Promoting Student Engagement: Using Community Service-Learning Projects in Undergraduate Psychology

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Cover Page Footnote
The authors wish to thank Mary Dubbink and Rich Carlson for providing departmental data. We also thank Michele Bridges and two anonymous reviewers for helpful comments and suggestions. Send correspondence to Richard J. Harnish, Department of Psychology, The Pennsylvania State University, New Kensington Campus, 3550 Seventh Street Road, Route 780, Upper Burrell, PA 15068-1765; e-mail: rjh27@psu.edu.

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Promoting Student Engagement: Using Community Service-Learning Projects in Undergraduate Psychology

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In this article, we present a novel way to integrate psychological theories and research methods by engaging undergraduate psychology students in service-learning projects. Our goal for the course was to bring to life theories and research methods that students often regard as academic rather than practical. We describe the different projects conducted with several community partners over the course of seven years. Students reported high satisfaction with the course as compared to similar courses that do not have a service-learning component. Additionally, students performed better (as measured by final grades) in the course that had a service-learning component. We discuss why service-learning had an impact on students and the benefits it provides for both students and faculty.

When many think of student engagement, thoughts of community volunteer projects come to mind. Although universities are often involved in such projects, volunteer opportunities lack the structure for students to reflect on the activity so that they gain a more complete understanding of course content. Engagement however, is a scholarly activity where the activity is designed, implemented, and evaluated with an educational experience in mind (Howard, 2003). To this end, engagement takes on an experiential learning or service-learning component during which students are directed to reflect on the nature of the engagement activity in order to integrate it with elements of traditional course content. Our purpose is to present a variety of service-learning projects that we have conducted over the past seven years. In particular, the pedagogical rationale and effectiveness of using service-learning will be discussed. Although projects described are from an applied social psychology course, the teaching methods used could be adapted to work in a variety of courses where an experiential component would complement more traditional methods.

During the course of educating undergraduate psychology students, classes that focus on theories, basic research methods, and statistics are the core of the curriculum. Yet, in our experience, few undergraduates consider how theory, research methods, and statistics intertwine. Indeed, we find that most students regard theories and topics in research methods as more academic than practical – facts to be memorized rather than applied to real-world issues. Perhaps their perception is due, in part, to the methods instructors use to teach such topics which emphasize memorization rather than application. Unfortunately, without the opportunity to integrate theory, research methods, and statistics, students do not make the connections between what is taught and the impact it has outside the classroom.

Although service-learning is not new – according to a popular account (e.g., Carver, 1997), it dates back to the 1920s – it has garnered renewed interest as higher education was called on by prominent academicians and organizations to assume a leadership role in addressing society’s problems (Bok, 1982, 1986; Boyer, 1990, 1994; Ehrlich, 1995; Hackney, 1994; Kellogg Commission, 2000; Kerr, 1963; Newman, 1985; Wingspread Group.
on Higher Education, 1993). In addition, calls for higher education to assume a leadership role in solving society’s problems have come from former U.S. Presidents – Bush, with the National Community Service Act of 1990, and Clinton with the National and Community Service Trust Act of 1993.

Even though there are many definitions of service-learning (Sigmon, 1994) and the language used to convey the idea of service-learning (Kendall, 1990), we wanted the service-learning experience to provide our applied social psychology students with activities that addressed a real-world problem that combined instruction specifically designed to promote learning (Jacoby, 1996). Our goal was that such an experience would embody Chickering and Gamson’s (1987) seven principles of improvement for undergraduate education. Specifically, we hoped that the service-learning project would encourage student-faculty contact, enhance cooperation among students, promote active learning, provide prompt feedback, stress time on task, convey high expectations, and engender respect for others’ talents and ways of learning. With these principles in mind, we created assignments in which undergraduate psychology students (who previously completed courses in basic research methods and statistics) collaborated with nearby communities on various projects where they could lend their expertise. In this article, we provide a description of our applied social psychology course which prominently features a service-learning experience, students’ evaluation of the course, and their learning as assessed by final grades.

