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The Civic-Minded Instructional Designers (CMID) framework: Educating instructional designers with community-based service-learning approaches

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The Civic-Minded Instructional Designers (CMID) framework: Educating instructional designers with community-based service-learning approaches

by

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For my family

Talhah, Toriq and Suha

Thank you for your unconditional love, patience and continuous support

For my parents and parents-in-law

Yusop, Kamilah, Siti Waziah and Misnon

Thank you for your continuous support and prayers for me to become who I am today

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ABSTRACT

This dissertation examines the issue of academic preparation of future professional instructional designers in the context of higher academic institutions. It is presented in non-traditional dissertation format as approved by the Department of Curriculum and Instruction, Iowa State University. The dissertation is comprised of three publishable journal articles that would represent Chapters 2, 3 and 4 of a more traditional dissertation, along with introduction and conclusion chapters. The dissertation argues that current approaches to educate instructional designers are career-centered and technically-oriented, resulting in production of an elite group of instructional designers - designers whose services become exclusively available only to selective clients and therefore disregarding the majority of others. The first study is therefore focused on understanding the concept of civic professionalism in Instructional Design and Technology (IDT). A novel framework based on synthesis of literature is proposed to educate civic-minded instructional designers. Using this proposed Civic-Minded Instructional Designers (CMID) framework to design an instructional experience, the second ethnographic study investigates just how a group of three IDT students enacted their civic-minded agencies and discusses the challenges they faced in their roles as consultants to three non-profit organizations. Data were gathered through participant-observation techniques and complemented with participants' interviews, analyses of their works, and a researcher's reflective journal. Findings reveal that students enacted their civic-minded activity by addressing community members' needs, giving voices to their community partners, addressing issue of projects' sustainability, being sensitive to community partners' perspectives while diplomatically voicing professional opinions, and acknowledging their

community partners as "design partners". In navigating these challenges, they were found to continuously make adjustments, to reconfigured their roles, and to built trusting relationships with their community partners as civic-minded agents. This second study contributes towards better understanding of instructional designers' roles within larger social contexts. The third study additionally explores the potential use of a service-learning pedagogical approach to educate civic-minded instructional designers. Using a naturalistic inquiry approach, it explores the benefits and challenges of integrating service-learning in the context of an introductory IDT course. Data were gathered via observations, participants' interviews, and analyses of participants' artifacts, including their online discussions, written reflections, and project work. Findings revealed that the service-learning approach allows students to gain a better understanding of the course content and to escalate their civic values. Two main challenges identified were in the form of severe group conflicts triggered by a combination of relationship, task, and processes related to the project work, and problems in gaining access to resources. While these challenges impacted students' quality of work, they were also found to prompt students to better understand themselves as instructional designers and as individuals. Together, these research elements provide insights on the concept of civic professionalism, a critical yet unexplored aspect of IDT literature, in the IDT field. Most importantly, it provides a reconceptualization by looking at IDT as a profession, and offers an alternative way of preparing professional instructional designers at higher education institutions.

CHAPTER 1: GENERAL INTRODUCTION

During the past 20 years scholars have been concerned with the practices of teaching instructional design and technology (IDT). There is a consensus among them that the major flaw of teaching and preparing instructional designers is the discrepancy between what is taught in instructional design academic programs in higher-education contexts and actual instructional design practitioners' practices (Winn, 1997). IDT scholars believe that IDT is usually taught as a set of design procedures most often focusing solely on media production (Merrill & Wilson, 2007). In addition, most teaching approaches are often described as being too model-centric (Bichelmeyer, Boling, & Gibbons, 2006), where students are taught how to do IDT using a variety of IDT models. This approach contrasts with teaching practices in most other design fields that focus on "developing habits of mind within those who will be designers, using design activities as the primary focus and design models as one possible support for those activities" (Winn, 1997). Additionally, the model-centric teaching approach ignores the complexity of the field and is thus unable to address the broader scope of instructional design (Ertmer & Cennamo, 1995; Rowland, Fixl, & Yung, 1992). It also may limit students' confidence with respect to exploring new ways of doing design (Bichelmeyer, et al., 2006) and make them unable to respond to critical needs for developing designers' skills in communication, negotiation, project management, and leadership (Rowland, 1992). The utmost concern is this model's failure to prepare students to be professional instructional designers in the field (e.g., Cox & Osguthorpe, 2003; Kenny, Zhang, Schwier, & Campbell, 2005).

