A Case Study for Service-Learning: What Students Learn When Given the Opportunity

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Abstract

Today's communities and organizations benefit from service-learning. Service-learning uniquely blends disciplinary knowledge with civic knowledge while making communities a better place to live. Students enrolled in a leadership course in a department of agriculture were given an out-of-class assignment consisting of a service-learning project. The goal of the service-learning project was to provide students with real experiences in leadership in which they were faced with identifying a community-oriented project, executing a plan, and completing the project. The assignment called for students to gain experience with course content (team leadership) by participating in a service-learning team project. Upon completing the service-learning project, students revealed five leadership themes, classified as the five Cs, must exist for team leadership to be effective. The five Cs were: 1) communication, 2) commitment, 3) consideration, 4) courage, and 5) competence.

Introduction and Theoretical Framework

A purpose of higher education is to prepare students to enter the workplace upon graduation (Cole and Thompson, 2002; Evers et al., 1998; Martin et al., 2000; McLaughlin, 1995; Peddle, 2000). However, several authorities (Askov and Gordon, 1999; Atkins, 1999; Evers et al. 1998; Kivinen and Silvennoinen, 2002; Morley, 2001) noted that today's students are not being prepared with the appropriate skills needed to face the challenges that linger outside the confined, structured environment of a college classroom. In fact, Evers et al. (1998) stated that "the skills most in demand are least in supply" (p. 16).

Peddle (2000) stated that college graduates need to possess more transferable skills and as such are not ready to enter the workplace. According to Schmidt (1999), graduates entering the workplace must be able to "solve complex multidisciplinary problems, work successfully in teams, exhibit effective oral and written communication skills, and practice good interpersonal skills" (p. 31). However, a review of the

literature revealed that such transferable skills are lacking in today's college graduates (Candy and Crebert, 1991; Coplin, 2003; Dunne and Rawlins, 2000; Radhakrishna and Bruening, 1994; Robinson and Garton, 2006).

In an attempt to address the growing need for transferable skills, Sapp (2000) stated that institutions of higher education have begun shifting emphasis away from simply providing instruction to a teaching philosophy of producing authentic learning. One method for including authentic learning is through service-learning. Service-learning is a form of experiential learning, created through a spirit of civic responsibility, (Binard and Leavitt, 2000) and exists as a means to bring ownership to the learning process and enable students to experience the transferable skills most in need in the workplace.

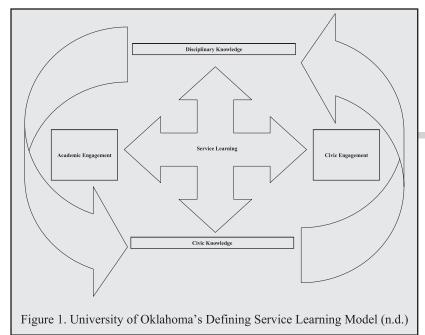
Experiential Learning

In 1984, David A. Kolb developed a model of experiential learning consisting of: concrete experience, observation and reflection, forming abstract concepts, and testing in new situations. To better understand the theory behind experiential learning, Kolb (1984) stated that it was "the process whereby knowledge is created through the transformation of experience" (p. 41). Scales et al. (2006) added that experiential learning implies: concrete experiences help students grasp information when students can reflect on those experiences and experiment actively with the concepts they are learning. Experiential education can provide greater depth of information processing, and thus a greater potential impact on learning, than less active methods.

Service-learning provides educators a vehicle for integrating, experiential learning activities into the curriculum (Barkley, 1999). Scales et al. (2006) stated that service-earning integrates concepts learned in class with real-world, authentic problems in society. Service-learning should be conducted in a community setting and should entail a reflection component (Barkley, 1999; Bringle and Hatcher, 1996; Karayan and Gathercoal, 2005). By providing students with the opportunities for concrete experiences and assisting in the intellectual processing of an out-of-

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class experience, service-learning takes advantage of the natural learning cycle and allows students to provide meaningful contributions to the community.

