Chapter 7
Preparing IS Students for Real-World Interaction with End Users Through Service Learning: A Proposed Organizational Model

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ABSTRACT
Although teaching the technical skills required of Information Systems (IS) graduates is a straightforward process, it is far more difficult to prepare students in the classroom environment for the challenges they will face interacting with end users in the real world. The ability to establish a successful relationship with end users is a critical success factor for any IS project. One way to prepare students for interaction with end users is through the implementation of service learning projects. Service learning projects provide a rich environment for students to experience real world interactions with users. This paper presents an organizational model to guide the implementation of service learning projects in IS curriculums. Service learning projects better prepare students to assume important management positions by giving them experience in applying the system development life cycle to an IS project and working with people. This organizational model uses the system development life cycle approach to integrate typical curriculum and service learning models. The organizational model is grounded in anecdotal evidence from prior experiences with IS students in service learning environments.

INTRODUCTION
It is of tremendous importance for Information Technology (IT) professionals to establish successful relationships with end users. Difficulties in working with end users are well documented (Perrin, 2007; Summerfield, 2006). End users often view IT professionals as enemies and are distrustful of them. IT professionals have a reputation for being, “aloof, geeky, and non-communicative” (Dubie, 2007, p. 1). Leonard (2000, p. 492) described the relationship between

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IT professionals and end users as, “intriguing, complex, and should be seen and managed as multi-dimensional entities.” It is therefore very difficult in a controlled classroom environment to prepare IT students to interact with end users in a real-world environment. The multidimensional aspects of the real world cannot be duplicated in a traditional classroom setting. One way to help prepare students for these challenges is through the implementation of service learning programs in Information Systems (IS) curriculums. By implementing service learning projects, students can be exposed to the mechanisms of working directly with end users and to be better prepared for the challenges they will encounter as IT managers.

Service learning is also known as collaborative learning, cooperative learning, or community-based learning. Although closely related, there are subtle differences in the meaning of these terms. The National Service Learning Clearinghouse (2008, p. 1) defines Service learning as, “a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities.” Collaborative learning refers to a variety of approaches in education that involve joint ventures by students or students and faculty (Smith & MacGregor, 1992). Cooperative learning refers to teaching strategies where teams increase understanding of subject material by implementing learning activities. Students typically have different levels of ability and team members cooperate by helping other team members learn. The difference between cooperative learning and collaborative learning is that in a cooperative learning environment each person is responsible for a portion of a team’s work. In collaborative learning environments, participants work together to solve a problem. Community-based learning may be collaborative or cooperative but specifically refers to the type of project. In community-based learning, students, faculty and community focus on solving a pressing community problem or effecting social change (Strand, Marullo, Cutforth, Stoecker & Donohue, 2003). Service learning has a strong focus on the reflection aspects of the process.

All of these approaches focus on action learning and were popularized by John Dewey (1859-1952), a well-known educator and philosopher. He was considered an unconventional educator and avoided traditional ideas of instructional methods of the day. Dewey believed that focusing on community based projects and applying a strong emphasis on citizenry would result in social and educational reforms (Ryan & Cooper, 1998). In the 1980s, a national strategy was initiated to promote civic responsibility and volunteerism at which time Universities began funding and staffing service learning programs (Elsner, 2000). Often these programs included training and allocation of resources to support service learning projects. Some campuses made service learning projects mandatory for specific courses (Elsner, 2000).

By the 1990s, the National and Community Service Act established funding guidelines for school based service learning and the Corporation for National Services (CNS) was created (Scales & Roehlkepartain, 2004). The CNS linked national service with education. In 1999, the W. K. Kellogg Foundation established a four-year, $13,000,000 investment into service learning for K-12. By 2004, over 10% of all K-12 public school students and 28% of all K-12 public institutions were involved in some type of service learning, reaching approximately 4.7 million K-12 students in 23,000 public schools (Scales & Roehlkepartain, 2004).

In the last several years, service learning has captured attention at all levels of education. A 2000 study by Billig showed that 64% of all public schools and 83% of all public high schools had implemented service learning projects. In addition, statistics from the report on Community Service in K-12 Public Schools by the National Center of Education Statistics (1999) show that approximately one third of all schools and half of public high schools had invested in programs that link service learning projects with school curriculums.