FCAS Pilot Program: Beyond the classroom with three approaches incorporating service learning into undergraduate courses

Emily F. Schmitt Lavin
Nova Southeastern University, eschmitt@nova.edu

Mark A. Jaffe
Nova Southeastern University, mjaffe@nova.edu

T. A. Silver

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NSUWorks Citation
Schmitt Lavin, Emily F.; Jaffe, Mark A.; and Silver, T. A., "FCAS Pilot Program: Beyond the classroom with three approaches incorporating service learning into undergraduate courses" (2012). Biology Faculty Proceedings, Presentations, Speeches, Lectures. 126. https://nsuworks.nova.edu/cnso_bio_facpres/126

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Abstract

The researchers developed SL training and assessment tools in addition to maintaining all regular course assignments.

BIOI 1500
- Pre and Post-test on student attitudes toward science education and the SL process
- Curricular unit for elementary school students to learn science
- Reflection Essay

BIOI 2600
- Geriatric terminology quiz
- Pre-test and Post-test on student attitudes towards the elderly
- HPD expert led workshop on Ageism
- 5-hour interactions with participants by volunteering at the HPD health fair
- Reflection Essay
- Student Survey

EXSC 3800 Exercise Prescription
- Accumulate 5 hours of practice to develop proficiency in administering and interpreting sphygomanometry
- Reflection essay to highlight the experience of practicing on the community

Assessment

In addition to maintaining all stated regular course objectives, each researcher developed new specific SL objectives.

BIOI 1500 Biology I/ Lab.
- Summarize information relating to one of the topics being studied in BIOI 1500 to produce science curricular units for K-12 students.
- Demonstrate the ability to effectively communicate complex scientific concepts.

BIOI 2600 Medical Terminology.
- Define geriatric terminology and explore attitudes regarding the elderly.
- Apply geriatric terminology and observe ageism among the different participants through volunteering at HPD’s Boomers and Beyond Health Fair.

EXSC 3800 Exercise Prescription
- Administer and interpret sphygomanometry (blood pressure) in accordance with the American College of Sports Medicine.

Objectives

Each researcher created a unique approach to accomplish their SL objectives:

Approach #1: BIOI 1500 Biology I/ Lab. Students created curricular units and presented science demonstrations to elementary school students and their families at Science Alive, a community night event at Wellesley Elementary School.

Approach #2: BIOI 2600 Medical Terminology. Students applied geriatric medical terminology and confronted their attitudes toward the elderly during their daily interactions with participants at the Boomers and Beyond Health Fair.

Approach #3: EXSC 3800 Exercise Prescription. Students practiced administering and interpreting blood pressures at the Lifetime Learning Institute (LLI).

Results

Students stated that preparing and sharing science with young children and other NSU volunteers helped them understand course concepts better. The experience helped to make science learning more engaging. 500 people attended the event.

BIOL 2600
- Students averaged 26/30 on the geriatric terminology quiz compared to 24/30 on regular quizzes.
- Student survey results averaged 4.5/5 on student satisfaction with their SL.

EXSC 3800
- Students stated one of the major benefits was the hands on experience.

Challenges

There were common as well as unique challenges to each approach. All three researchers had challenges such as:
- Weather and transportation issues
- Monitoring students during the event
- Time and administration constraints
- Maintaining genuine interest in the project for the sake of community involvement and not simply as a course grade requirement.

Conclusions

The outcomes of all three service learning projects was a highly successful engagement of the students. Service learning can provide tangible benefits to all stakeholders. The students benefited by obtaining real life experience performing tasks in the community. The community benefited from the energy and passion that the students brought to the activities. NSU benefited from enhanced public relations and the professor benefited from having more engaged students in the class.

Recommendations:
- Although Service Learning can be incorporated into most classes, the experience of the researchers suggests that it would be a better fit in classes with 16 or fewer students. It is vital to enlist the community partner early in the process. Limit the project workload so that it does not place too great a burden on the student and faculty member. Limit the grade impact to between 5-15% so that students take service learning seriously, but not at the expense of the course content.

References

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Michelle Gagnon

Ft. Lauderdale-Davie, FL

FCAS Service Learning Pilot Program
Beyond the Classroom with Three Approaches to Incorporating Service Learning in Undergraduate Courses

Jaffe, M. (Biology), Schmitt, E. (Biology) and Silver, T. A. (Exercise and Sport Science)
Division of Math, Science and Technology
Nova Southeastern University
Ft. Lauderdale-Davie, FL