

# An Assessment of Service Learning Objectives and Outcomes

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## Abstract

*Service learning is increasingly recognized in higher educational settings as a transformative learning method for increasing student engagement in learning experiences, promoting civic responsibility, and exposing students to field settings and potential professional networks. As more institutions devote more classroom time or credit credentialing to the service learning experience, institutions are beginning to grapple with needing to validate this learning experience in quantifiable and qualitative terms in order to describe the experience to stakeholders, including accrediting bodies. This paper presents an investigation into institution-provided, publicly available materials regarding assessment of service learning objectives, outcomes, and activities in order to inform stakeholders of emerging trends, changes, and best practices in transparency of service learning outcomes. Findings indicate an orientation towards demonstrating program effectiveness rather than learning progression.*

*Keywords:* service learning outcomes, assessment

## Introduction

Service learning's recognition as a valid learning method has its roots in models of experiential learning in which students reflect and conceptualize understanding by active involvement in a concrete experience. Early theorists further defined service learning as an experience in which students, faculty, and community stakeholders collaborate to shape the experience to affect social or civic change (Furco, 1996; Seifer, 1998). As applications within higher educational settings increased (Stoecker, 2014), educational practice, supported by field literature increasingly started to advocate for service learning incorporation into higher educational settings (Hatcher & Studer, 2015) because of its benefits to campus and community populations (Buch & Harden, 2011; Eyler et al., 2001; Willis, 2002; McGoldrick & Ziegert, 2002); fostering of critical thinking and higher order thinking skills; and development of personal outcomes such as social awareness (Buch & Harden, 2011), leadership and identity (Eyler & Giles, 1999) and civic responsibility and inter and intrapersonal skill development (Dressler et al, 2011; Hébert, 2015). With integration into credit-based programs of study (Coffey & Lavery, 2015; Gazsi & Oriel, 2010), coursework (Hildenbrand & Schultz, 2015; Zamora, 2012), and other curriculum-based experiences (Martin, 2015), higher educational institutions began to struggle with how to quantify and qualify the learning experience in order to assess its effectiveness and present the experience to stakeholders.

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## Literature Review

While many higher educational institutions tout the number of offered service learning opportunities, variety of settings, and format of experiences, they are more challenged in translating the experience into communicative terms that convey the meaningfulness of the experience as a learning activity. With assessment transparency related with mixed results to stakeholder confidence (Bamber, 2015) and motivation (Seevers, Rowe, & Skinner, 2014), publicly presenting valid and reliable data may serve to impact program success and effectiveness evaluation. In addition, transparency of service learning experiences may forward efforts to benchmark such activities for implementation into a continuous improvement framework. External benchmarking of service learning outcomes beyond the institutional level is limited due to several factors including difficulty of standardizing experience components due to variety in length, format and setting, as well as, to questions regarding the validity of the standard benchmark measures (Nora, Crisp, & Matthews, 2011). Hawk's (2014) study of experiential education assessment methods serves as one benchmarking example with findings that student preparation for potential future experiences serves as an emerging data point.

For implementers, one of the attractive features of service learning is its flexibility in terms of adoption (Ziegert and McGoldrick, 2008) and format (Craigien & Sparkman, 2014), but with this flexibility comes concerns about assessing the experience in a standardized and fair manner and the realism that such a continuum of experiences may not consistently fall into a high-quality learning experience. Chan (2012) noted a lack of studies related to exploring outcomes-based assessment methods in experiential learning. In part, to counteract this deficit, Hawk (2014) studied the use of direct assessment measures of experience-based learning to evaluate transferrable skills and discipline-specific proficiencies into evaluative categories of communication, creative and critical thinking, ethical reasoning, information literacy, self-directed leading, technology, global competence, leadership, professional practice, research, and responsible citizenship.

