DOES GREATER EXPOSURE TO SERVICE LEARNING ENHANCE STUDENT OUTCOMES?

James E. Weber, St. Cloud State University
jweber@stcloudstate.edu

Paula S. Weber, St. Cloud State University
psweber@stcloudstate.edu

Margaret A. Young, Texas Woman's University
myoung13@twu.edu

ABSTRACT

Service learning has become an increasingly popular pedagogy on university campuses, partially due to pressure on colleges and universities to produce students who are strong community citizens. This occurs at a time when institutions of higher education find themselves increasingly pressed for resources and seeking ways of maximizing the impact of their expenditures. In their 2010 empirical study on impacts of service learning, Weber and Weber examined the impact of service learning on four variables appropriate to developing better citizens, an inherent aspect of service learning: Civic Participation, Self-Efficacy Toward Service, Attitude toward Helping Others, and the Role of College Education in Addressing Social Issues. They found a number of positive significant results for student service learning participation and made suggestions for future research, but were unable to conclude that taking a second or more service learning class had an impact on study variables. This study took a different approach to examining the impact of repeated exposures to service learning, proposing a specific pattern of results for various levels of service learning experience. Results suggest that there is a clear pattern of response levels on study variables to service learning, but that hypothesized differences in mean levels of those responses are not all significantly different. If it is true more generally that repeated exposures to service learning produce non-significant increases in student outcomes, universities should reexamine their strategies regarding the provision of service learning opportunities so as to maximize the results of their expenditure of scarce resources.

Keywords: Service Learning; Impact of Service Learning; Multiple Exposures to Service Learning

INTRODUCTION

Service learning has a long history on US college campuses, with roots stretching back to the 19th century (History of Service-Learning in Higher Education, 2008). By the late 20th century, service learning in education achieved a more formal status, as it was included as a goal in the National and Community Service Act of 1990, which was passed by the 101st Congress and signed by President George H.W. Bush. That act defined service learning as:

A method under which students or participants learn and develop through active participation in thoughtfully organized service that is conducted in and meets the needs of a community; is coordinated with an elementary school, secondary school, institution of higher education, or community service program, and with the community; and helps foster civic responsibility; and that is integrated into and enhances the academic curriculum of the students, or the educational components of the community service program in which the participants are enrolled; and provides structured time for the students or participants to reflect on the service experience. (National and Community Service Act of 1990, Sec. 101 [42 U.S.C. 12511] Definitions, 23, A-B)

Similar to other forms of student participation in campus activities (Lubbers & Joyce, 2014) service learning has a variety of benefits (Helm-Stevens, Fall, Havens, Garcia, & Polvi, 2014) including the effects of organizational outreach to the community and the economic impact of student labor in the community. It has grown rapidly and is becoming a widely adopted educational pedagogy (Helm-Stevens et al., 2014) with greater acceptance into mainstream activities at universities (Gerstenblatt & Gilbert, 2014). Campus Compact, an organization founded to support service learning, tracks service learning in their 1,120 member institutions, and their 2012 report indicates that 95% of their members offer an average of 66 service learning classes per campus (Campus Compact, 2013).

In fact, service learning has become so popular that in spite of the benefits, some researchers are beginning to question whether both campuses and communities possess the resources to continue the expansion (Littlepage, Gazley, & Bennett, 2012). As an example of the magnitude of resources expended on higher education's side, in 2012, 18% of campus Service Learning Centers had budgets exceeding $250,000 (Campus Compact, 2013), a significant expenditure at a time when colleges and universities' resources are stretched. The community supply-side is seldom examined (Helm-Stevens et al., 2014), but Littlepage et al. documented concerns that service learning participation at nonprofits required a greater involvement from managers than other volunteers, and in some cases managers suggested that their hesitance to expand service learning might be related to the time required to properly manage and provide high-quality educational experiences to service learners.