In efforts to address this issue, academics began to call for alternative approaches to teaching IDT that specifically integrate IDT knowledge with the actual design practices used in the field. These efforts range from trying to understand the actual roles and design practices of instructional design professionals (Schwier, Hill, Wager, & Spector, 2006) to conducting inter-profession comparisons with other fields such as art (e.g., Boling & Smith, 2009) and engineering (e.g., Gibbons, 2008) to further understand the way design is practiced and taught to students. Others have explored appropriate pedagogical strategies such as cognitive apprenticeship (e.g., Ertmer & Cennamo, 1995), action learning (e.g., Bannan-Ritland, 1999) and experiential learning (e.g., Dunlap, Dobrovolny, & Young, 2008).

Critiques of alternative teaching approaches

While acknowledging the important contributions these alternative teaching approaches bring to the field of instructional design and technology (IDT), I argue that these approaches heavily emphasize the sharpening of designers' technical skills and competencies (i.e. *what* and *how to* do instructional design) instead of nurturing designers' civic purposes (i.e. *why* we do instructional design). By doing so, I argue that we have been neglecting and undermining the critical and transformative roles that an instructional designer can perform to benefit the general welfare and broaden the social agenda as advocated by Campbell, Schwier, and Kenny (2009).

Additionally, emphasis on career preparation, especially for businesses and industries (e.g., Curry, Teasdale, & Summerville, 2009; Jonassen, 1988) without the appropriate instillation of ethics- and civic-based purposes, will result in (re)production of an elite group of instructional designers. Just like elite fashion designers whose services are typically available only to highly selective clients, these elite instructional designers will likely deploy their technical expertise to support only the needs of profit-making organizations. Consequently, they are likely to disregard the needs of other members of the society like non-profit community organizations who also desire and need instructional design assistance to support their organizations' objectives. If this is the case, then we, as IDT professionals, have ignored the "social expectation of professionals to serve the public good" (Hatcher, 2008, p. 2) that has historically characterized North American society (Sullivan, 2005).

These concerns bring forth a series of questions: How can we educate technically competent instructional designers while being simultaneously civic-minded? What changes must happen in the IDT academic preparation programs within higher-education institutions? What will a civic-minded IDT curricula look like? What are the benefits and challenges of implementing civic-oriented curricula for the students? This dissertation is designed to answer these questions.

Problem statement

Although there are growing interests among IDT academics and scholars to instill moral and ethic components into IDT education, there are two key problems in satisfying them.

First, issues of morals and ethics are generally understood from the "ethics of principles or rules" (Sullivan, 2005, p. 262) perspective. This perspective looks at ethics as a set of principles outlined by professional bodies to protect their integrity. Thus, the teaching approach is likely to emphasize the understanding and application of the IDT profession's ethical and moral codes, such as those endorsed by the Association for Educational Communications and Technology.

What is lacking in IDT academic preparation is the "ethics of virtue or character" (Sullivan, 2005, p. 262) perspective. In contrast to the first perspective, this perspective emphasizes building individual professional character and self-regulation. From this perspective, a professional is viewed as an individual who is responsible for his or her own moral acts. This dissertation research is framed by this perspective in that it emphasizes a professional's role in addressing social issues.

Second, there is a lack of empirical research solely dedicated to study the concept of professionalism in IDT literature, especially studies on civic professionalism. Perhaps one of the reasons for this is that the study of professions and professionalism is mainly rooted in and extensively discussed within the sociology field (Hatcher, 2008) and is therefore

considered beyond the main business of IDT academics and scholars. Although there have been some efforts to encourage discussion on IDT professionalism from a social perspective, such as instructional designers' professional identities and roles as social change agents (e.g., Campbell, Schwier, & Kenny, 2005; Campbell, et al., 2009) and socially responsible researchers (Reeves, 2000; Reeves, Herrington, & Oliver, 2005), these research efforts are centered on discussions on theoretical constructs that "are not often examined in relation to actual classroom data" (Turner, 2003, p. 12). This dissertation is meant to continue and to add values to this important discussion by providing a more detailed analysis of civic professionalism as it can be applied at the classroom level. Lack of understanding of this concept can result in difficulty of defining our professional identities and social responsibilities as instructional designers, as well as our understanding of the "grand purpose" (Schwier, et al., 2006) of IDT.