Efforts to benchmark individual service learning outcomes across courses, programs, and institutions are rare (Steinke & Finch, 2007); although benchmarking engagement and satisfaction with service learning as a program offering is a prominent component of popular instruments such as the National Survey of Student Engagement (NSSE). Searches performed for the current study confirm underperformance of available benchmarks. In addition, Harvey, Coulson and McMaugh (2016) noted the paucity of field literature devoted to developing the reflective component of a service learning experience, long considered a staple of the service learning experience. Some field literature has pointed to a lack of assessment studies of outcomes for particular populations (Greenwood, 2015) or types of community activities (Martin, Warner, & Das, 2016). In addition, literature is increasingly noting the lack of assessment on the side of the community participant, a concern that has gained traction with some field literature advocating for a service-learning redesign in favor of community participant origination (Butin, 2015; Gates et al., 2014). Brydges and Gwozdek (2011) noted a need for longitudinal study design which would obtain baseline and post-service learning data to better evaluate satisfaction levels and study effectiveness on learning outcomes of curricular topics. Finally, some studies note the importance of a top-down design in terms of measuring experiential learning outcomes and point to a lack of accreditation standards in fields (Krieger & Martinez, 2012).

Assessment of specific service learning objectives have been the focus of some scholarly research. Service learning's fostering of civic competency and engagement (Tourney-Purta et al., 2015) and critical thinking (Heinrich et al., 2015) was assessed with positive correlations. In addition, institutions are surveying student engagement with, and perceptions of, service learning activities (Dressler, Cedercreutz, & Pacheco, 2011; Reed, et al., 2015). An investigation into the alignment of learning objectives to field professional standards (Schlesselman et al., 2015) found increased awareness of standards but inconsistent implementation in a member institution study. Visual representation of service learning as an activity has also been studied to discover the meaning that institutions attach to the activity. Donahue, Fenner, and Mitchell (2015) documented a disconnect between institutional stated aims of service learning as a learning activity and practice with a pattern of racial and class discrimination present.

For the literature review of this study, assessment instruments of the grounding and related literature were studied to determine what types of quantitative and qualitative assessment methods were deployed in the collection of study effectiveness. These findings are used to ground instrument development in this study and are not presented as study findings, due to the literature review focus and lack of sampling mechanism. Results found that quantification of work hours, pre and post experience survey results, and learning experience and satisfaction ratings were commonly used to evaluate learning outcome effectiveness. Types of qualitative assessment include portfolio, diary, and discussion narrative content analysis. Scoring rubrics would be used on these items to gauge student understanding of service participant and organizational issues, demonstration of cultural intelligence, and synthesis of stakeholder mission elements. Less important, but still significant findings, found that the ability of the learning experience to develop attitudes and global mind-sets and student ability to identify service participant values and change agents were considered important in judging critical thinking ability. The most common required outcome was a self-development or self-awareness journal followed by comprehensive projects with a required presentation component. Less important, but still statistically significant, outcomes included goal-setting activities, and action-building plans for the behalf of the service participant; in some cases, these activities may have been implied to occur within the journal framework, hence the lesser finding. With the exception of explicit findings related to ethical literacy, these findings seem to correlate well with Pless, Maak, and Stahl's (2011) description of six reflective learning competence areas. A non-significant but conceptually important finding was that some studies mapped the service learning experience to institutional student learning outcomes with correlations strongest for citizenship or global competencies and self-directed learning, and weakest for research and technology-related competencies.

## **Method**

In a method similar to that described by Kim and Kuljis (2010), the content analysis method deployed by this study used a pilot study of 10 website presentations of institutions in the researcher's home state in order to determine an initial set of evaluative criteria, and a possible spectrum of responses that met the criteria. This activity lead to a level of abstraction for the inductive categories that allowed the research coders to correctly place each phenomena presentation especially in relation to study parameters. Consensus between coders resulted in minor revision of categories to best represent viewing perspective and enhance formative and summative reliability (Mayring, 2000). Search terms relating to service learning were deployed

to find potential assessment of experiences. In addition, the institution's assessment, reporting, institutional research, and effectiveness pages were mined for potential data sources. Each possible finding was evaluated for fit to the service learning paradigm, or other types of volunteer opportunities. Community-based research is not considered part of this study.

Due to the pilot study finding that only one institution out of a sample size of 10, reporting service learning by learning outcome, the sample was changed to those institutions that hold Carnegie Community Engagement Elective Classification in the hope of obtaining significant findings. With 361 institutions earning such a designation (Carnegie Foundation, 2015), the research study will consist of a sample of 45 of these institutions with an equal representation of four institutional types (doctorate-granting, masters' colleges and universities, associates colleges and special focus institutions) representing regional areas of the United States of America.