From higher education's perspectives, resources remain stretched even though the recession is over. In a white paper from the Center on Budget and Policy Priorities and based on data provided in 2015 by the State Higher Education Executive Officers Association, Mitchell and Leachman (2015) indicate that support for public higher education has still not returned to pre-recession levels, leaving colleges and universities to decrease educational or other services, raise tuition, or often to implement both options. As of 2015, state funding for higher education remained below pre-recession levels in all but three states, in some cases by more than 40%. For example, in the large Minnesota State Colleges and Universities 54-campus system, state appropriations, though rising in the last three years, suffered an overall decline from $670.2 million in 2008 (Fiscal Year 2014 Operating Budget, 2013) to $605.1 million in 2015 (Fiscal Year 2015 Operating Budget, 2014). Faculty and staff lines have been cut, programs eliminated, and costs are being examined more closely than ever. In other cases, entire campuses have been merged or discussions are ongoing regarding that possibility (Thomason, 2015; Walters, 2015). The result has been that in spite of improving conditions (Mitchell & Leachman, 2015) students now pay on the average, tuition amounting to 53% of the cost of their education (Higher Education: State Funding Trends and Policies on Affordability, 2014)

and colleges and universities may be forced to look at tuition increases to expand programs. As one of those programs that could be expanded, service learning and its outcomes appropriately bear examination.

For all its recent popularity, research on service learning seems to have a number of limitations. As early as 2004, Wittmer noted that there was little empirical data examining the impact of service learning on students. Weber and Weber (2010), and Newman and Hernandez (2011) agreed, identifying several gaps and methodological failings common to service learning studies, and in 2011 Seider, Gillmor and Rabinowicz argued that the bulk of academic literature on service learning was qualitative and descriptive rather than empirical. Authors seem to be identifying a perceived lack of quantitative studies to complement the qualitative studies prevalent in the literature. Given the great number of variables potentially involved in the study of service learning (variations in types of service learning, length, degree on incorporation into class work, community, student engagement, environmental support, the great number of student outcomes, organizational outcomes, community outcomes, etc.) one could reasonably expect to see hundreds of papers, if the research on service learning was mature.

This perspective is supported by the small number of studies cited in two available meta-analyses on service learning. Conway, Amel, and Gerwien (2009) were able to find 103 quantitative analyses of service learning suitable for inclusion in their meta-analysis, while in a meta-analysis published three years later, Yorio and Ye (2012) included 40 studies. Conway et al. used an inclusive definition for service learning, while the Yorio and Ye study employed criteria for inclusion more strictly defining service learning. Seventeen of Conway et al's studies were included in Yorio and Ye, along with 23 studies not included in the earlier meta-analysis. In total, 126 unique quantitative studies were used in the two meta-analyses. The Conway et al. study, the more comprehensive of the two, found that changes in students for academic outcomes were moderate, changes for personal and citizenship outcomes were small, and changes for social outcomes were in between. The Yorio and Ye study found positive effects on student understanding of social issues, personal insight, and cognitive development. Of course the meta-analyses don't focus on all of the possible outcomes for service learning, which also include service learning's impact on universities and the communities where the service occurs.

Given the large number of potential service learning related areas to study and the relatively small number of quantitative studies available, there are understandably a number of gaps in the literature. One of those gaps is the effect on students of multiple exposures to service learning. The question arises as budgets for service learning centers and projects climb on campus while overall campus budgets fall. In an environment featuring fewer resources for higher education, the question of whether a single exposure to service learning is sufficient or whether multiple exposures are necessary to produce desired results in students becomes more and more relevant. If multiple exposures are necessary, the impact on the cost of providing those service learning experiences is evident.

The 2010 Weber and Weber study attempted to address the issue of multiple exposures to service learning and their impact as a secondary issue. That study was embedded in a stream of research that developed scales measuring constructs intended to be relevant to the civic engagement portion of intended service learning outcomes (Sleeper, Schneider, Weber, & Weber, 2006; Weber, Weber, & Craven, 2008; Weber, Weber, Schneider, & Sleeper, 2007) establish reliability and

validity of those scales (Weber, Weber, & Young, 2010), then use those scales to examine the impact on these constructs in students exposed to service learning (Weber, Schneider, & Weber, 2008; Weber, Schneider, & Weber, 2011). The constructs developed and studied included Civic Participation (CP), Self-Efficacy Toward Service (SETS), and College Education's Role in addressing Social Issues (CERSI), and they were used along with a more general scale, Attitude toward Helping Others (AHO) developed and validated by Webb, Green, and Brashear (2000).

