

Student Perceptions of Reflection Tools Used in a Service Learning Community Nutrition Course

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Abstract

Service learning is promoted as an effective teaching and learning approach that integrates meaningful community service into the college classroom. Reflection is included as a key component in this instructional method. Journaling is the common method of reflection, although other methods are available. There is little published evaluation on comparisons of the relative value of different methods of reflection. To better understand students' response to service learning and to reflection tools, a pre and post questionnaire was administered to 66 undergraduate nutrition majors in three community nutrition classes taking place between spring 2008 and spring 2009. These students reported benefits from all three reflection tools used in the course. However, none of the three tools (journal, panel discussion about the site experience, written questionnaire about experience) were reported as statistically significantly more useful than another. In fact some students preferred one tool to reflect on self and another tool to reflect on the community. Instructors are encouraged to implement and evaluate a variety of reflection tools which are creative and utilize universal design for learning concepts thereby optimizing the students' reflection in service learning.

Introduction

Service learning is an effective teaching and learning approach that integrates meaningful community service into the curriculum (National Service Learning Clearinghouse, 2009). Faculty who use service learning report that it brings new life into the classroom, enhances academic performance, increases student interest in the subject and teaches problem solving skills (Bringle and Hatcher, 1996). Markus et al. (1993), using a randomized control-group design found that students in service learning sections had more positive beliefs and attitudes toward community service and scored higher on examinations. Other research supports the positive effects of service learning in higher education (Bringle and Kremer, 1993; Giles and Eyler, 1994). A key component of this instructional method is the opportunity for self-reflection (McCarthy and Tucker, 2002; McCarthy and Corbin, 2002; Wells and Graber, 2004). Many college students participate in service activities. However, in order to maximize

academic learning, promote personal growth and instill a commitment to lifelong civic engagement, these activities must be thoughtfully linked to the course content and include structured student reflection (Ash, 2003).

In the field of nutrition and dietetics, service learning has been shown to enhance depth of learning and enhance student's self-reported levels of self-confidence (Nicholson, 2003). Ash in 2003 reported on an innovative reflection tool for an upper level nutrition course, which consisted of biweekly structured reflection facilitated by student leaders held in small groups outside of class time. These reflection sessions included students writing what they learned and how they learned it on three dimensions: personal, civic and academic. Ash reported that these additional structured reflection sessions deepened student understanding of themselves, and their local and global community (Ash, 2003). These students also kept journals. Journal keeping is the traditional approach to student reflection commonly used in service learning classes (Gilson and Ottenritter, 1999; Mills, 2001)

There is no one way to keep journals. The authors could not find published research indicating the effectiveness of journal keeping over other methods. Some faculty have reported on the "shallow" nature of student writing (Hume, 2009) and others note the confusion about reflection (Grant et al., 2006). McGuire et al., (2009) reported on a case study where faculty identified low to high quality journals and tracked whether the journal writing improved during the course. They reported that half of those students characterized as having low quality journal writing remained at that low quality even at the end of the course. They reiterated the challenges involved in stimulating critical thinking using journaling.

The objective of this project was to ask students to report on reflection techniques used throughout an upper level community nutrition course to gain better understanding on what type of reflection technique optimizes students' perception of learning. It is hoped that this information will inform university instructors on how best to implement service learning into their courses.

Methods

The use of reflection tools in service learning was examined by a questionnaire presented to 66 stu-

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dents in three community nutrition classes taught at California State Polytechnic University, Pomona from spring 2008 through spring 2009. This research was approved by the California State Polytechnic University, Pomona's Institutional Review Board. All sixty-six undergraduate students gave informed consent and completed the pre and post course questionnaire. Frequencies and Chi Square procedures were performed in SPSS (version 16.0, SPSS Inc, Chicago, IL, 2008). The questionnaire sought student input on class satisfaction, concerns and learning as well as specific questions regarding usefulness of reflection techniques. This paper reports on the responses to only the reflection techniques questions. All students were asked to keep journals and turn them in at the end of the course as part of their grade. They were instructed to write in any style they wished. The only mandate in journaling was to consider the experience from three levels: personal, program site where they performed their service learning and from a larger societal view which is typical of journal writing (Gilson and Ottenritter, 1999; Cooper, 1997). Two other reflection techniques in addition to journaling were used throughout the course (written surveys and panel discussions). Written surveys which contained questions such as, "What concerned or worried you the most about doing service learning?" and "What did you like the most about doing service learning?" were given to the students both pre and post experience. Panel discussions were also used. The panel consisted of the small group that went to one particular service learning site. They discussed their experience and responded to questions from the rest of the class on their particular site experience. The written survey also asked students to report on any additional reflection techniques that they developed. Students were asked to report how a particular reflection tool helped them to reflect at each of the three levels (self, site and greater societal issues) as described by Cooper, 1997.