While the Common Data Set (CDS), a data-gathering collaboration of higher education institutions, does collect data regarding the offering availability of a category that would include service learning, that publication does not seek explicit service learning assessment data and will not be mined for this study. In addition, the National Survey of Student Engagement (NSSE) and the Noel-Levitz Student Satisfaction Inventory (SSI) asks about current and intended participation in service learning as well as in terms of its availability as an offering, but does not ask about, or relate findings to, learning outcomes. Should a school's analysis of those results be provided, it was mined as qualitative evidence. Results from more comprehensive instruments, such as the National Assessment of Service and Community Engagement (Siena Research Institute, 2014), Community Service Attitudes Scale (Shiarella, McCarthy, and Tucker, 2000) or the Civic Minded Graduate Scale, Social Justice Advocacy Scale were used, if found. In addition, data on community service that is not structured as a service learning activity were not mined due to the anticipated lack of identified learning outcomes. Student and Alumni surveys were mined if responses linked service learning to learning outcomes in any manner. Finally, accreditation self-studies of an institutional focus were mined for potential reporting of service learning outcomes and activities.

In each case, the service learning website or page(s), institutional assessment site, and institutional reporting/effectiveness site were searched for institutional transparency findings. For large institutions, an office of academic 9 was also a common search. Both the terms service learning and experiential learning were deployed. Departments were not part of the search protocol due to lack of standardization for all students. However, if institutional search lead to departmental findings, then results were recorded. To reflect current issues in service learning, data findings earlier than 2010 were not recorded. Data resulting from applications to develop or designate a service learning course were included if learning outcomes information was provided.

## Results

Due to small significant percentages and sizes, the intent to report results by institutional type will only be used in cases where there is a need to aggregate data. Thirty one of 45 (68%) studied institutions offer information regarding student learning objectives, however, only eight of the 45 (18%) present developed objectives. An additional five institutions present typically one or two service learning objectives as part of their General Education learning objectives. One additional institution provides a declarative statement that all service learning courses must provide learning objectives, therefore, a total of 14 of 45 (31%) of institutions present some meaningful learning objectives. The highest data provision of the study (82%) regards program objectives, only 8 institutions did not provide program objectives for service learning. The most common program objectives: 1) involves a statement that the goal of the office is to facilitate service learning opportunities; 2) communicates the desire to develop campus and community relationships; and 3) foster the inclusion of best-practices into service learning curriculum.

In terms of learning objectives themselves, only seven of the 45 (15.5%) studied sites presented the objectives linked to a framework of a civics-based, problem-based, or discipline-based model or capstone course, service internship or community action research. However, evidence exists in the form of sponsorship and related policies of that intent for an additional 5 presentations for a total of 12 of 45 (26.6%). Only 23 of the 45 (51%) studied institutions presented learning objectives in terms of relationship to categories of learning, personal or social outcomes; broadly it can be said that these institutions were seeking to balance the engagement experience into the three domains. The most common learning objectives included improvement to students' ability to problem-solve and think critically and to improve application of knowledge to real world settings. The presentation of personal objectives that reached the level of significance include improved personal efficacy, interpersonal development, and improvement in leadership and communication skills. Top social objectives included improved social responsibility and citizenship and greater understanding of the impact of diversity and inter-cultural topics. Exact representations are not provided due to the difficulty of parsing and extracting language from provided content.

Six of the 45 institutions (13.3%) are providing course syllabi as examples of student learning objectives and coursework requirements. As a common theme, information about program requirements, often in the form of reflection templates and evaluation forms, are provided, but outcomes or results of those surveys and tabulations are not provided. In addition, analysis of provided data is often not publicly transparent with only 6 of the 45 institutions (13.3%) providing analysis, usually in an annual report form.

Commonly reported items that reflect program outcomes include: 1) 11 of 45 (25%) report number of participants, with those results evenly distributed between being found on a dedicated page, within the institutional self-study, or in a service learning annual report; 2) 19 of 45 (42%) present data regarding the number of service-learning courses or departmental involvement with that information evenly divided as presented on a dedicated page or in an annual report; 3) 13 of 45 (29%) present data regarding the number of service learning projects or partners; and 4) 14 of 45 (31%) present number of hours with an additional 10 institutions (adjustment to 53%) presenting evidence that an hour log is used to collect this information from students.

