**Service-Learning: Creating Opportunities to Expand Students’ Worldviews**

Lauren I. Murray, M.A.
College of Education and Human Performance
University of Central Florida
Orlando, Florida

Jarrad D. Plante, M.P.P.A.
College of Education and Human Performance
University of Central Florida
Orlando, Florida

Thomas D. Cox, Ed.D.
College of Education and Human Performance
University of Central Florida
Orlando, Florida

Tom Owens, Ph.D.
College of Education and Human Performance
University of Central Florida
Orlando, Florida

**ABSTRACT**

More literature is needed that focuses on the effectiveness of service learning projects in higher education, specifically how individual students are impacted. This study investigates the possible influence of an international service-learning experience on a student’s worldview. The International Service-Learning Inventory was used to ask students a variety of questions on social justice, intercultural competencies, diversity, global awareness, democracy, civic engagement, and transformative learning. The study was conducted with University of Central Florida student participants (N=9) enrolled in an international service-learning field experience in Botswana examining educational access and gender issues. The results demonstrated strong relationship among four factors: Community, Civic Engagement, Diversity, and Education & Leadership – of which were defined as a student’s worldview. In addition, there were interaction effects with the four factors and gender and ethnicity and main effect sizes with the four factors and first generational students, Pell Grant recipients, and those who have traveled abroad. Because of the large effect size in the small population, this “pilot” or “exploratory” research suggests to the reader significant results may be found when examining larger populations.

**INTRODUCTION**

Service-learning has been described in various broad terms as a type of pedagogy, a philosophy, a program, a high-impact practice, a retention tool, and/or an experience pivotal to student learning and engagement (Deeley, 2010; Kuh, Kinzie, Schuh, & Whitt, 2005; Mendel-Reyes, 1998; Tinto, 2012; Yeh, 2010). The National Service-Learning Clearinghouse (2005) defines service-learning as, “...a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities.” Another requirement of service-learning may include coursework that is associated with the experience with assignments and assessments attached. Additionally, students must actively participate in real-life activities that meet the needs of the larger community, and students have the opportunity to apply newly acquired skills and knowledge to real-world problems (Cashel, Goodman, & Swanson, 2003; McClain, Diambra, Burton, Fuss & Fudge, 2008). A 1999–2000 survey of 324 universities and colleges found that 82% offered undergraduate and graduate courses involving service-learning experiences (Moser & Rogers, 2005). The benefits of service-learning to student participants have been studied across academic disciplines including nursing (Calvillo, Clark, Ballantyne, Pacquiao,
Service-Learning: Creating Opportunities to Expand Students’ Worldviews

Lauren I. Murray, Jarrad D. Plante, Thomas D. Cox, & Tom Owens

ABSTRACT

Participants in this study were nine undergraduate students who chose to identify their gender, five (55.6%) were female and two were male (22%). Of the eight students who responded to questions regarding race and ethnicity, four identified as being white or Caucasian (44%), three as being Black or African American (33%), one as Hispanic or Latino (11%). Three of the students self-reported being juniors in college (33%) with the remaining six (66%) identifying as college seniors. Eight students (89%) are completing degrees within the College of Education, while one student is pursuing a degree in the College of Sciences (11%). Five of the nine students (56%) indicated that they were Pell Grant recipients. Five students identify as first-generation (56%). Eight of the nine students indicated that they had previously completed service-related activities. Seven of the nine had previously traveled abroad for a variety of reasons, from vacationing and visiting with family and friends, to class trip and business trip, to participate in a mission trip, and/or alternative break program.

METHOD

Participants

Participants in this study were nine undergraduate students enrolled in an international service-learning trip to Botswana for 3 weeks in the summer of 2013. The participation rate for both the pre- and post-online survey was 98%. Of the seven students who chose to identify their gender, five (55.6%) were female and two were male (22%). Of the eight students who responded to questions regarding race and ethnicity, four identified as being white or Caucasian (44%), three as being Black or African American (33%), one as Hispanic or Latino (11%). Three of the students self-reported being juniors in college (33%) with the remaining six (66%) identifying as college seniors. Eight students (89%) are completing degrees within the College of Education, while one student is pursuing a degree in the College of Sciences (11%). Five of the nine students (56%) indicated that they were Pell Grant recipients. Five students identify as first-generation (56%). Eight of the nine students indicated that they had previously completed service-related activities. Seven of the nine had previously traveled abroad for a variety of reasons, from vacationing and visiting with family and friends, to class trip and business trip, to participate in a mission trip, and/or alternative break program.