The 2010 study employed a quasi-experimental pre-test, post-test with a control group nonequivalent group design. It was a real-world study of 676 students enrolled in 27 courses and 38 majors across the campus of a mid-sized Midwestern comprehensive university. Because students enrolled in classes of their own volition instead of being randomly assigned to classes (creating nonequivalent groups), special care was taken in the analysis to deal with the issue of potential self-selection into service learning sections of classes. The primary analytical technique employed was a Multivariate Analysis of Covariance (MANCOVA) as suggested by Reichardt (1979) for the analysis of non-equivalent group designs of this nature. In this procedure, post-test scores on CP, SETS, CERSI and AHO were entered as dependent variables; the fixed factor was treatment versus control group, and pre-test scores on CP, SETS, CERSI and AHO were entered as covariates to statistically remove the impact of preexisting attitudes (that might lead to selection bias) from the analysis. That analysis showed a significant impact of service learning on all three constructs specifically designed to be relevant to service learning, although the effect sizes were small for these personal and civic participation variables, consistent with the Conway, et al. meta-analysis.

More germane to this paper is Weber and Weber's attempt to examine the impact of multiple exposures to service learning. Their analysis was limited to a comparison of only 304 students currently enrolled in service learning classes, looking to see if having multiple exposures to service learning produced incremental impacts on the four variables studied. Though they failed to find differences between single and multiple exposures to service learning, studying only students currently enrolled in service learning classes limited the sample size analyzed.

Perhaps a better way of looking at the problem would have capitalized on their findings that even controlling for preexisting attitudes, taking a service learning class produced a significant impact on student attitudes. If it is known that a service learning exposure produces an impact, it might be possible to conceptualize the issue of impact differently. Suppose we examine a sample of students. Is it possible to predict the pattern of magnitudes of their levels of CP, SETS, CERSI & AHO based on the total amount of experience in service learning classes and how recently that has occurred? This reconceptualization has the benefits of increasing the power of the analysis by increasing the number of subjects in the sample as well as maximizing the variance in the dependent variables by also including subjects who have not taken a service learning class. An approach of this nature gives a researcher a better chance of finding true significant differences if they exist.

This study should be regarded as an extension of the Weber and Weber (2010) paper that uses the same variables, but a significantly larger sample to examine the question of exposure to multiple levels of service learning in a different way. The available dataset allows us to determine if a student is currently enrolled in a service learning class and if they have had service learning classes

previously. Thus we have four conditions: those who are currently enrolled in a service learning class and have previously had a service learning (SL) class (designated Group 1), those who have had a service learning class previously but are not currently enrolled in one (designated Group 2), those who are currently enrolled in a service learning class and have not had one previously (designated Group 3), and those who have had no exposure to service learning (designated Group 4). Summarizing:

> Group 1 – Currently taking a SL class and having prior experience with SL.
> Group 2 – Not currently taking a SL class but having prior experience with SL.
> Group 3 – Currently taking a SL class but not having prior experience with SL.
> Group 4 – Not currently taking a SL class and not having prior experience with SL.

Since we know that service learning has an impact, we could hypothesize that more exposure to service learning produces a greater impact. That would be the first condition above, students who have previously taken a service learning class and are currently enrolled in one. This leads to Hypothesis 1.

> H1. Group 1 will exhibit the highest level of responses on CP, SETS, CERSI, and AHO.