Institutions may be demonstrating a long-term investment into service learning as demonstrated by 7 of the 45 (15%) presenting some form of longitudinal data regarding service

learning at the institution. 4 of the 45 (9%) institutions present data related to financial impact of service learning or expenses related to service learning. 5 of the 45 (11%) institutions require all undergraduate students to take a service learning course or other significant learning experience; one additional institution requires a service learning component for all honors students.

Perhaps due to lack of investment in national instruments related to service learning, only 5 of the 45 (11%) of institutions present quantitative results of surveys related to service learning. Reporting of qualitative results fares significantly better with 27 of 45 (60%) providing data, an overwhelming percentage of those results took the form of project summaries. Perhaps due to the difficulty of making service learning assessment relatable to audiences, only 5 of 45 (11%) report such results within institutional assessment report. An observed trend is that institutions are more likely to present information and results about service learning assessment on sponsored pages, particularly if the institution hosts a service learning or civic engagement center or sub-unit.

While 13 of the 45 (29%) institutions provide evidence that students evaluate the service learning experience, only 6 of the institutions provide results, with the remaining institutions providing a link to the evaluation instrument. 11 of the 45 (24.4%) institutions survey faculty and 7 of the 45 (15.5%) have a mechanism for seeking community participant feedback.

## **Discussion**

Despite gains in the quality and quantity of assessment measures for higher education institutions, regional, and national bodies and consortium, improvements in transparency of assessment results are still needed as evidenced by recent announcements by the United States Department of Education to improve and expand researcher access to data, enhance the FSA Data Center, expand use of administrative data, and support evidence-based policymaking (Mahaffie, 2017). Large public institutions tend to funnel all academic activity through departments and not have the effectiveness or assessment infrastructures of the institutional body; nearly one-fourth of the service learning programs in the current investigation were sponsored by an academic sub-unit, college, or department, and an additional one-fourth only had representation from two or three academic areas. A 2016 survey of Association of American College and University (AACU) member institutions found that while 87% assess learning outcomes within departments, only 67% assess learning outcomes in general education across multiple courses (Hart Research Associates, 2016a), where service learning is most likely to be found. Therefore, as illustrated by this study, service learning is often occurring at the course level, so assessment of service learning may be underreported or under analyzed if not linked to an institutional initiative. Steinke and Fitch (2007) identify concerns including service learning integration in assessment processes, systematic documentation, and incomplete data gathering methods as prominent stumbling blocks toward true service learning assessment. Field literature seems to support this study's findings: a study of pharmacy schools found that only 26.5% of schools presented some type of service learning outcomes. (Schlesselman, et al., 2015). In addition, Yates, Wilson, and Purton (2015) noted the dearth of studies validating experiential learning experiences and used their literature review to conclude that a range of assessment methods exists in the field. To compare to the field, 46% of the AACU study of member institutions include service learning, however, the AACU study included a civic learning category which may have split that population.

Althoff et al. (2007) found achievement and motivation benefits due to the posting of learning objectives to teacher, parent, and student audiences. While field literature still supports that the provision of learning objectives is a response to accreditation requirements (Stovall, 2014), it is clear that posting of learning objectives is gaining field traction, as exemplified by the National Institute for Learning Outcomes Assessment (NILOA)'s development of a transparency framework for evaluation of institutional websites (NILOA, 2017).

While the provision of a large number of program objectives means that institutions should be commended for focusing on program improvement, this provision in no way reflects or absolves institutions of the need to present learning objectives. Based upon all of the above evidence, it is clear that a rate where only 4 of the 45 (8%) institutional provision of transparent data regarding service learning outcomes should be considered underwhelming with levels below those of other studies that explore the assessment of student learning (Thompson, et al., 2014). However, given that an additional 13 institutions do present evidence of a culture of learning from student learning outcomes, as well a field perception that service learning assessment is still on the beginning of the curve, this study's low rates seem justified. It should be noted that the field of service learning assessment is still developing; Steinke and Fitch's (2007) illustration of 17 direct, mixed and indirect measures makes clear that widely used instruments available to measure knowledge application, critical thinking and problem-solving, and intellectual development do not meet needs as only one tool addresses all three areas.

In order to foster better learning, Association of American College and University (AAC&U) has identified and recommended six learning objective categories related to service learning: 1) Diversity of Communities and Cultures; 2) Analysis of Knowledge; 3) Civic Identity and Commitment; 4) Civic Communication; 5) Civic Action and Reflection; and 6) Civic Contexts/Structures (Brammer et al., 2009). Confirming this study's findings of 31% of stated outcomes, a recent AAC&U study of member institutions found that only 63% had explicit outcomes related to civic engagement or competence (Hart Research Associates, 2016a). Of this study's most common program objectives, support was found in field literature of the need to foster participation or persistence rates (Arendale, 2016).