Materials

The International Service-Learning Research Inventory was designed by the researchers after defining the term worldview and determining what construct would be investigated. After performing a meta-analysis of studies using similar inventories, the International Service-Learning Research Inventory was developed using three previously validated surveys as its basis. The International Service-Learning Research Inventory is an online survey which consists of 28 questions, 28 of which were 6-point Likert Scale questions. The survey consists of two primary areas: demographic information and assessment questions. Assessment questions asked the participant to rank themselves on a scale of sense of community, civic engagement, and thoughts on diversity and educational leadership; all topics that the researchers define as worldview.

To ensure the instrument’s reliability and validity, a control group of similar participants was asked to complete the inventory. Each of these individuals completed the inventory with a member of the research team present to answer any questions or address any concerns that were raised. Improvements in wording and formatting were then made to the inventory as needed. These individuals were then asked to take the inventory again to ensure that any issues had been resolved.

To validate the measure, a Cronbach Alpha was conducted for each of the four factors. One example of a Cronbach Alpha of .80 means for each construct. Multivariate and univariate tests were used to determine relationships between construct scores and demographic information.

RESULTS

A scorecard was developed for each of the four factors of Community, Civic Engagement, Diversity, and Education & Leadership and an overall total score for the pre- and post-survey results with the ranges yielding Low, Medium, and High. (Table 1). This scorecard is based off of The Personal Adult Learner Style Inventory (Knowles, 1997).
Holton, and Swanson, p.291, 2005). The changes from pre to post Low scores for the four factors were negative or nonexistent. At the same time, the changes from pre to post High scores for the four factors were all positive. The overall total scores changed where the Low range from pre- and post-survey decreased by 1, the Medium range from pre- and post-surveys stayed the same and the High range from the pre- and post-survey results increased by 1. This illustrated that student participants have increased their worldview based on the four factors and overall total scores.

Dependent T-tests for all Likert Scale were conducted to investigate mean differences between pre-survey and post-survey results. Of the 28 questions within the four factors, two are worth reporting. There is a statistically significant mean difference ($t = -2.53$, $df = 8$, $p < .05$) in student participant responses from “I am comfortable getting out of my comfort zone” from the Education and Leadership factor in pre- and post-survey responses. The pre-survey answers given prior to the trip to Botswana were significantly lower ($M = 4.67, SD = 1.12$) than the post-survey answers given upon their return ($M = 5.11, SD = 1.27$). The 95% confidence interval of the mean difference ranged from -.85 to -.039, and did not include zero. Similarly, a statistically significant mean difference ($t = -2.53$, $df = 8$, $p < .05$) was found in responses to “I am concerned about the rights of others and sensitive to those being discriminated against” from the Community Service factor in pre- and post-survey responses. The pre-survey answers given prior to the ISL trip is significantly lower ($M = 5.00, SD = .71$) than the post-survey responses ($M = 4.67, SD = .73$). The 95% confidence interval of the mean difference ranged from -.35 to -.039, and did not include zero.

A repeated measures test was also used against five pieces of demographic information: gender, ethnicity, first generation, Pell Grant, and whether the participant has traveled abroad. The team was only interested in looking at large effect sizes in the Univariate tests; that is .14 and greater. Tables two and three were measured with interaction effects and tables four, five and six were measured with main effect sizes. Looking at tables two and three, Univariate for Gender versus time and Ethnicity versus time, the Community factor yielded a commonality as a large interaction effect size. Ethnicity also scored large interaction effect sizes in both Diversity and Education & Leadership.