The theoretical framework for this study is based upon experiential learning and the engagement theory, which strives to build meaningful learning situations in a collaborative setting based upon realworld problems (Kearsley and Shneiderman, 1999). The engagement theory is rooted in the philosophy of constructivism. Constructivism is an approach to learning that focuses on the prior knowledge of the learner (Cronje, 2006) and the knowledge learners obtain as a result of collaborating with others through open dialogue. Lebow (1992) described constructivists as those who thrive on solving meaningful, real-world problems. Barak et al. (2006) described constructivism as "...the elimination of a standardized curriculum, the implementation of hands-on problem solving, and the promotion of active learning." (p. 246). Service-learning relates closely to the engagement theory because students are in control of their own learning by collaborating with other students in class, while solving real-world problems, and actively participating in hands-on experiences.

To better understand how service-learning is incorporated into the classroom, Fink (n.d.) and the Instructional Development Program at the University of Oklahoma (n.d.) developed a conceptual model for defining service-learning (Figure 1). The model depicts that service-learning is dependent upon four factors: disciplinary knowledge, academic engagement, civic knowledge, and civic engagement. According to the conceptual model, for learners to possess disciplinary knowledge, they have to be academically engaged (e.g., formal instruction in a specific content area). In turn, academic engagement leads to civic knowledge. Likewise, in order for learners to possess civic knowledge, they must be

engaged in a civic experience. This engagement leads to further disciplinary knowledge. The model is cyclical in nature so that knowledge is constantly being created by the learner through engagement.

Purpose and Objectives

The purpose of this qualitative, case study was to assess the learning outcomes of a service-learning project among undergraduate students in an agriculture leadership course at the University of Missouri-Columbia. The learning outcomes resulted in qualitative data derived from students' end of the course reflection assignments (e.g., team poster presentations and individual reflection papers). Specifically, this project was designed for students enrolled in a leadership course that focused on team and organizational leadership. In all,

there were 46 students (freshman through seniors) enrolled in the course. All 46 actively participated in the service-learning project. The specific research objectives were to 1) distill key learning outcomes from the service-learning project as recorded by students, and 2) provide anecdotal examples of such learning outcomes.

Methods

Students were given an out-of-class assignment consisting of a service-learning project. The goal of the project was to provide students with an authentic leadership experience in which they were faced with identifying a community-oriented project, executing a plan, and completing the project. Moreover, the project served as a qualitative, case study for applying leadership knowledge, skills and concepts and a point of reference for reflection. The project consisted of students:

- 1. Completing a team service-learning task.
- 2. Applying leadership theories and concepts.
- 3. Reflecting on the learning outcomes of the service-learning project through a team poster presentation and paper.

The assignment was performance-based and called for all students to gain experience with course content by participating in a service-learning team project. Students were randomly assigned to teams of four to five individuals. The Office of Service Learning (OSL) located on campus was a resource used to identify potential community organizations in need of volunteer service. A formal classroom presentation was made to students by representatives from the OSL on the various opportunities to serve the community. Students were given the flexibility to choose any of the existing organizations within the community. Based upon the community organization and task selected, each team required

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different materials. If, for example, a team elected to participate in a landscaping beautification project, the sponsoring organization was expected to provide the students with shovels, plants, potting soil, and other materials and resources deemed necessary for completing the task.

To begin the team development process, teams were exposed to team-building exercises that allowed them to become better acquainted with each other. Specifically, students spent two class sessions participating in "low ropes" activities. The activities were designed to encourage students' abilities to familiarize themselves with each other as well as build trust, solve problems, enhance communication, formulate strategies, make decisions, and recognize the strengths and weaknesses of each team member.