In terms of requiring a service learning experience, this study's findings of 13% (2% of which requires honors students only) are validated by field literature parallel findings of 14% (Hart Research Associates, 2016a). The honors student data may serve as an outlier; an AACU study indicates that 85% of institutions have a common set of learning objectives, with the remaining percentage devoted to departmental or program objectives, rather than other populations (Hart Research Associates, 2016b).

Due to positive findings in Green, Marti, and McClenney (2008)'s study of the benefits of increasing academic integration for racial and ethnic groups, aggregating service learning assessment by student factors may better serve at-risk populations by proving baseline data for intervention programs. Given that quality of the learning experience is a significant issue, evidence exists that institutions of this survey may be deploying data results to evaluate the program but are not being transparent about the results due to underperformance of findings in this area.

A surprising finding is that only 2 of the 45 institutions (4%) provided data linked to describing the long-term relationship between the institution and the community partner; a standard that field organizations are working to consider part of the definition of service learning (Schlesselman et al., 2015). Another relevant finding of the Schlesselman study was a confirmation of this study's findings that hour logs are the most commonly found assessment

items. A surprising finding of the current study was the number of institutions support faculty inclusion in service learning with funded fellow's programs (some of which are for a larger umbrella of student affairs or student engagement) or other faculty structures such as advisory boards.

### Conclusion and Implications for Future Research

Institutions are investing in long-term success models for the inclusion of service learning in a variety of campus implementations. However, factors including the large variability in models, discipline-specific goals, and lack of institutional supports continue to challenge local and large-scale assessment processes that can be compared and benchmarked against other institutions. While institutions should continue to track and improve program effectiveness measures, a deeper commitment to assessing learning outcomes and engaging with data offers the only true potential for insights into validating service learning as an authentic learning method.

Coordination with state, regional, and national consortiums are needed to improve a deep deficit in sustainable collection and analysis of service learning assessment data and benchmarking to establish baselines and averages for improvement.

The study of student learning outcomes in service learning appears to be a ripe vein for additional examination. Unlike traditional forms of study, service learning is also tied to institutional reputation and service, so managing needs and expectations of community partners is part of the learning experience and serves as an impact factor in the assessment process. In addition, it may be difficult to assess student learning when there are other factors that may make the service learning experience valuable to the student. Few longitudinal studies exist to examine factors over time so causality linkages are few. Due to the informality of some service learning formats, serious data collection may at best be compromised, and at worst unavailable. This study has shown that data collection is occurring amongst faculty populations. Field literature is only recently reflecting development of the pedagogy involved with service learning, so studies examining experiences with learning communities and related teaching methods would be welcome.

Finally, due to this study's findings of data collection and analysis regarding community participants and organizations, lessons for improving community development and higher education's service relationship to the community are sources for potential research.

### References

- Association of American Colleges & Universities (2017). Criterion from AAC&U Civic Engagement VALUE Rubric. Retrieved from <http://www.aacu.org/value/rubrics>
- Althoff, S. E., Linde, K. J., Mason, J. D., Nagel, N. M., & O'Reilly, K. A. (2007). *Learning objectives: Posting & communicating daily learning objectives to increase student achievement and motivation*. (Unpublished master's thesis). Saint Xavier University. Retrieved from ERIC database. (ED496125)
- Arendale, D. R. (2016). *Postsecondary peer cooperative learning programs: Annotated bibliography 2016*. University of Minnesota, Department of Postsecondary Teaching and Learning. Retrieved from ERIC database. (ED565496)



