learning," "professional development," "impact/influence on scholarship," and "barriers and facilitators."

Community Partner Surveys Analysis

> Research Question 5: What community partner constructs in service-learning courses are being surveyed most frequently by Campus Compact members? Are there unique community partner constructs?

Fifty-six Campus Compact members used summative questions for community partner surveys most frequently. For example, nine school surveys asked the community partner "What contributions did the students make to your organization?" Seven school surveys asked the community partner "What challenges did you and the students face as part of this project?" No unique community partner concepts emerged. See Table 6.

Table 6. Formative and Summative Community Partner Questions by Question Category

Question Concept	Question	Schools with Similar Responses
Formative Open-Ended Nature of community-university partnership	Explain project that our students are working on.	1
	What are the current challenges?	1
	What are the successes?	1
	What are your recommendations for improving the student service-learning experience?	1
Total Formative Open-Ended		4
Formative Closed		3
Nature of community-university partnership	Are you satisfied with the student contributions?	
	Have the students established a relationship with your organization and community that you serve?	2
	Is the student on time and dependable?	4
Total Formative Closed		9
Summative Open-Ended Capacity to fulfill organizational mission	What were your organization's goals and objectives in working with our service-learning students?	3
Nature of community-university partnership	What challenges did you and the students face as part of this project?	7
	What contributions did the students make to your organization?	9
Nature of community-university interaction	What were the students' duties with your organization?	2
Satisfaction with partnership	What benefits do you think our students received by working with your organization?	8
Total Summative Open-Ended		29
Summative Closed		
Capacity to fulfill organizational mission	Were the students able to achieve the goals and objectives that you anticipated to meet your community's needs?	12
Nature of community-university partnership	Were the students prepared for the work they did with your program?	10
	Did the student(s) demonstrate an understanding of your organization's mission?	11

Question Concept	Question	Schools with Similar Responses
Nature of community-university interaction	Were the students reliable and punctual?	32
	Did the students follow directions and show genuine effort?	26
	Did the students use appropriate communication skills?	14
Sustainability of partnership	Are you interested in working with service-learning students in the future?	11
Total Summative Closed		116

Research Question 6: What community partner constructs in service-learning courses are being surveyed least frequently or not at all by Campus Compact members?

Campus Compact members used formative open-ended questions for community partner surveys least frequently. For example, only one school survey asked the community partner "What are the current challenges?" Only one school survey asked the community partner "What are your recommendations for improving the student service-learning experience?" No unique concepts or categories were found in the community partner data. Two concepts from Gelmon et al.'s *(2001)* assessment guide were not found in the coding of the community partner surveys: "economic benefits" and "social benefits."

Discussion

The results of this study indicate that 121 Campus Compact member universities and colleges assess students, faculty, and community partners similarly, but not comprehensively. In many question categories only a few schools had similar questions, especially in the student formative question category, the faculty formative and summative open-ended question categories, and the community partner formative and summative open-ended question categories. The results illustrate that summative questions were preferred over formative questions on the surveys for all three constituents: student, faculty, and community partner. In addition, the analyzed surveys overlooked several themes from Gelmon et al. *(2001)*, including the following for the students: sensitivity to diversity, sense of ownership, communication, valuing of multiple

teachers; for the instructors: motivation and attraction of faculty to service-learning, professional development, impact/influence on scholarship, barriers and facilitators; and for the community partners: economic benefits and social benefits. In addition, six unique concepts emerged: (1) leadership, (2) understanding course details, (3) understanding the service-learning instructional method, (4) course/project description, (5) impact/influence on the community partner, and (6) commitment to service-learning.

Unique Concepts

Leadership emerged as a unique concept, with one summative open-ended question asking if the student developed personal leadership skills, and *understanding course details* was a unique concept, with two summative open-ended questions about the student's total hours of work and whether the tasks and assignments were clear. *Understanding course details* was also found in the formative assessment survey questions for students section, with one question asking if the student clearly understands his or her goals, objectives, and responsibilities. A unique concept, *understanding service-learning as an instructional method,* was added to describe questions that ask students whether they have a clear understanding of what service-learning entails. This unique concept was grouped under the cognitive development category that Gelmon et al. *(2001)* established.

For faculty, three formative open-ended questions were coded under the unique concept *course/project description* that asked how the course was structured, how service-learning related to the course objectives, and how goals and objectives related to the course. One question was coded under the unique concept *impact/influence on community partner*, asking if faculty felt that their course was a service to the community. Finally, one question was coded under the unique concept *commitment to service-learning,* asking faculty if they would continue using service-learning as part of the course.