Upon completion of the low ropes activities, the teams were expected to identify, plan, and implement their service-learning project. The guidelines for the project included the following: 1) must be interdependent – hence, the concept of "team"; no single individuals could complete the project on behalf of the team; rather, all team members had to participate, 2) must be service-oriented – team members had to select a project that would provide a service to the community, 3) must be meaningful service – the project chosen had to meet a need of the community. and 4) must include a planning and organization component – students had to present and describe how the project was planned out and organized. The number of hours required to implement the servicelearning project was not prescribed. However, students were granted a four week window to complete the assignment.

The nature of the project provided for an "emergent" leader to arise from the team. The leader "emerged" from the group based upon their perceived leadership traits, knowledge, and skills. During the course of the project, the leader's objective was to guide the team's service-learning project to completion. This included directing, coaching, supporting and delegating tasks and responsibilities to team members. Each team was granted portions of class time to discuss and carry out the appropriate planning tasks associated with their chosen servicelearning activity. Team members reported their progress to the leader, who in turn, reported to the course instructor. Correspondence from the leader to the instructor existed concerning the progress of the team, as well as any challenges incurred. At three points throughout the semester-long servicelearning assignment time frame, students assessed themselves and their team members' commitment toward completing the task. This served as a form of individual and self accountability and reflection.

The culminating event for the assignment was to complete the service-learning activity and design and develop a poster to be shared with others in the course during a formal poster session. The poster session served as an alternative form of student presentation accountability. Teams were expected to develop a "display/poster" containing the following elements: 1) Title, 2) Description of the Project, 3) Methodology for completing the task, 4) Results of the Project, 5) Project Sponsor and 6) Team membership and project leader. Similarly, each team submitted a single written summary paper containing the same information as displayed in the poster session. Students presented their posters in class to the other teams. Additionally each student was expected to develop and submit a written analysis of the team experience (personal case study). In completing the written analysis, each student addressed the following components:

- **Leadership Analysis** (using the leadership theories and concepts discussed: 1) Describe the evolution of the team, and 2) Discuss team member dynamics.
- **Personal Observations** (reflection on personal leadership behaviors and contribution regarding the team project)
- **Lesson(s) learned** (What was learned from the service-learning experience?)

The individual paper was an assignment employed to assess students' thoughts and learning experiences regarding the project and was used as an assessment tool to determine what the student learned throughout the process. Furthermore, the papers were used by the instructor as reference to provide guidance and clarity to assist future students as they formulate ideas for future service-learning projects.

Content analysis (also called textual analysis) was the process employed for collecting and analyzing the data for this study. "Content analysis...refers to searching the text for recurring words or themes" (Patton, 2002, p. 453). The researchers analyzed the written reflections of individual students in an effort to make inferences about the characteristics of the written communications. Together, the researchers micro analyzed the content written by each student, line by line, to form themes from the data in a case record until theoretical saturation was assumed (Patton, 2002). The case record was employed by the researchers to condense the voluminous data into existing themes and served as an established form of dependability for the study.

Materials and Resources

E-mail was the primary communication resource used most often in this project. When team conflicts or concerns arose, students were encouraged first to work it out on their own. If the conflict/concern persisted, students were advised to contact the instructor via e-mail. Serving in a "Leadership Consultant" role, the instructor responded back with suggestions, referencing various leadership theories for managing the conflict or addressing the concern. However, in an attempt to give full control to students, the instructor never physically intervened.

Throughout the process, various assessment tools were used to evaluate the teams. A commitment form was introduced to the group at the beginning of the project (Figure 2). This form allowed for each individual to monitor the actions of themselves and their teammates. Specifically, individuals were asked to assess themselves and their teammates' commitment to complete the project on a scale of one (least amount of commitment) to 10 (most amount of commitment). Lastly, students were given a traditional, summative, paper/pencil assessment based on their knowledge of the content learned as a result of the project.

depicting the content students gained during the project were revealed. The five themes are referred to as the "five Cs" for team and organizational leadership. The five Cs consisted of: communication, commitment, consideration, courage, and competence. Examples of students' excerpts were captured to display how they valued the themes.