Results

Students were 95% female and 5% male which reflects the gender composition of dietitians in the US (Bryk and Kornblum, 1999). Since this course is for upperclassman, 32% of the students were juniors, 55% were seniors, and 9% reported they were graduate students with three not responding.

The students were asked to rank the following reflection techniques (journaling, survey questions,

and panel discussions) from useless (1) to very helpful (5) on how that particular tool helped them think about themselves, the site and the greater community/issues. Table 1 reports on the collapsed responses (1 and 2 as useless, 3 as unsure on usefulness and 4 and 5 as helpful).

Differences in student responses to usefulness of reflection tool were analyzed using Chi Square procedure in SPSS version 16.0, (SPSS Inc., Chicago, IL, 2008). There was no statistically significant difference in the student responses on usefulness of one reflection tool as compared to another. Since the least useful tool was still reported as helpful by 65% of students, it appears that each of these reflection tools is helpful to students and that some tools help students reflect on themselves and other tools help students reflect on the program site and/or the greater community and issue. The highest reporting of reflection tools as "useless" was for self-reflection. This could indicate that students used other self-initiated reflection methods to reflect on self or did not find any tool that allowed them good self-reflection. The levels of reflection and which tool helped students reflect on that level should be further addressed in future studies. When asked if the student used yet another reflection tool that was not expressly assigned, 15 (23%) students replied. Nine students reported that other class assignments such as the mid-term exam and homework served for useful reflection, three students reported that talking with others not in the class was useful, two reported talking with a guest speaker and one reported that speaking with the course instructor helped them reflect on the service learning experience. Although given the option to provide any additional comments on reflection tools, no students did.

Results and Discussion

According to these students, a variety of reflection tools is helpful and no one tool is better than another. Instructors are advised to utilize creativity when devising reflection tools. It would be helpful to use reflection tools that adhere to the universal design for learning (Wakefield, 2007) by allowing and encouraging multiple means of expression and engagement in reflection; not just journaling in one set format since students report usefulness of a variety of techniques including self-developed reflection tools. Since journaling is a core component of reflection, students should be encouraged to

journal in a way that makes sense to them. For example, they could draw pictures or write a song about their experience; they do not have to write in a typical journal style, but should be encouraged to individualize their journals. Some students in

Table 1. Students' report on Usefulness of Reflection Tool (n = 66)

	Journaling			Questionnaires			Panel Discussion		
	Useless	Not sure	Helpful	Useless	Not sure	Helpful	Useless	Not sure	Helpful
Self-reflection	14	9	43	11	11	44	12	3	51
Program-reflection	3	2	61	6	9	51	2	2	62
Community reflection	8	9	49	9	14	43	3	4	59

service learning classes I have taught have used a scrapbooking approach to journaling. It is not important how they journal, but that they invest themselves into the journaling assignment and think and express their reaction to their service learning experience.

Panel discussions should be lively and informative. In order to initiate a good discussion, the instructor may want to ask such questions as, "If this site offered you a paid position, would you take it? Why or why not?," "How would you describe the morale of the site staff?" and "What was most surprising about your site experience." After the discussion using instructor initiated questions, the rest of the class should continue asking questions to the panel which usually takes about 30 minutes per panel. A variety of reflection tools should be implemented and evaluated within the service learning classroom context. Future studies should seek more in-depth student responses to journaling and other methods of reflection using a larger sample of students and study possible gender, learning style and ethic differences in reflection tool usefulness.

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