- Bamber, M. (2015). The impact on stakeholder confidence of increased transparency in the examination assessment process. *Assessment & Evaluation in Higher Education*, 40(4). doi: 10.1080/02602938.2014.921662
- Brammer, L., Hatcher, J., Gessell, D., Hoy, A., Kirlin, M., ... & Strait, J. (2009). Civic engagement rubric. *Association of American Colleges and Universities Repository*. Retrieved from <https://www.aacu.org/civic-engagement-value-rubric>
- Brydges, S. C., & Gwozdek, A. E. (2011). Assessment of the University of Michigan's dental hygiene partnership with the Huron Valley Boys & Girls Club: A study of students' and staffs' perceptions and service learning outcomes. *Journal of Dental Hygiene*, 85(4), 316-325. Retrieved from CINAHL Database #104568363.
- Buch, K. & Harden, S. (2011, September). The impact of a service-learning project on student awareness of homelessness, civic attitudes, and stereotypes toward the homeless. *Journal of Higher Education Outreach and Engagement*, 15(3). Retrieved from <http://openjournals.libs.uga.edu/index.php/jheoe/article/view/573>
- Butin, D. (2015). Dreaming of justice: Critical service-learning and the need to wake up. *Theory into Practice*, 54, 5-10. doi: 10.1080/00405841.2015.977646
- Carnegie Foundation. (2015). *Carnegie selects colleges and universities for 2015 community engagement classification*. Retrieved from <https://www.carnegiefoundation.org/newsroom/news-releases/carnegie-selects-colleges-universities-2015-community-engagement-classification/>
- Chan, C. K. Y. (2012). Assessment for community service types of experiential learning in the engineering discipline. *European Journal of Engineering Education*, 37(1), 29-38.
- Coffey, A., & Lavery, S. (2015). Service-learning: A valuable means of preparing pre-service teachers for a teaching practicum. *Australian Journal of Teacher Education*, 40(7). Retrieved from ERIC database. (EJ1069537)
- Craigen, L. M. & Sparkman, N. M. (2014). The value and importance of international service learning programs: A model for human service education. *Counseling & Human Services Faculty Publications*, 3. Retrieved from [http://digitalcommons.odu.edu/chs\\_pubs/3](http://digitalcommons.odu.edu/chs_pubs/3)
- Donahue, D. M., Fenner, D., & Mitchell, T. D. (2015). Picturing service-learning: Defining the field, setting expectations, shaping learning. *Journal of Higher Education Outreach & Engagement*, 19(4), 19-37. Retrieved from Education Research Complete Database.
- Dressler, S., Cedercreutz, J., & Pacheco, A. (2011). Strengthening curriculum through student learning outcome assessment in experiential learning. *Journal of Hospitality & Tourism Education*, 23(2), 41-47.

- Eyler, J., & Giles, D.E. (1999). *Where's the learning in service-learning?* San Francisco: Jossey-Bass.
- Eyler, J.S., Giles, D.E., Stenson, C.M. & Gray, C. J. (2001). At a glance: What we know about the effects of service-learning on college students, faculty, institutions, and communities 1993-2000. *Corporation for National and Community Service, Learn and Serve, National Service-Learning Clearinghouse*. Retrieved from <http://www.compact.org/wp-content/uploads/resources/downloads/aag.pdf>
- Furco, A. (1996). *Service-learning: A balanced approach to experiential education, expanding boundaries: Serving and learning*. Washington DC: Corporation for National Service. Retrieved from [http://www.shsu.edu/academics/cce/documents/Service\\_Learning\\_Balanced\\_Approach\\_To\\_Experimental\\_Education.pdf](http://www.shsu.edu/academics/cce/documents/Service_Learning_Balanced_Approach_To_Experimental_Education.pdf)
- Gates, A. B., Fletcher, C. V., Ruiz-Tolento, M. G., Goble, L., & Velloso, T. (2014). In spite of the boundaries: Exploring solidarity in the context of international service immersion. *Journal of Higher Education Outreach and Engagement*, 18(3), 57-82. Retrieved from ERIC database. (EJ1043294)
- Gazsi, G., & Oriel, K. N. (2010). The impact of a service learning experience to enhance curricular integration in a physical therapist education program. *Journal of Allied Health*, 39(2), 61-67. Retrieved from [https://www.researchgate.net/publication/44665363\\_The\\_impact\\_of\\_a\\_service\\_learning\\_experience\\_to\\_enhance\\_curricular\\_integration\\_in\\_a\\_physical\\_therapist\\_education\\_program](https://www.researchgate.net/publication/44665363_The_impact_of_a_service_learning_experience_to_enhance_curricular_integration_in_a_physical_therapist_education_program)
- Greene, T., Marti, C., & McClenney, K. (2008). The effort-outcome gap: Differences for African American and Hispanic community college students in student engagement and academic achievement. *The Journal of Higher Education*, 79(5), 513-539. doi: 10.1353/jhe.0.018.
- Greenwood, D. A. (2015). Outcomes of an academic service-learning project on four urban community colleges. *Journal of Education and Training Studies*, 3(3), 61-71. Retrieved from ERIC database. (EJ1060819)
- Hart Research Associates (2016a). Recent trends in general education design, learning outcomes, and teaching approaches. *Association of American Colleges and Universities Repository*. Retrieved from [http://www.aacu.org/sites/default/files/files/LEAP/2015\\_Survey\\_Report2\\_GEtrends.pdf](http://www.aacu.org/sites/default/files/files/LEAP/2015_Survey_Report2_GEtrends.pdf)
- Hart Research Associates (2016b). Trends in learning outcome assessment. *Association of American Colleges and Universities Repository*. Retrieved from [http://www.aacu.org/sites/default/files/files/LEAP/2015\\_Survey\\_Report3.pdf](http://www.aacu.org/sites/default/files/files/LEAP/2015_Survey_Report3.pdf)
- Harvey, M., Coulson, D., McMaugh, A. (2016). Towards a theory of the ecology of reflection: Reflective practice for experiential learning in higher education. *Journal of University*

