Developing University and Community Partnerships: A Critical Piece of Successful Service Learning

By James McDonald and Lynn A. Dominguez

The partnership between science and the environment in service-learning projects helps students to make greater connections to the world around them. Service learning provides many benefits to students, faculty, and communities within the context of a college course. However, to prevent frustration, it is important for faculty members to make a clear distinction between service learning and volunteerism by connecting their course objectives to the service being provided. They also must develop a framework for planning, assessment, and reflection. Finally, a successful partnership must be developed. Clearly defining the community setting to be used for the service-learning project will ensure a more positive outcome. Developing the partnership framework through purposeful communication with all partners is the key to successful service-learning projects. A sequential series of steps are provided for the framework development. Actual examples of classroom projects are described, along with benefits to students, agencies, and community participants.

Science instructors may often ask themselves how they can make the material in their classes relevant to their students. This is particularly important now as the world faces a variety of issues that are related to science such as energy, climate, and environmental challenges of a global nature. To comprehend the complexity of these global issues, students must gain a deeper understanding about science and the environment. However, at the same time, students must realize their connectedness to a much larger global community existing outside of the physical university boundaries. One teaching method that connects students with the community through the science content in their classes is service learning. Many people confuse community service with service learning. At its core, service learning provides a benefit to both the student (related to their classwork) and to the community partner. The use of service learning as a teaching method has the potential to provide many benefits to student learning (Figure 1).

Unfortunately, not all service-learning activities attempted by university faculty are successful, which leads to increasing frustration, especially after faculty have invested large amounts of time and effort. Usually unsatisfactory results occur because of two reasons. First, a distinction is not made between simply providing volunteer community service versus service learning. Second, many projects are missing one of three critical components to make the experience fit the definition of service learning. These include identification of appropriate course objectives that the service-learning experience will fulfill; a framework for planning, assessment, and reflection; and establishment of a successful partnership within the community.

Service learning is not simply a volunteer activity in the community; instead, as explained by Kaye (2007), in service-learning experiences “students are actively participating in the process of understanding, integrating, and applying knowledge” from the subject area they are studying as they work to improve their communities. Making a clear distinction between a volunteer activity and service learning is critical to the success of any service-learning project. At a number of service-learning workshops, we have assisted science faculty with problem solving related to the implementation of service learning in a science classroom. For example, a nutrition department faculty member had her students volunteer each semester serving food at a local soup kitchen. Students were required to donate 5 hours of their time, which they documented by having the soup kitchen personnel sign off on their time logs. However, the instructor and students were questioning the value of this experience in relation to what they were studying for their nutrition classes as a teaching method has the potential to provide many benefits to student learning (Figure 1).

<table>
<thead>
<tr>
<th>Figure 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service-learning benefits for students (Furco &amp; Root, 2010).</td>
</tr>
<tr>
<td>• Improved student engagement in school and learning</td>
</tr>
<tr>
<td>• Positive effects on students’ performance on subject-matter exams and assessments</td>
</tr>
<tr>
<td>• Increased motivation toward school</td>
</tr>
<tr>
<td>• Enhanced civic responsibility and citizenship</td>
</tr>
<tr>
<td>• Enhanced personal and social skills including leadership capacity</td>
</tr>
<tr>
<td>• Retention of students’ character assets as they mature</td>
</tr>
</tbody>
</table>
learning in class.

On examination of the class syllabus and assignment, we were able to determine that the volunteer experience was not tied to any of the course objectives, the students were not involved in either identifying a community/agency need or the formulation of an effective service-learning project, and the soup kitchen had not been consulted as to their agency or client needs (although they did appreciate the help). Once the instructor opened a discussion with the soup kitchen, the partners were able to generate a list of needs the agency had including nutritional classes for clients, assessment of nutritional deficiencies in the menus, and a comprehensive list of potential food donors to fill nutritional gaps. The instructor was able to tie many of the agency needs to specific class objectives such as (a) assessing client nutritional needs and (b) conducting nutritional classes for a variety of clients. She then challenged her students in each class to design a service-learning project that would benefit both the agency and the students’ learning needs. Student reflection papers demonstrated that the time students were volunteering at the soup kitchen had become more focused, and they were able to identify tangible benefits to all partners.

As the previous example demonstrates, although the instructors’ original intentions were good, the anticipated outcome of the first project was not what was expected until a service-learning model was fully implemented. One important concept for faculty to remember as they design service-learning projects for their classes is that we want our students to view engagement with the community as a partnership rather than something the students have done for the partner (London, 2000). The purpose of this article will be to assist university faculty in designing a framework for defining, identifying, and creating successful community partnerships in their service-learning projects.

