

Promoting Research Use Among Undergraduate Students Through Service Learning

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Abstract

In this article, we, the authors, examine a model of service learning for pre-service counselors enrolled in a research methods class. In a review of the counseling and human services literature, we found many references to teaching research methods; only a few articles, however, demonstrated using service learning in counselor or human services education. The students in this project joined a public health department, eight rural elementary schools, and university-based researchers to study bullying and school safety. The undergraduate students supported this project by conducting behavioral observations and informal interviews in the local schools. Positive responses were received from undergraduate students who responded to an open-ended follow-up questionnaire after they completed this course.

Introduction

During the 1998 - 2000 school years, a local public health department and eight elementary schools in two rural districts joined with university based researchers to study elementary student bullying and school safety. Undergraduate students from a counselor-training program joined the project and conducted observations and informal interviews in schools as part of a service learning component for a research course. Our goal in examining the students' reflections is to identify the possible effects of service learning on the students' understanding of class concepts.

We, the authors of this piece, were two of the university-based researchers. Laura was also the research classroom teacher. We began this partnership in 1993 when Laura started teaching research methods courses to pre-service counselors. Our collaboration began with concerns Laura had regarding student resistance toward integrating research with practice. Martha is a curriculum specialist and had previously worked as a classroom and mentor teacher for several experimental science and math programs. This partnership has lasted throughout our university careers as we focus on developing and assessing instructional methods in counseling education.

Service learning provides an opportunity for students to develop academic competencies through organized service that (a) is conducted in and meets the needs of a community; (b) helps foster civic responsibility; (c) is integrated into and enhances the academic curriculum of the students; and (d) includes structured time for students to reflect on the service experience (Bringle &

Hatcher, 1995). The use of service learning as a teaching tool can bring the academic context into the practice setting through reciprocal models, where students and the community partners mutually benefit from their participation in the learning exchange (Furco, 1996).

This pedagogy suggests that successful community-based learning experience consists of several components (Bringle & Hatcher, 1995; Cone & Harris, 1996; Eyer & Giles, 1999; Zimmerman & Phillips, 2000). These elements include a community-based experience, critical reflection that is both written and oral, as well as academic questions (Cone & Harris, 1996). Community-based experience selection can be a collegial process between teachers, professionals in the practice setting, and students. Partnerships between communities and universities that have been most successful sustain the learning experience by providing an opportunity for students to actively experiment with course concepts while connecting the service to the organizational needs of the community partner (Torres & Schaffer, 2000; Zlotkowski, 1999).

When service learning is a major portion of the course, academic questions are tied to the course objectives, and oral reflection is integrated into the classroom activities and discussions (Zlotkowski, 1999). Reflective journals are added to encourage students to achieve a deeper level of learning (Conyers & Ritchie, 2001). These components are tied together to provide students with an integrated learning experience that enhances their understanding of course materials.

In this article, we suggest that service learning increases students understanding of course material in research courses. We added a discussion of class activities of the service-learning project. We also wanted to go beyond the previously published literature by assessing student satisfaction with the process. Therefore, the results of a qualitative survey completed by 20 undergraduate social work students are presented.

Use of Service Learning To Teach Research

In the past, counseling and other human service educators focused on teaching the process, terminology, and facts about psychological research (Holloran, 1996; Conyers & Ritchie, 2001). Such practices were limited because they overlooked the link between practice and research methodology. Researchers propose that professional counselors and human-service professionals be capable not only of using scientific knowledge, but also of contributing to the development of new knowledge as research collaborators, data collectors, and research assistants (King & Teo, 2000; Martyr & Bull, 2000). Through research, students can identify a problem, demonstrate an understanding of the research and theory related to this problem, critically analyze the problem and current knowledge, and develop strategies for problem resolution (Gordon, 2000).