Large main effects for first generation students and participants who have traveled abroad both included Diversity and Education & Leadership. Similarly, non-first generation students along with those who have not traveled abroad both have large main effects for three factors: Community, Civic Engagement, and Diversity. Main effects for Pell Grant recipients had large effect sizes in Community and Diversity, and for those who do not receive Pell Grants had large effect sizes in all four factors: Community, Civic Engagement, Diversity, and Education & Leadership. Diversity was the common factor for those who answered “yes” to traveling abroad, receiving Pell Grants, and/or first generation students. Converse significant difference after running a multivariate repeated measure for all four factors, but there was a large effect size, suggesting that the three-week international service-learning trip accounted for 33.3% of the variance in scores. Using Cohen (1992), that .01, .06, and 1.4 represent Small, Medium and Large effect sizes respectively, results indicate that two factors had a Medium effect size (Community Service = .064 and Civic Engagement = .073) and two factors had a Large effect size (Diversity = .286 and Education & Leadership = .254).

A repeated measures test was used also against five pieces of demographic information: gender, ethnicity, first generation, Pell Grant, and whether the participant has traveled abroad. The team was only interested in looking at large effect sizes in the Univariate tests; that is .14 and greater. Tables two and three were measured with interaction effects and tables four, five and six were measured with main effect sizes. Looking at tables two and three, Univariate for Gender versus time and Ethnicity versus time, the Community factor yielded a commonality as a large interaction effect size. Ethnicity also scored large interaction effect sizes in both Diversity and Education & Leadership.

Large main effects for first generation students and participants who have traveled abroad both included Diversity and Education & Leadership. Similarly, non-first generation students along with those who have not traveled abroad both have large main effects for three factors: Community, Civic Engagement, and Diversity. Main effects for Pell Grant recipients had large effect sizes in Community and Diversity, and for those who do not receive Pell Grants had large effect sizes in all four factors: Community, Civic Engagement, Diversity, and Education & Leadership. Diversity was the common factor for those who answered “yes” to traveling abroad, receiving Pell Grants, and/or first generation students. Conversely significant difference after running a multivariate repeated measure for all four factors, but there was a large effect size, suggesting that the three-week international service-learning trip accounted for 33.3% of the variance in scores. Using Cohen (1992), that .01, .06, and 1.4 represent Small, Medium and Large effect sizes respectively, results indicate that two factors had a Medium effect size (Community Service = .064 and Civic Engagement = .073) and two factors had a Large effect size (Diversity = .286 and Education & Leadership = .254).

A repeated measures test was used also against five pieces of demographic information: gender, ethnicity, first generation, Pell Grant, and whether the participant has traveled abroad. The team was only interested in looking at large effect sizes in the Univariate tests; that is .14 and greater. Tables two and three were measured with interaction effects and tables four, five and six were measured with main effect sizes. Looking at tables two and three, Univariate for Gender versus time and Ethnicity versus time, the Community factor yielded a commonality as a large interaction effect size. Ethnicity also scored large interaction effect sizes in both Diversity and Education & Leadership.

Large main effects for first generation students and participants who have traveled abroad both included Diversity and Education & Leadership. Similarly, non-first generation students along with those who have not traveled abroad both have large main effects for three factors: Community, Civic Engagement, and Diversity. Main effects for Pell Grant recipients had large effect sizes in Community and Diversity, and for those who do not receive Pell Grants had large effect sizes in all four factors: Community, Civic Engagement, Diversity, and Education & Leadership. Diversity was the common factor for those who answered “yes” to traveling abroad, receiving Pell Grants, and/or first generation students. Conversely significant difference after running a multivariate repeated measure for all four factors, but there was a large effect size, suggesting that the three-week international service-learning trip accounted for 33.3% of the variance in scores. Using Cohen (1992), that .01, .06, and 1.4 represent Small, Medium and Large effect sizes respectively, results indicate that two factors had a Medium effect size (Community Service = .064 and Civic Engagement = .073) and two factors had a Large effect size (Diversity = .286 and Education & Leadership = .254).