In the 2010 paper, Weber and Weber speculated that because of the reflective nature of service learning, it is possible that the impact of service nature is not immediate, and in fact the impact may increase over time, consistent with the types of long term impact found by Newman and Hernandez (2011). In the current study, in order to provide an adequate group size, all students having taken at least one service learning class but not currently enrolled in one were treated as a single group. Within this group, there are some who have previously been enrolled in more than one service learning class, but all would have had the opportunity to reflect on their experience. For those two reasons, the second hypothesis states:

> H2. Group 2 will exhibit the next-highest levels of CP, SETS, CERSI and AHO scoring below Group 1 and higher than the remaining students.

We know that service learning has an impact on the variables studied, so the third hypothesis states:

> H3. Group 3 will exhibit the next-highest levels of CP, SETS, AHO & CERSI, scoring lower than Groups 1 & 2 on those variables and higher than the remaining students.

Finally, the remaining hypothesis states:

> H4. Group 4 will exhibit the lowest levels of CP, SETS, AHO & CERSI.

METHOD

This study uses the dataset of the 2010 Weber and Weber study, but approaches the analysis of the issue of the impact of multiple exposures to service learning differently, allowing the examination of a 62% larger sample with greater total variance. It proposes that if we examine a sample of students, knowing that an exposure to service learning has an impact on the study variables and the reflective nature of service learning may increase results over time, we can predict that order of levels of study variables based on the currency and amount of exposure to service learning.

Since the university did not require the use of service learning in all sections of classes in these relatively early days of service learning adoption, some sections of classes implemented service learning while others did not. Students were administered a pre-test survey on the first day of class, before their professor revealed anything about the class. The survey included items comprising the CP, SETS, CERSI and AHO scales, demographic items, and items allowing the matching of post-class surveys. Students were assured that their responses were confidential and would not be revealed to their professors. In the last week of classes students were administered a post-test survey consisting of the same scales plus the items allowing matching with pre-test surveys.

Sample

A pre-class (first class period before the instructor had covered the syllabus), pre-test survey was administered to 676 students enrolled in 27 sections of classes, including 16 sections engaged in service learning and 11 sections of the same courses where students were not engaged in service learning. A wide variety of majors were included, ranging from Business to Education and comprising 38 majors. During the final week of classes, a post-test survey was administered and researchers were able to match 493 post-surveys with pre-surveys. Missing data on one response brought the sample size down to 492 for the following analysis. Subjects were 40% male, with a mean age = 21.37 years (SD = 4.7 years, Median = 20.0 years). Table 1, below, shows how the sample was broken down in terms of amount and currency of exposure to service learning, along with sample sizes for the different categories.

Table 1. Sample Sizes and Classification of Groups 1-4.

	N	Prior Experience with SL	Currently Taking a SL Class
Group 1	106	Yes	Yes
Group 2	56	Yes	No
Group 3	198	No	Yes
Group 4	132	No	No

Analysis

The analysis was conducted utilizing SPSS's GLM, simulating a Multivariate Analysis Of Variance (MANOVA). Group (experience and currency of experience with SL) was the fixed factor and post-test, end-of-semester scores on CP, SETS, CERSI and AHO were entered as dependent variables. The overall, multivariate F-test Group was significant ($F_{4, 485} = 6725.5$, p = .000 for Pillai's, Wilks', Hotelling's and Roy's tests), so interpretation of between-subjects effects was appropriate.

Results

The results of between-subjects tests are shown below in Table 2. The sample sizes were large enough to achieve reasonable power for tests, with all observed power values above .99. F-values were very highly significant for all four dependent variables, though effect sizes were modest, ranging from 4.8% of variance explained for Self-Efficacy Toward Service and College Education's Role in addressing Social Issues, to 5.1% for the more general AHO, and to 6.7% Civic Participation.

Table 2. Estimated Marginal Means, Significance Levels and Effect Sizes for DVs.

