

Developmental Outcomes of Service Learning Pedagogies

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Abstract

This study explored the psychosocial development outcomes of service learning from three distinct models: ongoing continuous service throughout a semester in co-curricular service learning; one time, intensive week-long spring break service learning trips; and ongoing service through a semester of academically-based service learning. A control group of students who had no involvement in service learning was used for comparative purposes. The Student Developmental Task and Lifestyle Assessment (SDTLA; Winston, Miller, & Cooper, 1999b) was administered to college students involved in each of the three types of service learning and the control group. This instrument was administered as a pre-test at the beginning of the academic semester, and then again at the end of the academic semester as a post-test to determine the developmental differences. The findings indicated that there were significant developmental differences among the three service learning pedagogies. In particular, the results suggested that, based on the SDTLA Developmental Tasks, the Spring Break service learning pedagogy had statistically significant psychosocial development gains. The implications for service learning practitioners include further understanding of the developmental outcomes of these service learning types are explored.

Introduction

During the past decade, there has been a marked increase in interest in the pedagogy of service learning. Many postsecondary educators have unitized service learning as part of their curriculum and co-curriculum. Much of the research conducted to date speaks to the degree to which service learning has a positive effect on students' general personal and cognitive development (e.g., Eyler & Giles, 1999; Jacoby, 1996; Sax & Astin, 1997). However, relatively little is known about whether the various types of service learning are effective tools for developing students, and what the differences may be between these service learning pedagogies. These types of service learning pedagogies have needed further investigation in terms of outcomes for students (Campus Compact, 1998). Accordingly, this study examined the outcomes of service learning from three distinct models to determine their developmental impact on student participants.

For purposes of this study, service learning is defined as “a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development. Reflection and reciprocity are key concepts of service learning” (Jacoby, 1996, p.5). This study explored the outcomes of service learning from three distinct models: ongoing continuous service throughout a semester in co-curricular service learning; one time, intensive week-long spring break service learning trips; and ongoing service through a semester of academically-based service learning. A fourth control group of students was used for comparative purposes. This study investigated one particular student outcome, psychosocial development, among college students involved in three different types of service learning by

administering the Student Developmental Task and Lifestyle Assessment (SDTLA; Winston, Miller, & Cooper, 1999b). This instrument was devised to measure students on several developmental vectors defined by Chickering and Reisser (1993). In particular, this study examined the Developing Autonomy Task and the Developing Mature Interpersonal Relationships Task, as well as the various subtasks that provide specific components of the larger developmental task. This instrument was given to participants as a pre-test at the beginning of the academic semester, and then again at the end of the academic semester as a post-test to determine the developmental differences gained.

This study explored the question: Do students involved in distinct types of service learning have different psychosocial development outcomes? The following hypothesis was tested in an attempt to answer the stated research question:

- The “SDTLA difference scores” of traditional college students will significantly differ across the three types of service learning. (‘SDTLA difference score’ is a derived score when a post-SDTLA score is subtracted from a pre-SDTLA score.)

This study employed a classic pre-test/post-test control group design to test the hypothesis whether psychosocial development, the dependent variable, was different among students who participate in co-curricular service learning, academically-based service learning and service learning spring break trips, the independent variables.

Study Population and Sample

The population for this study comprised currently enrolled, traditional-age, full-time, degree-seeking students at a private, liberal arts college located in the Midwest. The population was selected using a stratified random sample selection design. The students asked to join this study were already participating in three distinct service learning pedagogies. One group of sixty students who were involved in academically-based service learning was invited to participate in this study. These students were involved in a service learning project connected to their course content. Another group of sixty students involved in co-curricular service learning facilitated through the college’s service learning office was invited to participate. These students were involved in continuous service learning projects throughout the semester at locations such as thrift stores, after-school programs, and homeless shelters. The third group of students was involved in the college’s service learning alternative spring break trips. These sixty students invited to participate traveled during the college spring vacation to a location to serve for a week. A final group of sixty students who were not involved in service learning was chosen at random from the college student population to serve as a baseline group.