Formative Questions for Assessment

It became evident that Campus Compact members who had assessment tools available online were not using questions for formative assessment as frequently as questions for summative assessment. Nevertheless, this could be explained from the viewpoint that formative assessment is used within particular classroom contexts as a reflection exercise, whereas summative assessment is

typically used more as a campus-wide survey or at the end of the semester for community partners. Formative assessment could be described as assessment *for* learning, whereas summative assessment could be described as assessment *of* learning. Formative assessment allows the student to participate in constructing knowledge and engages the student as an active learner throughout the semester through feedback mechanisms such as dialogue and participation *(McDowell, 2012)*. This valuable type of assessment asks for feedback from students, and that feedback allows the instructor to adjust teaching methods during the semester. In response to the amended teaching methods, the students adjust their learning approach. Since formative assessment occurs throughout the semester, formative assessment measures have a function similar to that intended for *reflection* in service-learning.

> While reflection, "the intentional consideration of experience in light of particular learning objectives" *(Hatcher & Bringle, 1997, p. 153)*, is one of the most important principles of good practice in the literature *(Honnet & Poulsen, 1989)*, there is reason to believe that reflection gets rather short shrift in typical service-learning experiences. *(Eyler, 2002, p. 518)*

This study reflects the short shrift that use of reflection receives in service-learning, since formative questions found online were few. Yet students must use structured continuous reflection or "reflective judgment" to attain the high levels of cognitive development necessary for understanding and managing social issues *(Eyler, 2002)*. The formative questions found in the tables can be used for intentional structured reflection, encouraging cognitive development. Instructors can integrate and guide reflection (i.e., formative assessment) throughout the semester, so that a student carefully considers knowledge and/or beliefs and how to support knowledge or beliefs, along with results of those beliefs or knowledge *(Dewey, 1933)*. At the completion of the project, reflection is vital: reflecting on the project, perhaps professionally presenting the project to the community partner, and afterward summatively assessing the experience. The DEAL model *(Ash & Clayton, 2009)*, created for reflection, includes prompting questions that can be used to guide students to critically reflect on academic enhancement, personal growth, and civic engagement. For example, the DEAL model has prompts for the student's personal growth, such as: "What did I learn?, "How did I learn it?," "Why does it matter?"

and "What will I do in light of it?" The model has proved to be a rigorous tool for assessing reflective learning *(Molee, Henry, Sessa, & McKinney-Prupis, 2010)*. Thus far, reflection is used rather sparsely in comparison to summative assessment and assessing reflection is difficult to accomplish *(Molee et al., 2010)*.

In the survey tables, formative questions were bifurcated into open-ended and closed questions. Formative *open-ended* questions are qualitative in nature, and their purpose is to interpret social interactions in order to understand the relationship more deeply. The respondent is invited to answer formative open-ended questions with a unique response. The formative *closed* questions are quantitative in nature and their purpose is explaining, predicting, and generalizing about the population under study.

Summative Questions for Assessment

Summative and formative assessment could be considered interdependent and not necessarily discrete categories *(Taras, 2010)*. Taras argues:

> Summative assessment must come first: it is necessary to assess the quality of the work before feedback can be given for the learner to use. Feedback cannot come from thin air: examining the work with implicit or explicit criteria and standards will result in judgments. What differentiates summative and formative assessment is that the latter is used by the learner to update and improve the work (or, at the minimum, to understand what would need to be done and how). *(p. 127)*

Nevertheless, for this study, summative assessment is primarily used to judge learning and frequently had high-stakes consequences, while formative assessment was primarily used to improve learning *(Crisp, 2012)*. Formative assessment always requires feedback, whereas summative assessment does not *(Taras, 2010)*. For survey construction, whether to use open-ended, closed questions, or both is a matter of preference rather than privileging one type of question over the other *(Andres, 2012)*. A variety of questions, both closed and open-ended, contributes a mixed-methods approach to the research. Open-ended questions, qualitative in nature, which allow a respondent to provide answers in his or her own words, have advantages such as allowing the respondent to develop a topic from the survey, bring up a new issue, or address a sensitive topic *(Andres, 2012)*. Closed dichotomous questions are advantageous

because they are simple and specific and can be tailored to be followed by an open-ended response factor such as "Please use the space below to explain your answer" *(p. 71).* Unordered response categories, ordered response categories, and rating scales are other types of response categories to consider. All the types of questions with response categories are closed questions, quantitative in nature, which can lead to generalizability in results.

Limitations. While these surveys were posted online, the researchers did not know how many students, faculty, or community partners were assessed with each measure. Additionally, the researchers did not have data regarding the specific validity or reliability of any of the surveys examined. Thus, concepts coded in this study are representative of the posted campus compact surveys, but have not been validated. Another limitation is what is posted on a university website at a particular point in time is not necessarily a reliable indicator of whether or not the university has a survey available. Some surveys were only available by use of a password, so this study could not include those surveys. Finally, using only Campus Compact institutions' surveys is limiting, since there are many more institutions that use service-learning than Campus Compact members.