Dependent Variable	Estimated Marginal Means	Std. Error	F-Value	Sig. Level	Partial eta^2	Observed Power
Civic Participation (CP)	Group 1 = 24.82	.312	11.671	.000	.067	1.000
	Group 2 = 24.70	.429				
	Group 3 = 24.43	.228				
	Group 4 = 22.68	.280				
Self-Efficacy Toward Service (SETS)	Group 1 = 21.26	.270	8.160	.000	.048	.992
	Group 2 = 20.84	.371				
	Group 3 = 20.65	.197				
	Group 4 = 19.56	.242				
College Education's Role in addressing Social Issues (CERSI)	Group 1 = 23.94	.378	8.223	.000	.048	.992
	Group 2 = 23.36	.520				
	Group 3 = 23.18	.277				
	Group 4 = 21.57	.339				
Attitude toward Helping Others (AHO)	Group 1 = 16.75	.245	8.798	.000	.051	.995
	Group 2 = 16.41	.337				
	Group 3 = 15.97	.179				
	Group 4 = 15.13	.220				

Table 3 shows both the estimated marginal means for all four dependent variables and the 95% confidence intervals that can be used to evaluate whether the groups are significantly different. Hypotheses 1-4 proposed a pattern of means for the groups on each of the dependent variables that, taken together would have means ordered from high to low, Group 1, 2, 3, then 4. An

examination of Table 3 shows that the proposed pattern holds true for all four dependent variables. Further examination shows that the differences predicted in H1-H4 are not all significant.

Table 3. Estimated Marginal Means and 95% Confidence Intervals for Dependent Variables.

Dependent Variable	Estimated Marginal Means	95% Confidence Interval	
		Lower Bound	Upper Bound
Civic Participation (CP)	Group 1 = 24.82	24.207	25.434
	Group 2 = 24.70	23.853	25.540
	Group 3 = 24.43	23.981	24.878
	Group 4 = 22.68	22.132	23.231
Self-Efficacy Toward Service (SETS)	Group 1 = 21.26	20.734	21.794
	Group 2 = 20.84	20.110	21.569
	Group 3 = 20.65	20.258	21.034
	Group 4 = 19.56	19.085	20.036
College Education's Role in addressing Social Issues (CERSI)	Group 1 = 23.94	23.201	24.686
	Group 2 = 23.36	22.335	24.379
	Group 3 = 23.18	22.638	23.725
	Group 4 = 21.57	20.910	22.241
Attitude toward Helping Others (AHO)	Group 1 = 16.75	16.264	17.227
	Group 2 = 16.41	15.748	17.073
	Group 3 = 15.97	15.612	16.317
	Group 4 = 15.13	14.697	15.560

The interpretation of results for all four dependent variables is similar. Although the means are patterned as hypothesized, Groups 1, 2, & 3 are significantly different from Group 4, but not from each other. In essence, students with any experience with service learning scored significantly higher than students with no experience, but there were no significant differences between groups based on multiple exposures to service learning. Thus H1-H3 received partial support (the pattern of means is as predicted but the differences not significant) and H4 is supported (those with no exposure to service learning scored significantly lower on all 4 dependent variables).

DISCUSSION

While the popularity of service learning has never been higher, the widespread use of this relatively expensive pedagogy comes at a time when colleges and universities find themselves financially stretched and having difficulty meeting all their various commitments. At the same time, questions are being raised about the sustainability of the commitment to service learning from both the educational and community perspectives. In that environment, additional information or analysis that sheds light on the effectiveness of service learning is welcome. This study focused on only a small part of service learning's possible outcomes: what Conway et al. (2009) would call personal and citizenship outcomes. Civic Participation (CP), Self-Efficacy Toward Service (SETS), College Education's Role in addressing Social Issues (CERSI) and Attitude toward Helping Others are important variables, but they are not the only variables that should be studied. The meta-analysis found personal and citizenship outcomes to be relatively small and that finding is echoed in this study. In general, a generous interpretation of the current study also might be seen as supporting the view that increased exposure to service learning enhances these small personal and citizenship outcomes, but that the impact is small enough that it is not statistically significant. A less-generous interpretation might ignore the pattern of outcomes that is repeated and consistent across all for variables, but not significant.