In total, four distinct groups of 60 students representing a sample size of 240 participants were invited to participate in this study. Students who completed the first pre-test SDTLA represented 82% of the sample (164 subjects). Of the 164 subjects who completed the pre-test, 112 chose to continue participation in the study by completing the post-test SDTLA. This represented 68% of the pre-test sample group and 47% of the original sample invited to participate in this study.

Statistical Methods

Descriptive and inferential statistics were calculated for the independent variable in this study, service learning type, which was operationalized into three fixed categories, and a fourth baseline control group and for the eight dependent variables, which were the tasks and subtasks of the Student Developmental Task and Lifestyle Assessment (SDTLA; Winston, Miller & Cooper, 1999b). Mean, standard deviation, multiple t tests, an analysis of variance (ANOVA), a multivariate analysis of variance (MANOVA), and Tukey HSD method were used to report the results of the research question.

Findings and Implications

Based on the findings of this study, there is a significant difference in the psychosocial development outcomes between the three service learning pedagogies. In particular, the results show that, based on the SDTLA Developmental Tasks, the spring break service learning pedagogy has the most statistically significant developmental differences. The implications of these findings will be explored further.

The research question asked whether students involved in distinct types of service learning had different psychosocial development outcomes. In order to answer this question, the hypothesis that was tested was whether the “SDTLA difference scores” of traditional college students significantly differed across the three types of service learning. The SDTLA difference score is a score calculated when the raw post-SDTLA score is subtracted from the raw pre-SDTLA score. As shown in Table 1, there appears to be only small differences between the means of the four groups, with exception of the spring break service learning group.

Table 1
Mean and Standard Deviations for Developing Autonomy and Developing Mature Interpersonal Relationships Tasks

	Autonomy	Relationships	N
Control/Baseline	.8584 (4.01)	2.6400 (4.89)	25
Co-curricular SL	-.7767 (3.49)	2.5643 (5.61)	25
Academic SL	.3785 (8.04)	3.6917 (6.67)	31
Spring Break SL	3.6054 (4.99)	4.2707 (4.10)	31

An analysis of variance (ANOVA) was conducted to determine the differences between the four independent variables, three service learning pedagogies and control group, and the SDTLA developmental tasks. The post-hoc procedure employed the Tukey HSD method to investigate the differences within the Developing Autonomy task. The Tukey HSD provides a value that allows the researcher to make comparisons of means after a significant F-value has been observed in an ANOVA. The significant comparison between the spring break service

learning group and the Co-curricular Service Learning group is presented in Table 2. The Tukey method showed a statistically significant difference in developing autonomy for students who engaged in the Spring Break Service Learning pedagogy when compared to students who participated in the Co-curricular Service Learning pedagogy. The students involved in Spring Break Service Learning had significantly more development on this SDTLA Task than those involved in Co-curricular service learning

Table 2
Post-hoc Tukey Results for Developing Autonomy Task

	Type	Mean Difference	Std. Error	Sig.
Spring Break Service Learning	Control	2.7469	1.50187	.265
	Academic SL	3.2269	1.41913	.111
	Co-curricular SL	4.3820*	1.50187	.022

*Significance at the .05 level

While a statistically significant difference was found between the spring break service learning group and the co-curricular service learning group on the Developing Autonomy Task, it seems clear from the mean scores that the difference was due to a strong difference score from the spring break service learning group, rather than a lack of development from the Co-curricular Service Learning group. The students involved in Spring Break Service Learning had significantly more development on this SDTLA Task than those involved in Co-curricular Service Learning.

Discussion

The findings of this study provide some utility for service learning practitioners. Some reasons for the strong difference scores for the SDTLA Tasks by the Spring Break Service Learning type as compared to the other service learning types will be briefly explored. In addition, a brief examination will be presented into the possible reasons the academically-based service learning pedagogy was found to yield the least psychosocial development differences.