Defining community

Most universities are situated near or in a greater community setting of a local town or city. Students tend to identify most strongly with the university setting as their community instead of the surrounding town or city. For faculty members who are implementing service learning for the first time, a project that takes place on campus can have several benefits. These include proximity to classrooms and labs, accessibility to student organizations and residence halls, and easier planning for the project. The following are examples of potential on-campus, service-learning projects: recycling education programs, campus awareness of environmental issues, youth and child environmental education programs, campus sustainability programs, and campus “greening” projects (i.e., planting trees, removing invasive species).

However, while on-campus projects can serve a need, university students also must understand the impact they have on the surrounding communities. Service-learning activities provide many opportunities for students to positively interact away from the university setting and within the surrounding community. Jacoby (2003) found that “service-learning partnerships have served as the catalyst for broader and deeper engagement and civic responsibility by colleges and universities” (p. 2) within their communities.

The term community may actually be defined in a number of ways for the purposes of service-learning activities. Certainly, a city is an example of a large diverse community. However, individual agencies within that city form their own types of communities. For example, nonprofit agencies, youth groups, health agencies, and schools are all smaller communities within the context of a city. Each of these community types has their own missions, goals, and perspectives that influence the type of interactions and activities that take place within them. In working with students, the community partner should always derive significant benefits from a service-learning project (Kaye, 2004). For this to happen, it is important for university faculty to fully understand the community partners’ perspective when initially designing a service-learning project. Although benefits to the students in the form of real-life experiences and to the faculty member through achievement of course objectives are relatively easy to identify, community partner benefits may be more challenging. According to Jones (2003), “great care must be taken to design and sustain partnerships with community agencies that enable student-learning objectives to be realized while advancing community agency goals and activities” (p. 152). A strategy for purposeful communication between the faculty member, students, and community partner becomes the vital link that sustains all successful service-learning projects. The key to the communication strategy is development of a strong partnership framework on which to imbed the service-learning components.

Developing the partnership framework

Once the focus for the course has been determined, the instructor may use two different ways to create a project. The first step in the framework is to clearly identify the class objectives and outcomes that will be met by the service-learning project (Figure 2). In some cases, students may be tasked with designing a project on the basis of a specific assignment or outcome. In other classes, the instructor may first determine what a classwide project will be, with students designing portions of the project.

The second step is to select a few potential community partners who may benefit from the project outcomes. Contact can be made by
the faculty member or students to determine the mission and goals of the partner. In some instances, the faculty member may be contacted directly by an agency for assistance with a specific project or need. Whatever form the initial contact takes, the instructor must develop a clear picture of the agency and its needs, the clientele they serve, their capacity for student numbers, and their interest in the project.

The third step is to clearly define the project purpose; university, student, and partner roles; the responsibilities of each partner; and the benefits for all involved. At many universities, when students are required to go off campus as part of a class, the faculty member will need to complete an affiliation or service-learning agreement with the partner agency to protect the students, faculty, university, and agency in the event of an accident or mishap. Faculty should check with their respective risk management group on campus to determine what their university policy requires. During the project the instructor should make regular contact with the agency to determine the project’s progress. All partners should be invited to the final student presentations of their project.

Service learning as a teaching methodology in a university science, education, or any other subject-matter course provides an opportunity for students to experience knowledge in the real world. The following two examples are taken from real service-learning projects conducted in an Environmental Interpretation class and an Elementary Science Methods class. In each of these examples the instructor, the university students, and the partner all derive benefits from a service learning experience (Figure 3).

For the Environmental Interpretation class example, the instructor formed a partnership with both the city and county parks and recreation departments. Although there are many parks managed by each department, there are very few environmental education opportunities available for the public within those parks. The county parks director brainstormed a list of potential service-learning projects that students in the class could engage in to benefit the students, parks, and community. During the spring semester, students worked in teams to research, plan, develop, and produce a self-guided interpretive trail for one of the county parks. The parks director met with student teams, provided updated trail maps, and clarified what her goals for the project would be. The director attended the final class presentations for the project and selected two that would be implemented along the trails. Since that time, this class has worked on a number of environmental education projects for the parks and schools in the community. Students consistently mention in their project reflections the value of working with professionals in the field and the pride they have in their finished products.

The Family Science example provides a chance for elementary preservice teachers to put their science lessons into practice with elementary students and their parents from a local school. They get the opportunity to give back to the local community, to reflect on their own science teaching, and to learn from the mistakes made in teaching an inquiry-based science lesson during a service-learning project. As future elementary science teachers, the students need to “develop an appropriate philosophical mind-set to complement inquiry as a prerequisite to becoming an inquiry-based teacher” (Llewellyn, 2007, p. 53). Family Science provides this opportunity for the preservice teachers. All of the course objectives and outcomes are met through several class assignments, an event held during class time, and a chance to gain practical experience in science teaching.