If repeated exposures to service learning do not produce worthwhile incremental gains, one has to question whether the money and effort spent in providing those additional exposures has been well spent. A better strategy for these resources might be to expose more students once rather than a smaller number of students multiple times, or even to reallocate the resources entirely. Institutions of higher education are not wanting for alternative applications of time, effort and money currently allocated to service learning.

Study Limitations

The current study, though of adequate size, is taken from only a single, mid-sized, Midwestern comprehensive university. It cannot be considered representative without replication. In addition, this study didn't exhaustively study all possible outcomes of service learning. In examining CP, SETS, CERSI and AHO, this study focused on personal and citizenship outcomes of the students exposed to service learning. It is possible that these low-impact outcomes are unique in not showing additional impact upon repeated exposures to service learning. It is also possible that multiple exposures to service learning produce incremental impacts within the university and community that completely justify the cost, time and effort expended. Overall, this study examines only a subset of the variables subject to change from repeated exposures to service learning, and eventual conclusions about the overall efficacy of service learning must necessarily come from further study that includes additional variables representing other types of impact. Finally, not all service learning experiences are equal. This study doesn't discriminate between service learning type, skills used, and depth of student involvement in its analysis. Ideally, replication of this study would match the characteristics of the sites examined in this study, include the extensions discussed above and would be complemented by qualitative research designed to flesh out and explain the findings presented here.

CONCLUSION

In a time of diminished resources, it is important to examine university efforts that are time and money intensive in an attempt to maximize the impact of those activities. This study showed no significant incremental impact on the students' personal and citizenship attitudes studied. Those results raise the question of whether repeated exposures to service learning are justified if they show only relatively small returns for repeated time and monetary investments. Though the study examines only a small portion of possible service learning outcomes, it points to a need to examine more closely service learning practices and outcomes in other areas, especially whether the impact of repeated exposures of student to service learning has impacts that justify the investment, regardless of whether the impacts are on the student, the university and its relationships or on the community. As such this study is a valuable contribution to what should be a broader investigation of the possible impacts of multiple exposures to service learning. If additional research shows impacts on other outcomes similar to those shown in this study, universities can save considerable time, money and faculty resources by targeting exposures more carefully in a way that exposes the maximum number of students the minimum amount to produce desired outcomes. In a time when higher education is stressed for resources, this is a timely and important question.

REFERENCES

Campus Compact. (2013). *Creating a Culture of Assessment: 2012 Campus Compact Annual member Survey*. Boston, MA: Campus Compact.

Conway, J. M., Amel, E. L., & Gerwien, D. P. (2009). Teaching and learning in the social context: A meta-analysis of service learning's effects on Academic, personal, social, and citizenship outcomes. *Teaching of Psychology*, *36*(4), 233-245.

Fiscal Year 2014 Operation Budget. (2013). *Minnesota State Colleges and Universities*. Retrieved from http://www.finance.mnscu.edu/budgets/docs/FY2014_Operating_Budget.pdf

Fiscal Year 2015 Operation Budget (2014). *Minnesota State Colleges and Universities*. Retrieved from http://www.finance.mnscu.edu/budget/operating/docs/FY2016/FY2016_operating_budget_with_attachments_Final.pdf

Gerstenblatt, P., & Gilbert, D. (2014). Framing service learning in social work: an Interdisciplinary elective course embedded within a university-community partnership. *Social Work Education*, *33*(8), 1037-1053.

Helm-Stevens, R., Fall, R., Havens, C., Garcia, M., & Polvi, L. (2014). The impact of service-learning curriculum at a local at-risk high school: An examination of preliminary data. *American Journal of Economics and Business Administration*, *6*(3), 122-132.

Higher Education: State Funding Trends and Policies on Affordability. (2014). *GAO-15-151*. Washington, D.C.

History of Service-Learning in Higher Education. (2008). *Learn and Serve Clearinghouse*. Retrieved from http://education.ufl.edu/learnandserve/resources/resource%20files/History_of_SL_in_HE_FINAL_May08.pdf

Littlepage, L., Gazley, B., & Bennett, T. A. (2012). Service Learning from the supply side: Community capacity to engage students. *Nonprofit Management & Leadership*, *22*(3), 305-320.