A repeated measures test was used also against five pieces of demographic information: gender, ethnicity, first generation, Pell Grant, and whether the participant has traveled abroad. The team was only interested in looking at large effect sizes in the Univariate tests; that is .14 and greater. Tables two and three were measured with interaction effects and tables four, five and six were measured with main effect sizes. Looking at tables two and three, Univariate for Gender versus time and Ethnicity versus time, the Community factor yielded a commonality as a large interaction effect size. Ethnicity also scored large interaction effect sizes in both Diversity and Education & Leadership.

Large main effects for first generation students and participants who have traveled abroad both included Diversity and Education & Leadership. Similarly, non-first generation students along with those who have not traveled abroad both have large main effects for three factors: Community, Civic Engagement, and Diversity. Main effects for Pell Grant recipients had large effect sizes in Community and Diversity, and for those who do not receive Pell Grants had large effect sizes in all four factors: Community, Civic Engagement, Diversity, and Education & Leadership. Diversity was the common factor for those who answered “yes” to traveling abroad, receiving Pell Grants, and/or first generation students. Conversely significant difference after running a multivariate repeated measure for all four factors, but there was a large effect size, suggesting that the three-week international service-learning trip accounted for 33.3% of the variance in scores. Using Cohen (1992), that .01, .06, and 1.4 represent Small, Medium and Large effect sizes respectively, results indicate that two factors had a Medium effect size (Community Service = .064 and Civic Engagement = .073) and two factors had a Large effect size (Diversity = .286 and Education & Leadership = .254).

A repeated measures test was used also against five pieces of demographic information: gender, ethnicity, first generation, Pell Grant, and whether the participant has traveled abroad. The team was only interested in looking at large effect sizes in the Univariate tests; that is .14 and greater. Tables two and three were measured with interaction effects and tables four, five and six were measured with main effect sizes. Looking at tables two and three, Univariate for Gender versus time and Ethnicity versus time, the Community factor yielded a commonality as a large interaction effect size. Ethnicity also scored large interaction effect sizes in both Diversity and Education & Leadership.

Large main effects for first generation students and participants who have traveled abroad both included Diversity and Education & Leadership. Similarly, non-first generation students along with those who have not traveled abroad both have large main effects for three factors: Community, Civic Engagement, and Diversity. Main effects for Pell Grant recipients had large effect sizes in Community and Diversity, and for those who do not receive Pell Grants had large effect sizes in all four factors: Community, Civic Engagement, Diversity, and Education & Leadership. Diversity was the common factor for those who answered “yes” to traveling abroad, receiving Pell Grants, and/or first generation students. Conversely significant difference after running a multivariate repeated measure for all four factors, but there was a large effect size, suggesting that the three-week international service-learning trip accounted for 33.3% of the variance in scores. Using Cohen (1992), that .01, .06, and 1.4 represent Small, Medium and Large effect sizes respectively, results indicate that two factors had a Medium effect size (Community Service = .064 and Civic Engagement = .073) and two factors had a Large effect size (Diversity = .286 and Education & Leadership = .254).
ly, those who answered “no” to these same three main ef-
fected repeated measures, Community, Civic Engagement, and Diversity were the three common factors that had large effect sizes.

DISCUSSION

Students are coming to college with greater backgrounds in volunteerism and are already familiar with new peda-
gogies of engagement (Austin et al., 2000). The results of this study support that statement, as eight of the nine par-
ticipants had previously completed service activities prior to their international service-learning experience. Five de-
mographic variables were found to have large effect sizes: gender, ethnicity, previous travel experience, Pell Grant recipients, and first-generation identification. However, only first-generation identification, Pell Grant recipients, and previous travel experience will be discussed below.

First-generation students

The first variable found to demonstrate a large main ef-
fected size was the interaction between first-generation and time. Almost half (43%) of the first-generation students entered college leave before they complete their degree, in contrast to 28% for non-
first-generation students (Chen, 2005). Therefore, suc-
cessful interventions are critical for the retention of this at-risk student population. Service-learning courses have been found to enable first-generation students to develop mentor-like relationships with faculty members while also making the curriculum become more personalized for the students (McKay & Estrella, 2008). This process enables the students to be academically and socially integrated into the college community (Tinto, 2012). Previous qualitative research has found several im-
portant themes: ways in which their work contributed to their international service-learning experience. Five de-
mographic variables were found to have large effect sizes: gender, ethnicity, previous travel experience, Pell Grant recipients, and first-generation identification. However, only first-generation identification, Pell Grant recipients, and previous travel experience will be discussed below.