Communication

Students must be able to communicate orally while working together in teams. Students were expected to communicate with their team members to determine which service-learning project they

wanted to encounter, what materials they would need to complete the project, which team members would carry out the various roles, and how they would design their culminating poster and presentation to the class. Students wrote:

"I learned it's easy to get along with a group when you have communication. If you don't have communication, your group will slowly fall apart."

"I also learned that you can start with a small idea which in turn generates other ideas and through effective communication and building team rapport a finished product is created."

Team Name:					Date:				
stimate where team members' commit	ment levels are no	ow by circl	ing th	e appro	priat	e numi	ber.		
	Level of Commitment								
Team Members	Enthusiastic Will work hard to make it happen	Helpful Will lend appropriate support	Hesitant Holds some reservations; won't volunteer		Indifferent Won't help; won't hurt		Uncooperative Will have to be prodded	Opposed Will openly act on and state opposition	Hostile Will block at all costs
Self	10	9	8	7-6	5	4-3	2	1	0
Comments:									
Name:	10	9	8	7-6	5	4-3	2	1	0
Comments:					-	10	-		
Name:	10	9	8	7-6	5	4-3	2	1	0
Comments:									
	10	9	8	7-6	5	4-3	2	1	0
Name:Comments:	10	3		1-0	0	4-5			•
			_		_				_
Name:	10	9	8	7-6	5	4-3	2	1	0
Comments:									
	10	9	8	7-6	5	4-3	2	1	0
Name:									

Results and Discussion

Figure 2. Team Commitment Form

All teams completed their planned servicelearning project within the allotted time frame. Examples of the service-learning projects consisted of cleaning a local stream, facilitating team building exercises for teens, assisting at the local Humane Society, and planning and conducting a field trip for the Boys and Girls Club. Students from each team effectively constructed and presented a poster explaining the activities they conducted as a result of the service-learning project. However, most insightful was the reflection paper students completed. With a focus on the team dynamics and personal leadership skills, students used the service-learning project to make "connections" between the leadership theory learned in class and the application and/or observation of the theory in action.

Upon analyzing the content of the written comments by students, five emergent themes

Commitment

To complete the project, students had to remain committed to the project and to each other. Engaging students in their own learning requires a certain amount of commitment on behalf of the student. Students have to "buy into" the process by recognizing the implications for their learning. A sense of dedication was realized as a result of the statements made by students.

"There were times when I wanted to walk away but stuck through it."

"I am overwhelmed by the kind of experience planning such a project would have on me...it teaches you more about leadership, more about who you are, how you work in a group and also gives you a little insight into the community."

"In the beginning, we all had good ideas on what we wanted to do and we all came up with the concepts of our group, and we decided on going out and doing something hands-on with kids."

Consideration

When working with a team of individuals, it is important to remain considerate of everyone's feelings and ideas. Consideration allows individuals to be treated with respect and provides an overall sense of fellowship. It requires individuals to think beyond themselves and offer words of encouragement and praise. A strong sense of consideration led to a higher sense of overall morale for the project as exemplified by students.

"Everyone got to put in their input and opinions and we made decisions according to all of them. We also made sure everyone's ideas were heard."

"We began really listening to each other and finding standard ways to work with each other."

"When you are working on the project there is always something you can find for the group members to do to feel a part of the team."

Courage

Courage comes in many forms in everyday walks of life. This assignment called for students to have the courage to step out of their comfort zone of learning in a formal setting. By the end of the learning experience, students were ultimately in charge of their own learning. Students realized the importance of possessing the courage to try something new. The courage to share ideas and to stand on one's principles contributed to this theme. In addition, this courage was exemplified by individual students in the role they took on as leaders. For some, it was the first time for them to "step up" in a leader's role. Students wrote:

"I tried to be more democratic at the beginning but had to adapt to this group and become more autocratic."