This dissertation attempts to address these gaps in IDT literature. Chapter 2 provides understanding on how civic professionalism can be applied to IDT by constructing a framework that identifies the appropriate paradigm and qualities of civic-minded instructional designers. Chapter 3 aims to provide an in-depth understanding of how students enact their civic-minded agencies while working with three community partners using the proposed framework. Finally, Chapter 4 provides insights of the benefits and challenges of using service-learning as a potential pedagogy for educating civic-minded instructional designers. This research is particularly important if one wants to apply the concept of civic professionalism to academic preparation of instructional designers.

Organization of the dissertation

This dissertation investigates two main academic disciplines - IDT and sociology – to assist in constructing the concept of civic-minded instructional designers. It is presented in a non-traditional dissertation format featuring three publishable journal articles, an introduction and a concluding chapter.

Chapter 1: General introduction

The first chapter introduces the research topic, educating civic-minded instructional designers. It also presents a statement of the problem investigated, the dissertation purpose and the dissertation organization.

Chapter 2: Exploring the civic dimension of Instructional Design and Technology (IDT) and its application into IDT curricula: A conceptual framework of Civic-Minded Instructional Designers (CMID)

This article corresponds to the literature review section of a traditional dissertation. It reviews and critiques current approaches in educating instructional designers at higher-education institutions. The review concludes that current approaches to instructional designer education tend to be merely technical- and career-oriented. It thus proposes the instillation of civic-based education into the IDT curricula to balance these approaches.

Second, it reviews the concept of civic professionalism and identifies the qualities of a civic-minded instructional designer to operationalize the conception. These qualities assist the construction of a Civic-Minded Instructional Designers (CMID) interpretive framework. Finally it offers some recommendations for applying the framework within an IDT curricula.

Chapter 3: Educating civic-minded instructional designers: An ethnography of an instructional experience

This article presents an ethnography of three students' experiences and the challenges they encountered as civic-minded instructional design and technology consultants to three community-based organizations. These experiences took place in an advanced instructional design course explicitly designed to include civic and social interests at a large research university in midwestern USA. The students were exposed to an instructional experience purposely designed to prepare them as civic-minded instructional designers based on the Civic-Minded Instructional Designers (CMID) framework described in Chapter 2 of this dissertation. In this research, I describe academic service-learning as an appropriate approach for operationalizing the Civic-Minded Instructional Designers (CMID) framework at the classroom level.

To gain in-depth understanding of these experiences, I actively engaged in the participants' lives by immersing myself in their IDT consultant activities. Thus, the main data of this study reflects my participant-based observations of students' interactions with

their peers and community partners. Data is supported by and triangulated with my reflective research journal and analyses of course artifacts, including students' reflections on their learning experiences. To gain holistic understanding of the experiences, I also conducted interviews with the four community partners involved.

Chapter 4: Embedding service-learning into instructional design and technology curricula: Benefits and challenges

This article presents an exploratory case study of an advanced instructional design curriculum embedded with principles of academic service-learning. The research is conducted in the context of an introductory instructional design course at a large midwestern university in the US. Its main purpose is to identify the benefits and challenges of integrating service-learning into the instructional designers' education from the students' perspectives. Using naturalistic inquiry methodology, data were collected via observations, interviews with the students and instructor, analysis of students' online discussions, written reflections, and project works.

Chapter 5: Synthesis and recommendations

The final chapter of this dissertation summarizes the findings of Chapters 2, 3 and 4. It also presents instructional and design implications of introducing the Civic-Minded

Instructional Designers (CMID) framework into IDT curricula. Issues of possible limitations of applying the framework and pedagogy into IDT are also discussed in this chapter.

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CHAPTER 2: EXPLORING THE CIVIC DIMENSION OF INSTRUCTIONAL DESIGN AND TECHNOLOGY (IDT) AND ITS APPLICATION INTO IDT CURRICULA: A CONCEPTUAL FRAMEWORK OF CIVIC-MINDED INSTRUCTIONAL DESIGNERS (CMID)

(This chapter is being prepared for publication in the *British Journal of Educational Technology*)

Abstract

This paper reviews and critiques current approaches to educating instructional designers in higher-education institutions from a civic-minded professionalism perspective. It argues that current approaches are career-centric and technically oriented. The literature review synthesizes the concept of civic professionalism and discusses its application in Instructional Design and Technology (IDT). The paper proposes a conceptual framework that highlights the roles and qualities of civic-minded instructional designers and offers recommendations for instilling a civic dimension into IDT curricula.