We found that previous literature which addresses service learning as a tool for teaching research methods in counselor education is limited. However, a review revealed sources that provide a theoretical justification for incorporating service learning in the counselor education curriculum by drawing on the experiences of related disciplines. For example, many teacher preparation programs have successfully incorporated service learning into their curriculum (Bruner, 1990; Hayes & Cuban, 1996; Hones, 1997; Myers & Pickerel, 1997). Hamm, Dowell, and Houck (1998) discussed the use of service learning to help undergraduates learn about modern classrooms by assisting at-risk students in the school setting. In addition, Rocha (2000) developed a model of service learning that demonstrated policy concepts to social work students.

However, the potential for enriching service learning experiences in the counselor education curriculum extends beyond preparing counselors to work with at-risk children or to analyze organizational and social policy.

Two relevant articles in the human services and counseling literature demonstrated service-learning models in research methods courses. Peterson and Schaffer (2000) found that service learning helped nursing students develop group collaboration as well as research skills. Schaffer, Mather, and Gustafson (2000) described a model for combining diversity and sensitivity with research practice through a service-learning program designed to collect data on health needs among the homeless. They, too, noted that student involvement in service learning led to greater appreciation for the importance of research in human services and counseling.

We believe that service-learning experiences provide excellent forums for students to understand and apply research competencies required by the counseling profession. Many similar studies have reported that service learning has a positive impact on students' academic learning (Eyler & Giles, 1999; Gray, 2000; Hamm, Dowell & Houck, 1998). However, few have reported findings that suggest service learning can be successful in pre-service counseling programs.

Description of a Model Service Learning Project

We hoped to arrange "real world" data-collection and analysis opportunities for pre-service counseling students. We hoped, as a result, to increase both students' learning about and enthusiasm for research (Schaffer et al., 2000). To accomplish this we intended to tie the community to the classroom in several ways. First, a community educator from the public health department came to the research class to discuss the project. She discussed bullying and safe school programs, conducting observations, data collection and coding. Second, a graduate student supervised and trained the pre-service counselors while they conducted the field research. Finally, each service learner participated in the in-class discussions and reflections on the data collection experience as well as of the analysis of the qualitative and quantitative data that contributed to the development of the climate study reports.

The observations were mostly concerned with two aspects of the environment: behaviors of students and school-related activities that created the climate. Each student spent at least 8 hours in direct observation of the grade or middle school students and faculty throughout the day in a variety of normal activities. Observations included all grade levels, special education classes, and the students who participated in before- and after-school programs. While in the field, undergraduates were assisted by a graduate assistant who coordinated the student observations at each school.

Students conducted two forms of investigation, observation, and interviews. They recorded each incident of negative interactions between two or more people. Students also interviewed and observed the teachers, staff, and administrators. For each incident, students recorded the type of behavior, the child's gender, and whether there was intervention designed to address the conflict. Specifically, the behavioral aspect of this study recorded the following: name calling, yelling hurtful things, teasing, hitting, kicking, pushing, tripping, pinching, throwing things at someone,

and exclusionary behavior. This included paying special attention to areas in the school considered "hot spots." These areas included the lunchroom, hallways, and playground.

Interviews were conducted with school administrators, parents, staff, and teachers. Students asked questions to understand how the climate was organized. In particular, students learned about the arrival and dismissal process, rules and values, and how adults and children worked together to create the environment.

Class discussions were often lively. The students brought their observations back to class. Discussions also covered many aspects of the field research process and tied the students' experience to research concepts. Among the topics that were typically covered were reports from observers on the initial findings. Students worked in small groups to identify school safety needs at each school and recommended improvements based on the findings. These service learners were also able to compare the findings across schools to develop patterns. Learning often extended beyond concrete course material as students frequently engaged in discussions that compared or contrasted these patterns to their life experiences.

Evaluation of the Service-Learning Process

At the end of each semester, students completed informal course evaluations that consisted primarily of open-ended questionnaires. We asked students to comment on their experience with service learning, whether the experience and discussion changed their understanding of the course material, and whether the experience contributed to their competence in research.

These evaluations indicated that this teaching format was well received by the students. The students' comments reflected positive learning experiences in three areas: building evidence-based practice skills; integrating the service-learning experience with academic materials; and the importance of class discussion. Comments on the responses to the questionnaire are reported here because they provide valuable reactions to teaching research practice through service learning.