"Most importantly I learned how to step away from the leader role and be a follower, for quite possibly the very first time."

"When our team could not decide on an activity I stepped up and took the leadership role of deciding which activity we would participate in."

Competence

Every student in each team had to possess the competence to fulfill their obligation of the service-learning component. Competence among team members is important not only in the technical subject matter required to complete the task, but also in art and science of exercising leadership. In addition, the leaders who arose had to be competent at getting the rest of the group to continually contribute to the overall well-being of the project. Students recognized that competence was important.

"As a leader if I didn't show them that I trusted them and thought they were capable, they wouldn't perform well." "It really makes you feel good when you can see that you made a difference even if it was a small one."

On the surface, these themes appear to be a collection of leadership "attributes." However, they in fact relate back to multiple leadership theories learned in class including contingency and situational leadership theory, team development, and conflict resolution, as well as the "great man" theories of leadership attributes. Communication, for example is grounded in theories including emergent leadership and conflict resolution strategies (Northouse, 2004). Courage and consideration are grounded in leadership styles theory (task versus people-oriented leadership) and principles of interpersonal leadership (Covey 1989). Commitment surfaces in the literature related to "great man" theories as self determination and personal responsibility for accomplishing a task (Northouse, 2004). Related, competence is found in other "great man" theories as an attribute displayed by knowledge of the task and cognitive ability (Kirkpatrick and Locke, 1991).

Summary

Application of specific concepts and theories can best be learned through service-learning activities. Service-learning projects are one of many forms of experiential, engagement approaches in which students can apply their leadership knowledge and skills. Of particular interest is the development of learning while providing a service to others. Bringle and Hatcher (1996) stated that meaningful outcomes can exist as a result of service-learning opportunities. The outcomes that originated as a result of this study consist of the five Cs: communication, commitment, consideration, courage, and competence. Today's communities and organizations need people willing to serve in local arenas as well as at the workplace. Peddle (2000) stated that graduates need to possess more transferable skills prior to entering the workforce. This service-learning activity addressed five transferable skills that will benefit every student entering industry.

This course project served as an example of how to implement a service-learning component into an existing course. As employers continue to seek transferable workplace skills, faculty in higher education institutions are called to meet this demand. One way to meet this "call" from industry is to add a service-learning component to the existing curriculum. Through service-learning, students are empowered and engaged through a constructivist approach to learning and gain beneficial skill development that will transfer to the workplace. Students improved their interpersonal and human relational skills throughout this project while completing their service-learning activity. Furthermore, servicelearning activities provide alternatives to traditional assessment (e.g., evaluation of reflective journals vs. exams). Sapp (2000) stated that learning should be

authentic. One means for producing authentic learning is to provide students with "real life" experiences through internships and other workbased learning methods such as service-learning. Binard and Leavitt (2000) tout the numerous benefits of service-learning activities to the learner, instructor and community. Service-learning fosters relevance and importance of academic work in students' real-life experiences. From an instructor's perspective, service-learning enriches teaching. The experience enhances academic engagement and enjoyment of the course content, invites new perspectives and experiences, and contributes to class discussion. Furthermore, benefits are extended to the community. The service-learning project creates a spirit of civic responsibility that results in a renewed sense of community and encourages participatory democracy (Binard and Leavitt, 2000).

Kearsley and Shneiderman (1999) theorized the importance of engaging students in real-world, authentic problems. Service-learning is a vehicle for implementing such engagement and can be used to enhance students' transferability of skills from the learning activity to the workplace. To cap the overall essence of the service-learning activity in this case study of service-learning, one student wrote:

"In all this was a fun and educational experience for me because although I had a lot of fun doing this group project I also learned a lot of things that I will use for the rest of my life. In the work place you have to work with people and this was just a little piece of what I will get in the workplace."

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