**Pedagogy Behind The Service-Learning Projects**

We employed the experiential learning theory of Kolb (1984) as a framework for the course. In Kolb’s (1984) model, students first are exposed to abstract conceptualization (i.e., learning the course curriculum), followed by reflective observation (i.e., formal writing assignments), active experimentation (i.e., how the course information can be used to solve a social problem), and finally, the concrete experience (i.e., the service-learning project). Abstract conceptualization is achieved by asking students to critically read the assigned texts in order to provide training for the specific technique used during that semester. Reflective observation is obtained through student-led class discussions during which an assigned student discussion leader asks fellow students to explain and illustrate concepts from the readings (for details on the student-led seminar method, see Casteel & Bridges, 2007). Creating a research proposal, research materials, and a written report for the community partner engenders active experimentation. Upon agreement between the class and the community partner, students begin the project (i.e., the concrete experience in Kolb’s model).

**The Service-Learning Projects**

Because of the campus’ involvement in Westmoreland Economic Development and Initiative for Growth (WEDIG), a 501(c)3 corporation, community partners often approach the university and ask for assistance in various projects (see Harnish & Snider, 2012 for a description of WEDIG and the university-community partnership). All service-learning projects involved the collection, analysis and reporting of data in order that community partners could make informed decisions. Projects have included: collecting and analyzing data for comprehensive plans for the City of Lower Burrell and the Borough of Plum (for a detailed review of one of these projects, see Harnish & Bridges, 2004); understanding
The Course

At the beginning of the semester, we explained to students that the applied social psychology course would have two components: One was theory-based and the other was experientially-based. We synthesized these two dimensions in seminar discussions based on assigned readings and the service-learning assignment. We informed students that because the focus of this course was to apply social psychological theories and research methods to social problems, they were required to participate in a service-learning project. The service-learning project was to conduct the research needed for a nearby community to make informed decisions. We also told students that their grade for the course was based on two components: Leading and participating in the seminar discussions and their involvement in the service-learning project. Because the notion of conducting such a project was novel to students, we told them to plan on devoting approximately 4 hours a week or 60 hours over the course of the semester working on the project.

We yoked the assigned reading and class discussions to specific class assignments. For example, to help students understand the social issues with which the community was grappling, we assigned readings that focused on theories about neighborhood problem solving (e.g., Hirschman’s, 1970 exit, voice, loyalty theory). When students had an understanding of the specific community issue, our attention turned to discussions of which methodological and statistical techniques would be appropriate for the research project. For example, we would assign articles on methodology and statistical issues by McCreary (1997), King (1997), or Dillman (1991) according to the needs of the project.

As noted earlier, a different student leader conducted each class discussion. We assigned two class discussions over the course of the semester to each student. To aid the student leader in conducting the class discussion, the leader provided their classmates with six to eight questions to consider and answer while reading the assignment. These answers formed the basis of the subsequent discussion. We implemented this protocol to get students in the habit of active reading – taking notes, underlining passages, and writing responses and questions in the margins of the text or in separate notes.

After reviewing the social psychological theories that could help resolve the issues facing the nearby city, students met the community partners (e.g., mayor or supervisors and city council). The community partners provided background information on the project (e.g., recapping major economic events impacting the quality of life and the current economic and social realities facing the community). The community partners also set the stage for the research clearly identifying the informational needs for the project.

Students were charged with the creation of a research proposal and associated forms (e.g., consent forms and questionnaires) that they submitted to the community partners for review. A meeting was scheduled so community partners could offer suggestions on the proposal and associated forms. In this way, students were accountable for their work and thus created more efficient questions and lines of inquiry. As is required by the university,
the Institutional Review Board (IRB) also received a copy of the materials for review prior to conducting the research. We should note that as part of the course, all students successfully completed the university’s training on the treatment of human participants.

Because of the complexity of the projects, the entire class worked on a project during the semester. We used all 15 weeks of class time to complete the project. In Table 1, we present a typical schedule which describes the class topics and corresponding class activities. The classes met twice a week for 75 minutes during a 15-week semester.