Spring Break Service Learning:

First, the importance of providing quality alternative spring break opportunities from service learning offices has been affirmed. The psychosocial development differences for students involved in the spring break service learning trips were greatest when compared to the two other service learning types and the control group. One reason for this difference may be

due to the immersion experience of this type of service learning, and the personal and community development aspects of these trips. The power of immersion experiences in service learning was documented by Pompa (2002) who found these educational experiences provide learning dimensions that are difficult to achieve in a tradition classroom. Pompa (2002) writes, “different from the idea of service learning as a ‘feel good’ experience, which can be transient and ephemeral, what we are talking about here involves depth, direction, hard work, and a commitment to make change in the world” (p. 74). Immersion experiences in service learning, such as spring break trips, have the power to turn things upside-down for those engaged in them. It provokes one to think differently about the world, and to consider one’s relationship to the world in a new way (Rhoads, 1997).

Therefore, professionals working in service learning offices should provide opportunities for students to organize alternative spring break projects. Currently, of the Campus Compact member schools, 60% of the service learning offices offer spring break service learning trips as an option (Campus Compact, 2003).

The investment in planning these trips, building community on these trips, and serving with fellow students and community partners during these trips to unfamiliar parts of the country have provided student leaders with important learning and development. Most spring break service learning trips are advised by service learning professionals, but planned by student leaders. This involvement in the design and facilitation of the service learning experience has a powerful effect on student leaders (Astin, 1985). This student empowerment element is unique to spring break service learning, and may account for some of the developmental differences. In planning for spring break service learning trips, students and staff should intentionally facilitate the development of community for those going on the trip. The community that is built during these experiences should be intentionally developed, not just left to chance. This will foster an environment that will accelerate the psychosocial development for those involved.

In Rhoads and Neururer’s (1998) qualitative study of an alternative spring break program, the service learning experience provides some concrete examples of this unique learning opportunity. The intensity of spending a week immersed in a service learning experience can offer a better understanding of self and community for the students involved (Rhoads & Neururer, 1998). While the service interactions at the work site are not as prolonged as the semester-long service performed by the co-curricular or academic service learning groups, the spring break service learning experience offers students an opportunity to “truly live” the service experience 24 hours a day, for seven days. This immersion seems to influence the learning and development of students. It also seems that the sense of community and relationships developed within the service learning group can have profound learning outcomes. One student in Rhoads and Neururer’s (1998) study states that, “we really have a community within our group. We’re from really diverse backgrounds yet everybody really got along” (p. 111). It seems that students learned through the environment they were serving, through both the college group and the people they were assisting. This mutuality, the willingness to receive as well as give, becomes an important aspect of the spring break service learning experience.

The findings of this study provide some legitimacy to the spring break service learning pedagogy. There have been some reservations about affirming this pedagogy by professionals

because some students tend to view service learning work as traveling to a destination to “save the poor people.” Some professionals and researchers have questioned whether the money used to send students great distances to participate in spring break service learning could be used more effectively for the community by simply sending them the money (Van Engen, 2000). An example of this perspective is articulated by a community partner in Honduras who wrote, “the spring break group spent their time and money painting and cleaning the orphanage in Honduras. That money could have paid two Honduran painters who desperately needed the work, with enough left over to hire four new teachers, build a new dormitory, and provide each child with new clothes” (Van Engen, 2000, p. 21). Others acknowledge that students have various motivations for serving including guilt, curiosity about different cultures, or peer pressure.

With the strength of this type of service learning affirmed in this study, it is important to return to Rhoads and Neururer’s (1998) concept of mutuality, the willingness to receive as well as to give. They write, “students bring multiple agendas and experiences with their enthusiasm to volunteer. Staff members need to be sensitive to the experiences that shape students’ interest in and commitment to service” (p. 115). Students should be encouraged to reflect on what they are receiving in this experience of serving others. For some service learning professionals, the spring break service learning pedagogy may be seen as the “least serious learning experience” of the three types. However, as this study affirms, there are valuable developmental opportunities in this type of service learning, if it is viewed as more than just “fun and games.”

This study also supports the important role that spring break service learning plays in developing autonomy in students. The Developing Autonomy Task represents students who are able to meet their needs and action on their own ideas without the need for continuous reassurance from others; who recognize the reciprocal nature of the relationships between themselves and their community, and who act as a responsible, contributing member. This is an important area of learning for students in postsecondary education, and should be intentionally utilized in the student life professionals’ quest to foster student learning.