Building Evidenced-based Practice Skills

The students attributed an improvement of their competency in evidence-based practice to their experiences with service learning. Students commented that "discussing research within this class and participating in the observations, I learned to focus on what I was observing"; "by observing and recording at one of the schools, it brought everything that we had been talking about in class close to home. We got hands-on experience dealing with quantitative and qualitative research, data gathering, biases, and confidentiality"; and "It was interesting to listen to what others experienced in the schools. It made the subject appear to be easier. I helped come up with research questions and to observe different biases among the student observers."

Integrating Service Learning with Academic Material

The students attributed an improvement in their understanding of academic material presented in the textbook to their experiences with service learning. Students commented that "I found that

getting out and actually learning research by doing it hands on was very helpful in understanding the information from the book"; and "I found the material made more sense when I heard of the real-life study taking place. It seemed to make it 'come to life' with an actual example taking place during the class."

Influence of Class Discussion

Perhaps, in-class discussions as real-life research unfolded were the most enriching aspects of the service learning adventure. Students commented that "The discussion we had in class relating the project to the information in the book proved to be helpful in relating learning to research. It gave me an opportunity to connect the concepts with something real. The hands on experiences were the best way for me to learn and understand"; "I enjoyed learning and hearing about the study. It helped me better understand the class. I was able to hear first hand how research worked in the field. I learned how to observe different settings through the observers learning"; and "It was interesting discussing the study in class and it gave us the ability to see research in action. It is better to learn by example."

Some students commented that the discussions helped them organize the material that appeared confusing at the onset of the semester. One student commented, "In the beginning of the class, I was confused and didn't understand, but as the time went on, things started to make sense. I think this activity and class discussions on the study allowed me to put things together and understand how they relate to each other."

Finally, one student clarified the importance of the effect of the discussions about the service-learning experience on her understanding of and feelings towards the field of research. She stated, "By discussing the climate studies, we were able to see the humanistic side of research. We heard stories and discussed situations pertaining to research but in a more interesting way. It allowed me to develop an interest in a discipline (research) that I had originally disliked."

Conclusion

Service learning can be used as a catalyst for class discussions, thereby bringing process, terminology, and facts about research to life. Incorporating such models into preservice counselor education has the potential to increase the use of research beyond the classroom and into the field. One solution for human service professionals, who face increasing demands for indications of program effectiveness, is to rely on evidenced-based practice methods. The service learning approach to teaching research to pre-service counselors increases interest and potential skill in the tools necessary to conduct evidenced based practice.

In the present study, it was clear from the students' responses that their favorite part of this service-learning adventure was participating in class discussions about the project as it was unfolding. Also endorsed were the actual field observations because students saw how it contributed to increasing their research competency. Combined, these elements of service learning contributed to the students' endorsement of the class. It is clear from this study that overall student response to the courses was positive and supported further development of this teaching technique for counselor preparation programs.

The portion of the class that received the lowest endorsement was the absence of an individual project that demonstrated each student's unique accomplishments in research. As undergraduates, they are required to prepare a senior portfolio prior to graduation. In the future, students may be encouraged to organize their field notes and journal reflections as a final product to fulfill this requirement.

One limitation of service learning appears to be the time commitment required of faculty, community partners, and students. It seemed that the hours required for this project extended beyond the time allotted for a traditional course. Because of this predicament, we believe future students should to be notified that the course requires community service before registering. With prior notification, students can incorporate time for out-of-class activities into their schedules.

As a result of this research experience, we have developed a deeper interest in how students connect field experiences to class concepts. Further we are interested in understanding whether or how these connections lead to deeper meaning. Our current studies examine the reflective journals of students in an attempt to name and classify the nature of their relationships with learning. In conclusion, our experiences with the pre-service counselors have made an impact on our teaching style by expanding our openness to student experimentation. We have also increased our commitment to research in pre-professional education and in understanding students' experiences.

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