Table 1
**Schedule for Service-Learning Project**

<table>
<thead>
<tr>
<th>Week</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Definitions, theory and methods of applied social psychology are reviewed</td>
</tr>
<tr>
<td>2</td>
<td>Community partner presents overview of the service-learning project</td>
</tr>
<tr>
<td>3</td>
<td>Readings and discussions on methodologies that could be applied to the social problem</td>
</tr>
<tr>
<td>4</td>
<td>Students write a research proposal that details how the social problem will be addressed</td>
</tr>
<tr>
<td>5</td>
<td>Proposal is submitted to the Office for Research Protections (IRB) for review</td>
</tr>
<tr>
<td>6</td>
<td>Develop the sampling frame and sample for the project</td>
</tr>
<tr>
<td>7</td>
<td>Create the dependent measures</td>
</tr>
<tr>
<td>8</td>
<td>Community partner presented with the research proposal and supporting materials</td>
</tr>
<tr>
<td>9</td>
<td>Comments from the community partner are received and changes, if any, are made</td>
</tr>
<tr>
<td>10</td>
<td>Approval for the use of human participants is obtained</td>
</tr>
<tr>
<td>11</td>
<td>Preparation for the project (e.g., copying, assembly, etc.) and data collection begins</td>
</tr>
<tr>
<td>12</td>
<td>Data collection ends</td>
</tr>
<tr>
<td>13</td>
<td>Data coding, and data entry begins and ends</td>
</tr>
<tr>
<td>14</td>
<td>Students write a report to be delivered to community partner</td>
</tr>
<tr>
<td>15</td>
<td>(“Buffer” week for any slippage in schedule)</td>
</tr>
<tr>
<td>16</td>
<td>Presentation is scheduled with the community partner during the final examination period for the course</td>
</tr>
</tbody>
</table>

*Note.* Because the projects we have undertaken fall within the “expedited” category for IRB review at our university, IRB approval of the project is granted within two to three weeks. Other institutions may have different turn-around times.

**Evaluation**

**Measures**

We used two dependent measures to evaluate the effectiveness of using service-learning in our course: the university’s Student Ratings of Teaching Effectiveness (SRTE) and final course grades. The SRTE is a 22-item evaluation form that has both scale-response and open-ended questions to evaluate issues such as learning, enthusiasm, organization, group interaction, individual rapport, breadth, examinations, and assignments. Scaling of the close-ended questions is based on a 7-point scale where “1 = lowest rating,” and “7 = highest rating.” In addition, students are able to provide comments about the course or instructor if they wish.

Toward the end of the semester (week 14), all students enrolled in the course were sent
an email from the vice provost of academic affairs asking them to complete the SRTE. The process is managed by the university’s center for teaching excellence and is outside the control of the instructor. Up to two reminder emails are sent to students; the emails contain information on where and how to complete the SRTE.

Because we are particularly interested in documenting students’ perceptions of the course and instructor, as well as their learning, we first focus on students’ perceptions of overall quality of the course and overall quality of the instructor as assessed by SRTE scores. Then we examine learning that occurred in the course as measured by final course grades. We compare our applied social psychology course that had a service-learning component to the applied social psychology course taught at our university’s main campus which did not have service-learning component. In addition, we compare our applied social psychology course that used service-learning to a similar course we teach, introductory social psychology, which does not use service-learning. Using both of these comparisons provides a more complete picture of the impact service-learning has on our dependent measures and serves to overcome shortcomings associated with any one comparison (i.e., personality differences between instructors and differences in course content).

Comparison Between Our Applied Social Psychology Course and Our Main Campus’ Applied Social Psychology Course

To examine how service-learning impacted students’ evaluation of the course, we compared our applied social psychology course that had a service-learning component with those at our main campus where the applied social psychology course did not have a service-learning component. Because the university only considers two of the SRTE measures as critical to faculty evaluation, comparison data is only available for students’ perceptions of overall quality of the course and overall quality of the instructor. (See Table 2.)

Table 2
Mean Student Ratings of Applied Social Psychology Course With Service-Learning Component and Applied Social Psychology Course Without Service-Learning Component

<table>
<thead>
<tr>
<th></th>
<th>Applied Social Psychology Course With Service-Learning</th>
<th>Applied Social Psychology Course Without Service-Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall Quality of Course</td>
<td>Overall Quality of Instructor</td>
</tr>
<tr>
<td>Spring 2011</td>
<td>5.6</td>
<td>6.4</td>
</tr>
<tr>
<td>Spring 2010</td>
<td>5.6</td>
<td>5.8</td>
</tr>
<tr>
<td>Spring 2009</td>
<td>6.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Spring 2008</td>
<td>6.2</td>
<td>6.2</td>
</tr>
<tr>
<td>Spring 2007</td>
<td>6.3</td>
<td>6.6</td>
</tr>
<tr>
<td>Spring 2006</td>
<td>6.1</td>
<td>6.1</td>
</tr>
<tr>
<td>Spring 2005</td>
<td>5.6</td>
<td>5.7</td>
</tr>
<tr>
<td>Fall 2003</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Fall 2001</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

*Note.* Ratings are based on a 1 to 7 scale where “1 = lowest rating” and “7 = highest rating.”