Low-income students (Pell Grant recipients)

The second variable found to demonstrate a large main ef-
fected size was the interaction between low-income, or students who received Pell Grants and time. In the 2012-
2013 academic year, students with an estimated financial aid package of $5,000-$9,999 were Pell Grant eligible (U.S. Department of Education, n.d.).

In his 2010 analysis of data generated by the U.S. Census Bureau, Mortensen reports that there is a 46.8% gap in bachelor degree attainment based on age when measuring family income, with individuals in lower socio-economic statuses less likely to complete degrees. Therefore, research investigating the impact of service-learning on low-in-
come college students is critical to success of this segment of the higher education population.

Previous qualitative research suggests that low-income students often feel like outsiders in the college community but report that service-learning enables them to appreciate the opportunities that higher education provides. Another key finding regarding low-income students enrolled in service-learning is the importance of identity, both while completing service and how they saw themselves in the future. Henry (2005) writes that this emphasis on identity development was especially apparent in the low-income students reported sharing some important characteristics with the service-learning site, especially, “a similar class background and feelings of isolation and lack of personal identity” (p. 64). Future studies should examine the longitudinal impact of such realizations on students’ identities, major selection, GPA, and later participation in service-learning experiences.

Previous travel experience

The final variable found to demonstrate a large main effect size was the interaction between previous travel experi-
ence and time. While the greatest interactions were found between previous international experiences to complete mission and community service were demonstrated, any previous international travel experience can have a strong relationship with participation in the Botswana trip associated with this study.

Research on the assessment of international service-learn-
ing is limited. International experiences involve intense psycho-emotional, ideological, and physiological reac-
tions for students. Therefore, it is crucial that students critically reflect upon their experiences in order for per-
sonal growth and transformation of attitudes about the United States to occur (Adler, 1975; Crabtree, 2008). Hartman and Rola (2000) contend that students are transformed as individuals as a result of their interna-
tional service-learning experience, becoming more “caring and affirmed students” in the process (p. 21). Our research appears to complement these findings. Future research, however, should be longitudinal in nature, focusing on both the short- and long-term effects of international ser-
vice-learning on students’ personal, academic, and career development.

Limitations

This study had several limitations. First, the small sample size increases the generalizability of the results to a large population, which may be influenced by the way students responded while accounting for their experiences play an important role in the ways in which they create their worldview and challenge and support student identity development and have the opportunity to question their experiences impact their abilities to serve as global citizens and responsible leaders. John Dewey (1933) stated that, “true learning only occurs when students must grapple with true dilemmas” (Ayd-
lett, Randolph, and Wells, p. 152). Connecting classroom curriculum with hands-on experience in the field overseas through international service-learning has many benefits. Students are exposed to a diverse network of people who are trying to make a difference and have the opportu-
tunity to become civically engaged, grow to become lead-
ers, and work together with those who may have different viewpoints but find a way to seek common ground as a cohesive cohort: creating an impact by expanding stu-
dents’ worldviews. The results of this study give a strong charge for faculty in institutions of higher education to consider creating opportunities for service-learning in their class, programs, and in the university.

REFERENCES

Adler, P. (1975). The transitional experience: An alterna-
tive view of culture shock. Journal of Humanistic Psy-
chology, 15(4), 13-23.

geles: Higher Education Research Institute, University of California.

Aydlett, L., Randolph, M., & Wells, G., (2010). Project Panama: An international service project. Internation-
al Journal of Teaching and Learning in Higher Educa-
tion, 22(2), 152-157.

Biraimah, K. (2013). EDG 4954.0P01: International Education Field Experience (syllabus) – Botswana. Or-
lando: University of Central Florida.

nal of Transcultural Nursing, 20(2), 137-145.