- Teaching and Learning Practice*, 13(2), 1-20. Retrieved from Education Research Complete database.
- Hatcher, J. A. & Studer, M. L. (2015). Service-learning and philanthropy: Implications for course design. *Theory into Practice*, 54(1), 11-19. doi: 10.1080/00405841.2015.977656
- Hawk, J. (2014). *Using cooperative education evaluation data for university and program learning assessment*. Paper presented at WAVE 10<sup>th</sup> International Symposium on Cooperative & Work-integrated Education, Trollhattan, Sweden. Retrieved from <http://www.waceinc.org/uwest2014/proceedings/US/Joseph%20Hawk%20%20-%20US.pdf>
- Hébert, A. (2015). Student learning through service learning: Effects on academic development, civic responsibility, interpersonal skills and practical skills. *Active Learning in Higher Education*, 16(1), 37-49. doi: 10.1177/1469787415573357
- Heinrich, W. F., Habron, G. B., Johnson, H. L., & Goralnik, L. (2015). Critical thinking assessment across four sustainability-related experiential learning settings. *Journal of Experiential Education*, 38(4), 373-393. doi: 10.1177/1053825915592890
- Hildenbrand, S. M., & Schultz, S. M. (2015). Implementing service learning in pre-service teacher coursework. *Journal of Experiential Education*, 38(3), 262-279. doi: 10.1177/1053825915571748
- Kim, I., & Kuljis, J. (2010). Applying content analysis to web-based content. *Journal of Computing and Information Technology*, 18(4), 369-375. doi: 10.2498/cit.1001924
- Krieger, S. H., & Martinez, S. A. (2012). Performance isn't everything: The importance of conceptual competence in outcome assessment of experiential learning. *Clinical Law Review*, 19(1), 251-296. Retrieved from Academic Search Complete database.
- Mahaffie, L. (2017). Fact sheet: Supporting student aid data access and transparency. *Announcement from the United States Department of Education*. Retrieved from <https://www2.ed.gov/documents/press-releases/student-aid-data-access-transparency.pdf>
- Martin, M. C. (2015). Service learning as marketing pedagogy: Practical, theoretical and institutional perspectives. *Academy of Educational Leadership Journal*, 19(2), 109-127. Retrieved from Questia database.
- Martin, T., Warner, S., & Das, B. (2016). Senior games: Service-learning with older adults in a sport setting. *Sport Management Education Journal (Human Kinetics)*, 10(1), 43. doi: <http://dx.doi.org/10.1123/SMEJ.2015-0004>
- Mayring, P. (2000). Qualitative content analysis. *Qualitative Social Research*, 1(2). Retrieved from <http://utsc.utoronto.ca/~kmacd/IDSC10/Readings/text%20analysis/CA.pdf>