Students enrolled in the applied social psychology course that had a service-learning component rated the quality of the course higher ($M = 5.91$, $SD = .31$) than students en-
rolled in the applied social psychology course that did not have a service-learning component \((M = 5.39, SD = .34), t(8) = 2.40, p < .05, \text{ partial } \eta^2 = .42\). Examining the quality of the instructor, there was a marginally significant difference between courses that had and did not have a service-learning component. Students tended to rate the instructor who used service-learning higher \((M = 6.11, SD = .32)\) compared to instructors who did not use service-learning \((M = 5.57, SD = .47), t(8) = 2.18, p = .06, \text{ partial } \eta^2 = .37\).

### Comparison Between Our Applied Social Psychology Course and Our Introduction to Social Psychology Course

We also compared our applied social psychology course that used service-learning to a similar course we teach, introductory social psychology which does not involve service-learning component. As shown in Table 3, students rated course quality higher when the course had a service-learning component \((M = 5.91, SD = .31)\) compared to the course that did not have a service-learning component \((M = 5.41, SD = .42), t(12) = 2.53, p < .03, \text{ partial } \eta^2 = .33\). Students also rated instructor quality higher when the course had a service-learning component \((M = 6.11, SD = .32)\) compared to the course that did not \((M = 5.51, SD = .66), t(12) = 2.17, p = .05, \text{ partial } \eta^2 = .27\).

**Table 3**

<table>
<thead>
<tr>
<th>Applied Social Psychology Course With Service-Learning</th>
<th>Applied Social Psychology Course Without Service-Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Quality of Course</td>
<td>Overall Quality of Instructor</td>
</tr>
<tr>
<td>Spring 2011 5.6</td>
<td>5.7</td>
</tr>
<tr>
<td>Spring 2010 5.6</td>
<td>5.1</td>
</tr>
<tr>
<td>Spring 2009 6.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Spring 2008 6.2</td>
<td>6.0</td>
</tr>
<tr>
<td>Spring 2007 6.3</td>
<td>5.6</td>
</tr>
<tr>
<td>Spring 2006 6.1</td>
<td>5.1</td>
</tr>
<tr>
<td>Spring 2005 5.6</td>
<td>4.8</td>
</tr>
</tbody>
</table>

*Note:* Ratings are based on a 1 to 7 scale where “1 = lowest rating” and “7 = highest rating.”

### Evaluation of Learning

To assess the effect of these projects on student performance, we compared the grades of students from our applied social psychology course that had a service-learning component to the applied social psychology course at our main campus that did not have a service-learning component. Examining course grades, students earned higher grades when the course contained a service-learning component \((M = 3.86, SD = .18)\) compared to the course that did not \((M = 3.05, SD = .08), t(8) = 7.12, p < .001, \text{ partial } \eta^2 = .86\). Additionally, we compared the grades of students from our applied social psychology course with a service-learning component to those of our introductory social psychology course that did not have a service-learning component. Students earned higher grades when the course contained a service-learning component \((M = 3.86, SD = .18)\) compared to students enrolled in the course that did not have a service-learning component \((M = 3.03, SD = .46),
Discussion

Although there are weaknesses in the design of the current study, the pattern of our results is hopeful and lends support to other studies (for a review, see Conway, Amel, & Gerwien, 2009, but see Billig, 2002, and Eyler, Giles, Stenson, & Gray, 2001 for mixed results) that have found integrating service-learning into an undergraduate course increases students’ evaluations of the course and has a significant effect on learning. The current research suggests students who were enrolled in the applied social psychology course that had a service-learning component seemed to evaluate course quality higher than students who were enrolled in an applied social psychology course that did not have such a component. Additionally, students tended to rate the instructor higher when the course had a service-learning component. Finally, learning (as measured by course grades) appeared to be higher for those enrolled in a course that had a service-learning component compared to those enrolled in a course that did not.