Lubbers, C. A. & Joyce, T. A. (2014). Promoting campus activities: Encouraging student participation. *Quarterly Review of Business Disciplines*, *1*(1), 1-14.

Mitchell, M., & Leachman, M. (2015). Years of cuts threaten to put college out of reach for more students. *Center on Budget and Policy Priorities*. Retrieved from http://www.cbpp.org/research/state-budget-and-tax/years-of-cuts-threaten-to-put-college-out-of-reach-for-more-students

National and Community Service Act of 1990. (1990). 42 USCA 12501 et seq.

Newman, C. M., & Hernandez, S. A. (2011). Minding our business: Longitudinal effects of a service-learning experience on alumni. *Journal of College Teaching and Learning*, *8*(8), 39-48.

Reichardt, C. S. ((1979). The statistical analysis of data from nonequivalent group designs. In T.D. Cook & D. T. Campbell (Eds.), *Quasi-Experimentation: Design and Analysis for Field Settings*, (147-205). Boston: Houghton-Mifflin.

Seider, S., Gillmor, S., & Rabinowicz, S. (2011). The impact of community service learning upon the worldviews of business majors versus non-business majors at an American university. *Journal of Business Ethics*, *98*(3), 458–503.

Sleeper, B. J., Schneider, K., Weber, P. S. & Weber, J. E. (2006). Scale and study of student attitudes toward business education's role in addressing social issues. *Journal of Business Ethics, 68*(4), 381-391.

Thomason, A. (2015). Just like that, 12 campuses in Georgia become 6. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com/article/Just-Like-That-12-Campuses-in/151053.

Walters, S. (2015). Steven Walters: Wisconsin legislators quietly consider realigning colleges, universities. Retrieved from http://www.gazettextra.com/20150810/steven_walters_wisconsin_legislators_quietly_consider_realigning_colleges_universities
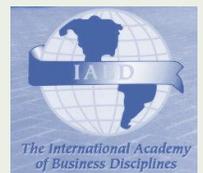
Webb, D. J., Green, C. L., & Brashear, T. G. (2000). Development and validation of scales to measure attitudes influencing monetary donations to charitable organizations. *Journal of the Academy of Marketing Science*, *28*(2), 299-309.

Weber, J. E., & Weber, P. S. (2010). Service learning: An empirical analysis of the impact of service learning on civic mindedness. *Journal of Business, Society and Government, 2*(2), 79-94.

Weber, J. E., Weber, P. S., & Craven, B. L. (2008). Measuring students' attitudes toward college education's role in addressing social issues. *Psychological Reports, 102*, 791-796.

Weber, J. E., Weber, P. S., Schneider, K., & Sleeper, B. J. (2007). Preparing students for citizenship: An exploration of the antecedents and outcomes of self-efficacy toward service. *Journal of Business Inquiry*, *6*(1), 3-10.

Weber, J. E., Weber, P. S., & Young, M. (2010). Measuring service learning outcomes: Test-Retest reliability of four scales. *Psychological Reports, 107*(2), 611-616.

Weber, P. S., Schneider, K. R., & Weber, J. E. (2008). Choosing to serve? An exploration of student self-selection of service learning projects. *Mid-Western Educational Researcher, 21*(2), 30-35.

Weber, P. S., Schneider, K. R., & Weber, J. E. (2011). Service learning: Does it change student perspectives? *Business Research Yearbook, 18*(1), 313-317.

Wittmer, D. (2004). Business and community: Integrating service learning in graduate businesseducation. *Journal of Business Ethics*, *51*(4), 359–371.

Yorio, P. L., & Ye, F. (2012). A meta-analysis on the effects of service-learning on the social, personal, and cognitive outcomes of learning. *Academy of Management Learning & Education*, *11*(1), 9-27.

QRBD

QUARTERLY REVIEW OF BUSINESS DISCIPLINES

August 2015

Volume 2
Number 2