- McGoldrick, K. Ziegert, A (Eds.), Putting the invisible hand to work: Concepts and models of service learning in economics, University of Michigan Press, Ann Arbor, MI (2002).
- National Institute for Learning Outcomes Assessment (2017). *Providing evidence of student learning: A transparency framework*. Retrieved from <http://www.learningoutcomesassessment.org/TransparencyFrameworkIntro.htm>
- Nora, A., Crisp, G. & Matthews, C. (2011). A reconceptualization of CCSSE's benchmarks of student engagement. *The Review of Higher Education*, 35(1), 105-130. Retrieved from ERIC database. (EJ945020)
- Pless, N. M., Maak, T., & Stahl, G. K (2011). Developing responsible global leaders through international service-learning programs: The ulysses experience. *Academy of Management Learning & Education*, 10(2), 237–260. doi: 10.5465/AMLE.2011.62798932
- Reed, S. C., Rosing, H., Rosenberg, H., & Statham, A. (2015). “Let us pick the organization”: Understanding adult student perceptions of service-learning practice. *Journal of Community Engagement & Scholarship*, 8(2), 74-85. Retrieved from <http://steans.depaul.edu/docs/11022015/Let%20Us%20Pick%20the%20Organization%20-%20Understanding%20Adult%20Student%20Perceptions%20of%20Service-learning%20Practice%201011022015114834821.pdf>
- Schlesselman, L., Borrego, M., Bloom, T. J., Mehta, B., Drobitch, R. K., & Smith, T. (2015). An assessment of service-learning in 34 US schools of pharmacy: Follow up on the 2001 Professional Affairs Committee report. *American Journal of Pharmaceutical Education*, 79(8), 1-11, 116. doi: 10.5688/ajpe798116
- Seevers, M. T., Rowe, W. J., & Skinner, S. J. (2014). Praise in public, criticize in private? An assessment of performance feedback transparency in a classroom setting. *Marketing Education Review*, 24(2), 85-100. doi: 10.2753/MER1052-8008240201
- Seifer, S.D. (1998). Service-learning: Community-campus partnerships for health professions education. *Academic Medicine*, 73(3): 273-277. Retrieved from [https://depts.washington.edu/ccph/pdf\\_files/SL-CCPH%20Prof%20Ed.pdf](https://depts.washington.edu/ccph/pdf_files/SL-CCPH%20Prof%20Ed.pdf)
- Shiarella, A. H., McCarthy, A. M., & Tucker, M. L. (2000). The development and construct validity scores of the community service attitudes scale. *Educational and Psychological Measurement*, 60, 286 –300. doi: 10.1177/00131640021970510
- Siena Research Institute (2014). *National Assessment of Service and Community Engagement*. Retrieved from <https://www.siena.edu/centers-institutes/siena-research-institute/national/>
- Steinke, P., & Fitch, P. (2007). Assessing service-learning. *Research & Practice in Assessment*, 2. Retrieved from <http://www.rpajournal.com/dev/wp-content/uploads/2012/05/A32.pdf>

- Stoecker, R. (2014). Extension and higher education service-learning: Toward a community development service-learning model. *Journal of Higher Education outreach and Engagement*, 18(1). Retrieved from <http://openjournals.libs.uga.edu/index.php/jheoe/article/view/1193>
- Stovall, S. (2014). Increasing faculty understanding of and participation in institution-wide assessment for student learning at a research university. *Assessment Update*, 27(2), 8-10. doi: 10.1002/au.30017
- Tourney-Purta, J., Cabrera, J. C., Roohr, K. C., Liu, O. L., & Rios, J. A. (2015). Assessing civic competency and engagement in higher education: research background, frameworks, and directions for next-generation assessment. *ETS Research Report Series*, 2, 1-17. doi: 10.1002/ets2.12081
- Willis, R. (2002). The economic approach to service learning: Ten simple guidelines. In McGoldrick, M., and A. Ziegert (Eds.) *Putting the Invisible Hand to Work: Concepts and Models for Service Learning in Economics*. Ann Arbor: The University of Michigan Press.
- Yates, T., Wilson, J., & Purton, K. (2015). Surveying assessment in experiential learning: A single campus study. *The Canadian Journal for Scholarship of Teaching and Learning*, 6(3), article 4. Retrieved from ERIC database. (EJ1084621)
- Zamora, V. L. (2012). Using a social enterprise service-learning strategy in an introductory management accounting course. *Issues in Accounting Education*, 27(1), 187-226. doi: 10.2308/iace-50102
- Ziegert, A., & McGoldrick, K. (2008). When service is good for economics: Linking the classroom and community through service-learning. *International Review of Economics Education*, 7(2): 39-56. doi:10.1016/S1477-3880(15)30090-6