Given the previous studies of spring break service learning, this researcher would have expected to see stronger significant differences on the Developing Mature Interpersonal Relationships Task for this type of service learning. This may be due to a small sample size or other factors. The pre-test score for the Peer Relationships subtask was strong ($x = 50.30$) and did not show significant differences after the post-test on this subtask. One explanation of this could be that the participants who chose to be involved in spring break service learning already possess strong relational skills.

Academically-Based Service Learning

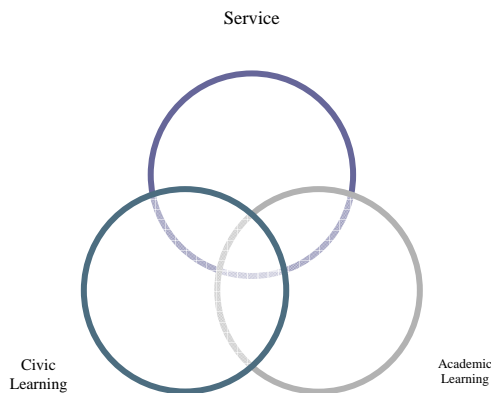
While academically-based service learning provided some difference scores that were higher than the control group, none were found to be statistically significant. In addition, as compared to the other two service learning methods, academically-based service learning was found to yield the least psychosocial development differences. While this seems contrary to some of the service learning literature, (Astin & Sax, 1998; Markus, Howard & King, 1993; Strage, 2000; Vogelgesang & Astin, 2000), this researcher believes there are some legitimate

concerns in regards to the effectiveness of academically-based service learning. These concerns and the possible reasons for the lack of psychosocial developmental differences for those participating in academically-based service learning in this study will now be addressed.

First, some faculty are misinformed about the true nature of academically-based service learning. Inserting a community service requirement onto an otherwise unchanged academic course does not constitute academically-based service learning. While such models are practiced, this interpretation marginalizes the student learning and presents challenges for transforming students' community experiences into learning. Moving students and the practice of service learning beyond "getting credit for doing good," requires treating service learning as more than a casual addition to a course. Merely giving credit for a few hours of service, even in conjunction with having students keep a log or journal of their service learning activities, does not lead to broader connections and academic learning. Community service must be considered in the context of, and integrated with, the other planned learning strategies and resources in the course to realize service learning's full potential as pedagogy (Howard, 2000).

Second, the models given to faculty for constructing academically-based service learning do not take into account the importance of facilitating student development outcomes. For example, one influential model for academically-based service learning offers three criteria as the litmus test for whether a course may be considered service learning by faculty (Howard, 2001). These criteria are: (1) relevant and meaningful service with the community, (2) enhanced academic learning, and (3) purposeful civic learning. The following Venn diagram is given as a model for constructing academic service learning.

Figure 1: Academic Service Learning (Howard, 2001)



All three criteria are necessary for a course to qualify as academic service learning, according to this model. However, this model creates no space for psychosocial or student development outcomes in the service learning process. In fact, according to a course design workbook published by Campus Compact, "it is important to note that while service learning courses may have other learning objectives and/or outcomes, such as in the social or affective domains, these are not necessary conditions for academic service learning" (Howard, 2001, p.13). After

performing a search of exemplary syllabi of service learning courses gathered by Campus Compact through a national research study, only twelve of the over one hundred courses mention student development outcomes in the course objectives. With this focus on academic learning objectives, meaningful service, and civic learning, there is an absence of recognition of the importance of student development outcomes. As faculty construct academically-based service learning courses without this awareness, it should come as no surprise that students are not coming away with these psychosocial development outcomes.

Third, the role of community in creating learning experiences should be considered in regards to academically-based service learning. The experience of participating in service and reflecting on this service in the context of a community has provided some powerful learning experiences for students (Eyler & Giles, 1999). This sense of community is more difficult to construct in a classroom setting, especially when compared to the immersion experience of the spring break service learning experience.