Future research. The database of institutional assessment was not used for this research because it is presently being analyzed for a future study. This institutional assessment data was collected simultaneously with the community partner, student, and faculty assessment data. The future research of this assessment data will address specifically how universities are using their online assessment instruments toward institutionalization and whether this is mediated by institutional variables such as institutional type (e.g., community college, graduate research institution). Moreover, each of the other three constituents—student, faculty, and community partner—will be researched separately, examining current assessment studies about each constituent. Assessment tools obtained from these studies could be used to create aggregate assessment survey tools for assessing a student's learning outcomes, helping with a university's accreditation purposes, evaluating outcomes of service-learning courses on campus, and evaluating the service-learning relationship between the community partner, institution, student, and faculty. A future study could address how the 121 institutions used the survey tools; for example, whether the surveys were administered by a service-learning office or by faculty in their classes. Another study could mine the list of Carnegie Foundation community-engaged institutions' websites for assessment data to

answer the following question: Is there a difference in the quantity and kinds of service-learning surveys that an institution provides to its constituents, based on institutional variables of interest (e.g., type of institution, Carnegie community-engagement classification, etc.)?

Conclusion

Suggestions for using unique concepts. All of these unique concepts have merit, and the questions found in the tables accompanying these concepts are available to develop surveys using the unique concepts. Several questions align with the unique concept *understanding course details* (see Table 4), such as "Do you clearly understand your goals and objectives and/or responsibilities?" This formative question could be used for a journal entry, a reflective paper, a class discussion topic, or unstructured interviews by the instructor during the semester (see Table 1). Students' understanding of the community partner's goals and objectives, and/or the responsibilities of the service-learning project, found in the unique concept *understanding course details*, is essential for the engaged activity to proceed efficiently. Leadership skills, as noted in the unique concept *leadership,* are becoming increasingly important for students to obtain. One summative question aligns with this concept: "Did the service-learning course help you to develop your personal leadership skills?," and it could be used at the end of the semester on a survey, a journal entry, an unstructured exit interview, or during a class activity (see Table 1). The third unique concept, *understanding service-learning as an instructional method,* with the question that accompanies it (see Table 4), could be used at the end of the semester for a discussion topic during a class activity. The fourth unique concept, *community partner impact/influence*, with the formative and summative questions that accompany it (see Table 5), highlights the importance of a mutually beneficial relationship between the student and community partner. The fifth unique concept, *course/project description* with three faculty questions that accompany it (see Table 5), assists faculty with cognitively integrating service-learning into a course. The sixth unique concept, *commitment to service-learning*, and the question that accompanies it (see Table 5), helps the institution understand whether the instructor will continue using service-learning in his or her courses. The question that accompanies the unique concept, "Will you continue to use service-learning as part of your course?" could be open-ended by adding, "Please explain" to the end of the question.

Constructing Assessment Surveys

Assessment assists universities in understanding the quality and effectiveness of outcomes; consequently, reliable, high-quality assessments can support universities' continuous investment of resources into service-learning. Higher education institutions are becoming more rigorous in their assessment of service-learning's effects on faculty, students, and community partners. As a result of rigorous assessment of these three constituents, the researchers anticipate the engaged campus becoming a sustainable entity and visibly positioned in the university's mission statement. All of the questions from the tables presented in this research can be used to develop surveys for assessment. The six unique concepts that emerged from the student and faculty assessment data expand and advance assessment options for faculty when assessing students, community partners, and/or themselves. Designing an assessment survey warrants deliberation of the goal of the assessment, recipient of assessment results, supportive resources, implementation of assessment, and how results will be used *(Gelmon et al., 2001).* Assessment contributes to understanding the impact of an educator's service-learning project, communicating service-learning suggestions to others, and recognizing the value and scope of service-learning.

Careful preparation is the key to successful implementation of formative and summative assessments into a service-learning course. Learning objectives and outcomes are thoughtfully constructed in advance of teaching the course and taken into consideration when deciding what formative and summative assessment tools to use. Quality assessment legitimizes both service-learning and community engagement and is a fruitful strategy for improvement and future planning. The service-learning instructor understands that the student is an active, engaged learner, and realizes that assessing the learning process in a service-learning class is time-consuming yet well worth the effort. "Designing research using quantitative designs can contribute to understanding both why particular outcomes occurred and the net impact of the program intervention" *(Bringle, Hatcher, & Williams, 2011, p. 277)*.

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