Introduction

Since its 'official' birth in the 1940s and, following the creation of an instructional technology program at Indiana University (IU), "one of the oldest and largest academic instructional technology programs" (Ely, 1998, p. 18), the field of Instructional Design and Technology (IDT) has significantly progressed over the years. While this progress has

certainly been welcomed and appreciated, the field is losing control over its research focus and professional agendas (Merrill & Wilson, 2007). Due to rapid advancement and expansion in the field, there is no longer a clear definition of just what constitutes IDT. The field has also witnessed rising numbers of professional organizations and journals associated with the study of teaching and learning. Merrill and Wilson argue that "everyone, it seems, is doing research and development related to technology and learning," across settings, including K-12, higher education, work, home, and entertainment. These individuals are either involved in IDT-related work or in the study of education and training in general. Either way it has become increasingly difficult for IDT members to keep track of general trends and theoretical developments in the field.

Consider academics and scholars, for example. Bichelmeyer, Boling, and Gibbons (2006) have expressed their concern about the IDT's values, uncertainties, and lack of focus. They contend that "professionals of all types in the field of IDT,… do not see the field as having a consensus definition, clear focus, distinct boundaries, established links between research and practice, or any obvious added value when compared with other fields" (p. 34). These concerns are also shared by practitioners and students. Practitioners struggle with the lack of congruity between theory and practice in IDT, while students' lack of understanding lies with how IDT is defined (Smith, Hessing, & Bichelmeyer, 2006). Others question the quality and relevance of research conducted in the field (e.g., Reeves, et al., 2005).

Concerns with IDT academic preparation programs

Of particular interest is the great amount of concern surrounding the topic of preparing instructional designers at higher-education institutions for academic (e.g., Cox, 2003; Larson, 2004; Rowland, Parra, & Basnet, 1995) and corporate (e.g., Julian, 2001; Larson & Lockee, 2009) settings. There seems to be a consensus that there is a discrepancy between the way instructional design is practiced in real-world situations and the way it is taught in instructional design and technology (IDT) classrooms. Part of this discrepancy is due to the fact that IDT is almost always taught as a set of procedures and most often focuses on media production. Such a narrow focus of IDT "ignores the complexity of this discipline and the high level of communication, negotiation, and other related skills needed for the practitioner to successfully approach instructional problems" (Bannan-Ritland, 1999, p. 1). Another reason is that most teaching approaches heavily emphasize an understanding of the various instructional design models available in the field (Rowland, 1992; Bichelmeyer, Boling & Gibbons, 2006). This model-centric approach fails to address the broader scope of instructional design knowledge, and, consequently, does not successfully prepare students to be professional instructional designers in the field (Ertmer & Cennamo, 1995; Rowland, Fixl, & Yung, 1992). In addition, students' confidence in exploring new ways of doing instructional design (Bichelmeyer, et al., 2006) may be diminished.

The problems associated with these approaches have resulted in a call for an authentically-based pedagogy that mirrors actual design practices (e.g., Cox, 2003; Gustafson and Branch, 2002). In response, researchers have begun to explore new approaches to

instructional design that prepares students for the actual jobs they will perform and situations they may face. Boling and Smith (2009), for instance, apply a studio-design model to teach instructional graphics courses more in line with "designerly ways of knowing" (p. 1). Others, such as Gibbons (2009), presented model-centered instruction that meets the criterion of an operational principle; Ertmer, et al. (2008) introduced cognitive apprenticeship approaches to teaching IDT.

Critiques on current authentic approaches to educate Instructional Designers

These new pedagogies have undoubtedly contributed to a greater in-depth understanding of the field and helped to prepare students to enter desired working environments. However, this paper argues that the desire to adequately prepare students for their career aspirations have led us to subscribe to the perspective of training-for-the-job, rather than training students to be active participants in enhancing the public's life (Cetindamar & Hopkins, 2008), the civic aspect of the IDT profession.

Consequently, the teaching focuses on equipping instructional-designers-in-training with an assortment of technical skills and tools so that they would be technically competent in performing their jobs. These tools include the ability to perform a variety of analyses, instructional activities, and assessment that Schwier, Hill, Wager and Spector (2006) referred to as some of the essential tools in an "instructional designer's toolbox" (p. 86). It also focuses on work processes – "how instructional design is carried out, what strategies and

approaches work in various contexts, how designers should systematically practice their craft" (Campbell, Schwier, & Kenny, 2008, p. 1), or the *what* and *how*– of the field.