Perhaps one reason service-learning seemed to impact student evaluations of the course, the instructors, and learning was that students may have found that the application of knowledge needed in completing the projects was more meaningful than just “memorizing” traditional course content. Research suggests there is a strong positive relationship between motivation and learning (Lepper, Sethi, Dialdin, & Drake, 1997; Ryan & Deci, 2000) with higher levels of intrinsic motivation being related to broader and deeper levels of learning (Blumenfeld, Kempler, & Krajcik, 2006; Eccles & Wigfield, 2002). Service-learning may provide an opportunity for students to engage in the course so its content can be internalized and integrated. With increasing internalization and integration, students become motivated to learn (Ryan & Deci, 2000). Indeed, Eyler and Giles (1999) suggest that service-learning activities provide students with opportunities to reflect, which leads to increased academic performance; further, Mabry (1998) argues that direct contact with community partners brings to life the academic learning goals for students. Still others (e.g., Tannenbaum & Berrett, 2005) note that the intensity and duration of service-learning projects facilitate academic outcomes.

Although the current research cannot directly determine if students were intrinsically (or extrinsically) motivated by the service-learning projects, we speculate that there was a personal endorsement of the project because students were from the communities in which the service-learning projects occurred. Researchers exploring the motivational underpinnings of behavior note the impact interpersonal events have on behavior. For example, Regan and Fazio (1977), Sivacek and Crano (1982), and Green and Cowden (1992) found that willingness to take action in order to solve a problem was contingent on whether or not someone was directly affected by the problem. Other researchers note that when individuals identify with a group, the group’s identity becomes salient, and collective action will be motivated by one’s sense of responsibility and concern for the group’s goals (Sturmer, Simon, Loewy & Jorger, 2003).

Engagement via service-learning provides multiple benefits for the students. First, it provides a powerful active learning component, defined by Cherney (2008) as learning that occurs not as the result of direct teaching but as a result of performing tasks. Research has consistently demonstrated that undergraduate memory and understanding of introductory concepts are better when introduced through active learning techniques (Cherney, 2008). Further, Goldman, Cohen, and Sheahan (2008) suggested that an introductory class should
involve students doing things while thinking about the things they are doing. That is, learning is aided by the opportunity for students to conceptualize, reflect, and experiment (Kolb, 1984; Rosie, 2000).

Additionally, engaging students in service-learning provides real world skills and experiences that the traditional classroom setting cannot. For example, when engaged in service-learning opportunities, students build and hone skills that employers prize. In the projects conducted with our community partners, students learned how to moderate focus groups, how to conduct in-depth telephone interviews, how to administer both mail and online surveys, or how to perform an intercept survey interview. Regardless of the type of project, students developed supportive materials (e.g., informed consent forms, questionnaires, moderator’s guides and samples), learned how to prepare and enter data into the Statistical Package for the Social Sciences (SPSS) for analysis, performed data analysis, and reported and presented findings to the community partners. Many of our students not only continue to use the skills gained from the service-learning activities, but also use the social networks created throughout the course of the project to secure internships and, in many cases, an internship has led to offers of employment with a community partner.

Engagement via service-learning provides benefits for faculty as well. Student evaluations of teaching were higher when the course used a service-learning project. This is important in that student ratings of teaching, in part, determines faculty salary, and indeed a faculty member’s future with his or her institution (i.e., tenure decisions). Much of our recent pedagogical research (see Bridges, Harnish, & Sillman, in press, Casteel & Bridges, 2007, Harnish & Bridges, 2011) has detailed techniques that instructors can utilize to not only improve learning, but also to improve student evaluations of the instructor and course as well. Service-learning activities such as those we have discussed in the present study can be combined with those techniques that earlier had been shown to increase student learning and improve student teaching evaluations.

Limitations

As noted earlier, there are limitations associated with the current research design that temper the conclusiveness of the study’s results. First, the use of posttest-only designs with nonequivalent groups lacks random assignment (Campbell & Stanley, 1963). For example, in the current research, students self-selected the campus where they took the applied social psychology course (our university’s main campus or a satellite campus), and the course taken (introduction to social psychology or applied social psychology). Additionally, instructors of the applied social psychology course also self-selected the campus in which they taught (at our university’s main campus or a satellite campus). Moreover, the amount of preparation time spent by the instructors on the course, the level of experience in teaching the course, and the instructor’s personal qualities were not controlled in the current study thus weakening the internal validity of the findings.

Conclusion

We described the use of service-learning in an undergraduate applied social psychology course, how such pedagogy can be used, and the benefits it yields for students and faculty. Although our research design could not control for all possible confounding variables, and our findings are based on two global measures of quality and one measure of learning, the
strength of the results, however, support and contribute to a larger body of research that
demonstrates the value of service-learning in the undergraduate curriculum.

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