The partner, in this case a local elementary school, also benefits from the Family Science service-learning experience. When the course instructor was supervising student teachers at the school, the principal commented on how the students had not done well on the critical thinking and problem-solving portions of the state achievement test. The instructor began a dialogue with the principal about how Family Science could meet some of these curricular objectives for the elementary students. The princi-
Developing University and Community Partnerships

Faculty should carefully consider their course objectives when designing a project and make early, regular contact with their community partners throughout the project timespan. Identifying student and community benefits early in the planning process will assist to ensure successful project partnerships that can be maintained over time. Consistent communication also related to the instructor that Family Science earns the school high grades for community involvement and collaborative partnerships on the report card to the state Department of Education. The teachers of the school also benefit because they receive more examples for teaching physical science lessons of which they were not previously aware.

Most important, the elementary students learn about the process and content of science. “In contrast to the commonly held and outmoded view that young children are concrete and simplistic thinkers . . . children entering school already have substantial knowledge of the natural world, which can be built on to their understanding of scientific concepts” (National Research Council, 2007, p. 53). Family Science provides elementary students the chance to try out their science ideas in a nonthreatening, engaging, and hands-on situation.

**Conclusion**

Research has demonstrated that service learning is an excellent teaching method to increase student engagement in learning. However, according to Furco and Root, 2010, “future investigations must incorporate . . . research design[s] that can raise the status of service-learning as an evidence based practice” (p. 16). On the basis of practical experience through the use of service learning as a teaching and learning method, we have found extensive benefits to accrue for all participants. Certainly our students have gained valuable learning experiences outside of the university walls that are directly related to their chosen career paths. In addition, the university and community partners are strengthened through each successful service-learning project.

The use of a step-by-step strategy for developing, planning, and initiating community partnerships by faculty serves to ensure a successful service-learning project for students, the community, and the university.

---

**FIGURE 3**

**Student, community partner, instructor, and university benefits from two service-learning projects.**

**Benefits from Environmental Interpretation service-learning project**

University students receive:
- opportunity to work directly with a parks and recreation agency in their community,
- opportunity to create a self-guided interpretive brochure that integrates the concepts learned in class in a purposeful project, and
- opportunity to experience the real-world application of theory and concepts.

Agency receives:
- influx of new ideas for programs,
- template for the self-guided interpretative trail brochure/materials, and
- opportunity to maintain open communication with the university department for other potential projects.

Community participants receive:
- up-to-date nature information about their local environment when hiking the trail, and
- enhancement of their experience hiking the trail.

**Benefits from Family Science night service-learning project**

University students receive:
- a sense of what it is like to work in the community and provide a needed service to a partner,
- practice working with students and their parents,
- opportunity to teach a science lesson of their own creation to a group of real students and learn from their mistakes,
- opportunity to reflect on their own practice and see how they could improve their teaching, and
- opportunity of teaching science as inquiry.

Partner (elementary school) receives:
- assistance to address gaps in their curriculum and teaching practice, such as critical thinking, problem solving, and hands-on inquiry-based science;
- involvement with the community and with parents that brings them to school to see what their child is learning;
- opportunity to share with teachers how to do physical science activities; and
- needed components for their annual school report to the state Department of Education.

Elementary science students receive:
- opportunity to learn the process of science,
- opportunity to learn about physical science concepts,
- opportunity to build on their existing knowledge of science, and
- a chance to do science with their parents in a fun and engaging setting.

**Benefits to the instructor for service-learning projects**

- more engaged, enthusiastic students for the content area,
- strengthened ties to community partners, and
- increased opportunities for practical application of course objectives and content.
Developing University and Community Partnerships

...tions with project partners will allow for the successful resolution of any problems that occur early in the project. Although service-learning projects require a significant amount of faculty time to be successful, the benefits realized by both students and community partners are worth the time and effort expended.

Acknowledgments
We thank Jeanie Mishler at Clare Primary School for her partnership with the Family Science program at their school and her involvement as a community partner. We also thank SueAnn Kopmeyer, director of the Isabella County Parks, for partnering with our interpretative students and providing funds for trail development.

References

James McDonald (mcdon1jt@cmich.edu) is a professor of science education in the Department of Teacher Education and Professional Development at Central Michigan University in Mount Pleasant. Lynn A. Dominguez is a professor in the Department of Recreation, Parks, and Leisure Services Administration at Central Michigan University.
Copyright of Journal of College Science Teaching is the property of National Science Teachers Association and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.