Finally, it is the belief of this researcher that student life professionals bear responsibility for the inefficiencies in constructing service learning experiences that further psychosocial development in the academically-based service learning pedagogy. In an effort to construct partnerships between the learning inside and outside the classroom, student life professionals have not advocated for student development objectives within academically-based service learning. The findings and recommendations from this study should embolden student life professionals in the service learning field to advocate for student development outcomes in all forms of service learning. This study affirms other previous research that found performing service as part of a course adds significantly to the benefits associated with community service for all outcomes except interpersonal skills, self-efficacy, and leadership (Astin et al., 2000). This study's emphasis on researching the psychosocial development of students may not have assessed the true value of academically-based service learning to the academy. The researcher believes the outcomes of academically-based service learning could be enhanced if service learning professionals provided further training for faculty about the importance of reflection, reciprocity and mutuality within the service learning experience. I believe the full potential of this service learning experience could be realized.

With these recommendations in mind, it is the belief of this researcher that academically-based service learning is an important pedagogy in the area of service learning. When done thoughtfully, it provides a much-needed connection of student learning between student life professionals and faculty. The academically-based service learning pedagogy holds great opportunity to collaborate between faculty and student affairs professionals in postsecondary education.

References

- Astin, A. W. (1985). *Achieving educational excellence: A critical assessment of priorities and practice in higher education*. San Francisco: Jossey-Bass.
- Astin, A.W., & Sax, L. J. (1998). How undergraduates are affected by service participation. *Journal of College Student Development* 39 (3), 251-263.

- Astin, A. W., Vogelgesang, L. J., Ikeda, E. K., & Yee, J. A. (2000). How service learning affects students. UCLA Higher Education Research Institute: Los Angeles.
- Bringle, R. G., & Hatcher, J. A. (2000a). Institutionalization of service learning in higher education. *Journal of Higher Education*, 71(3), 273-290.
- Campus Compact. (1998). Special report: Advancing our knowledge of the impacts of service learning. Providence, RI: Author.
- Campus Compact. (2003). *Service statistics: Highlights of Campus Compacts's annual membership survey*. Providence, RI: Author.
- Chickering, A. W., & Reisser, L. (1993). *Education and identity*. (2nd ed). San Francisco: Jossey-Bass.
- Eyler, J. & Giles, D. E. (1999). *Where's the learning in service learning?* San Francisco: Jossey-Bass.
- Howard, J. (2000). Academic service learning: Myths, challenges and recommendations. *Essays on Teaching Excellence*, 12 (3) 12-19.
- Howard, J. (2001). Service learning course design workbook. Ann Arbor, MI: OCSL Press.
- Jacoby, B. A., & Associates (1996). *Service learning in higher education: Concepts and practices*. San Francisco: Jossey-Bass.
- Markus, G. B., Howard, J., & King, D. (1993). Integrating community service and classroom instruction enhances learning: Results from an experiment. *Educational Evaluation and Policy Analysis* 15(4), 410-419.
- Pompa, L. (2002). Service learning as crucible: Reflections on immersion, context, power, and transformation. *Michigan Journal of Community Service Learning*, 9, 67-76.
- Rhoads, R. A. (1997). *Community Service and Higher Learning: Explorations of the Caring Self*. New York: University of New York Press.
- Rhoads, R. A. & Neururer, J. (1998). Alternative spring break: Learning through community service. *NASPA Journal*, 35(2), 100-118.
- Sax, L. J. & Astin, A. W. (1997). The benefits of service: Evidence from undergraduates. *Educational Record*. Summer-Fall, 25-33.
- Strage, A. (2000). Service learning: Enhancing student learning outcomes in a college level lecture course. *Michigan Journal of Community Service Learning*, 7, 5-13.
- Van Engen, J. (2000). The cost of short term missions. *The Other Side*, 1, 20-23.
- Vogelgesang, L. J., and Astin, A. W. (2000). Comparing the effects of service learning and community service. *Michigan Journal of Community Service Learning*, 7, 25-34.
- Winston, R. B. Jr., Miller, T. K., & Cooper, D. L. (1999b). *Student Developmental Task and Lifestyle Assessment Manual*. Athens, GA: Student Development Associates Inc.

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