This paper also asserts that emphasis on career preparation has caused IDT faculty, practitioners, and scholars to overlook an important aspect of IDT– the *why* aspect of the profession– the *meaning* of being instructional designers (Campbell, Schwier and Kenny, 2008). It also distracts us from questioning and thinking about the relevance and the "grand purposes" (Schwier, et al., 2006, p. 75), of practicing instructional design. Accordingly, as Campbell and her associates (2008) argue, instructional designers' critical and transformative powers to initiate and activate change at an interpersonal, institutional, and societal level are undermined. E ven worse, an approach to IDT with a career emphasis may result in the production of an elite group of instructional designers - designers whose services become exclusively available only to selective clients, especially those associated with profit-making organizations. We may therefore have unintentionally withheld our professional services from the larger society that includes citizens of low socioeconomic status, community-based, and non-profit organizations, as well as the public school system. If this is the case, then we, as IDT professionals, have betrayed the "social expectations of professionals to serve the public good" (Hatcher, 2008, p. 2).

To date, there are few scholarly discourses on the civic aspect of the IDT profession. One of the reasons for this could be that the study of professions and professionalism is beyond the scope of IDT. Indeed, it can be principally attributed to the field of sociology (Hatcher, 2008). Second, discourses on professionalism in IDT centers on ethical codes that

govern the profession (e.g., Yeaman, Eastmond, & Napper, 2008). These discussions reflect a structuralist analysis of a profession (Hatcher, 2008) that focuses on ethical practices. What is still lacking is scholarly discussion from a functionalist perspective that emphasizes the role and ethical practices of an individual professional in the society with respect to civic professionalism in IDT (Hatcher, 2008).

What follows is an attempt, framed by the functionalist perspective of professionalism, that seeks to address the gaps in IDT literature by (a) synthesizing literature related to civic professionalism, and, based on this synthesis, (b) proposes a conceptual framework that highlights the roles and qualities of civic-minded instructional designers. Developing a conceptual framework is critical to helping IDT professionals scrutinize and review the conceptualization of IDT as a profession and, most important, offers an alternative perspective with respect to viewing our current practice of preparing instructional designers at higher education institutions. The next section describes the methodology used to identify literature on which this framework is based.

Methodology

This literature review seeks to understand the concept of civic professionalism and its application to IDT. Two major questions guided this review: (a) what is civic professionalism, and (b) how can it be applied to IDT?

Search procedures

This literature review involved two iterative processes: (a) searching for relevant literature, and (b) based on the inclusion (and exclusion) criteria for this literature review, selecting only relevant literature that matches the purpose of this review. The search for relevant literature focused on five types of data sources: journal articles, scholarly books, practitioner-oriented publications including magazines, conference proceedings, presentations in the areas of educational technology and education in general, and theses and dissertations. These sources were accessed through various online databases, including ERIC, ProQuest UMI Dissertation, Google Scholar, and a manual library search. Keywords included "civic professionalism," "civic-minded designer," "literature review," "teaching instructional designer," "social change," and "civic-minded professional."

Literature from the first search process was first scanned to ensure that the keywords were present in the title, citation, or abstract. These search fragments were considered to be relevant for the purpose of this review. Literature fragments that did not include the keywords were discarded. Next, relevant literature fragments underwent another filtration process in which they were thoroughly read and compared to the inclusion criteria identified for the purpose of this review.

The main inclusion criterion for this literature review was that the topic of the literature was professional education (also referred to as professional training in some literature) in IDT. Second, the literature needed to be in the context of higher education. Thus any literature that related to other contexts such as workplace training and training in K-12 settings were excluded. Third, the literature needed to address the issue of preparing *future*

professionals and not *practicing* professionals. Additionally, it needed to focus on the issue of *pedagogical approaches* to training or educating professionals, and not on *how* professionals learn. Finally, for literature discussing the concept of civic professionalism, only those fragments related to education were selected. This meant that literature fragments that thoroughly discussed other aspects of civic professionalism, such as the political dimension of civic professionalism, were excluded.

The second process of filtration yielded only a few literature fragments. These were categorized into two broad categories, pre-identified for the purpose of this review as: (a) explanations relating to civic professionalism, and (b) civic professionalism in IDT. For this review, the term "civic" in civic professionalism refers to one's connection to a citizen, a city, citizenship, or community affairs (Merriam-Webster's Online Dictionary "Civic," 2010). Adapting from Saltmarsh's (2005) references to civic professionalism as the public purposes and social responsibilities of professional education and practice, the term civic professionalism in this article was then defined as a focus on supporting and enhancing public purposes and social responsibilities of professional education and practice. The term *public* in this definition refers to a group of people in an area of a state or a nation. These definitions are similar to Charmaz' (2006) description of axial coding that refers to the process of specifying the properties and dimensions of a category and sub-categories with the purpose of "giv[ing] coherence to the emerging analysis" (p. 60). This process leads to another emergent theme, labeled as the 'qualities of civic-minded professional' that informed later identification of specific qualities of professionals called 'civic-minded instructional designers'. Synthesis of this literature became the foundation of an emerging interpretive

framework called the Civic-Minded Instructional Designers (CMID). The next section discusses civic professionalism and its application in IDT leading to the development of the CMID framework.

The concept of civic professionalism

The concept of civic professionalism has been discussed across disciplines including education (e.g., Peters, 2004), history (e.g., Kimball, 1996), philosophy (e.g., Dewey, 1927; Sullivan, 2004; Sullivan, 2005), political science (e.g., Dzur, 2004), and across professions such as nursing (e.g., Day, 2005), law (e.g., Halliday, 1999), and teaching (e.g., Kennedy, 2005). However, since the main purpose of this literature review relates to the issue of academic preparation of future IDT professionals in the context of higher education, this review will focus only on civic professionalism as it relates to education and IDT professions. This section will first present the concept of civic professionalism as advocated by two main thinkers: John Dewey (1927) and William M. Sullivan (2004, 2005).

Civic professionalism from Dewey's (1927) and Sullivan's (2004, 2005) perspectives

So far as this review is concerned, discussions on civic professionalism can be dated back to Dewey's (1927) writing in *The Public and Its Problems*. John Dewey, an American philosopher in the early 20th century, described a civic-minded professional as a professional who had the public interest at the forefront of his or her professional work and a sense of

civic responsibility to conduct this work to advance the social good (Dewey, 1927). Dewey believed that professionals can serve as critical intermediaries to educate the public on the effects of larger social and economic forces and, consequently, can shape them to accommodate public needs (Dzur, 2004). Dewey (1927) emphasized the importance of public participation in contemporary democracy. Unlike Alexis de Tocqueville (2000), who stressed the importance of public participation and task-sharing between professionals and the public in township government and in the judicial system, Dewey (1927) was more interested in the idea of professionals as catalysts to public participation in democracy. Specifically, Dewey (1927) thought of professionals as experts who do not just "*represent* and act *for* the public", but rather "*facilitate* the public's solution to social problems" either directly - by "providing analysis for motivated community groups", or indirectly – by "influencing the conduct of other professions" (Dzur, 2004, p. 11).

Thus Dewey, in another writing, rejected the liberalist's view of knowledge and intelligence as an "individual possession" (Dewey, 1987, p. 47). Rather he advocated for the concept of social "scientific intelligence" that refers to the "egalitarian distribution of the capacity for scientific thinking and its incorporation into democratic decision-making in the polity, workplace, and elsewhere" (Westbrook, 1991, p. 187). From this point of view, knowledge is considered as social asset of the society (Boyte, 2003) that needs to be shared through dialogic conversations and interactions (Hatcher, 2008).

William M. Sullivan (2004; 2005) continued to expand on Dewey's (1927, 1987) civic professionalism. He proposes two concepts of professionalism: technical and civic.

Technical professionalism supports the view of professionals as experts with specific knowledge and skills. These professionals are considered as "purveyor[s] of expert services" (2005, p. 9). Conversely, civic professionalism refers to the ideal of social reciprocity between professionals and the public, that is, the people they profess to serve, in which "professionals…learn to bring their particular expertise into a larger, more complex deliberation about ends as well as means" (2005, p. 279). What really distinguishes each conceptis the ethical dimension of professionalism that is "institutionalized in the profession's social contract" (2005, p. 23) with the public. According to Sullivan (2004, 2005), this dimension is the most essential, yet jeopardized, dimension of professionalism.

Sullivan (2004) argued that professionals and their professions are directly pledged to the ideals of public service. Professionals make an implicit pledge and social contract with the public that they will deploy their skills and expertise to advance "the social values in the interest of those they serve" (Sullivan, 2004, p. 15). He argued that this responsibility and orientation toward public values are the important characteristics that distinguish professionals from other knowledge workers. From this point of view, an individual professional acts as community or social trustee of knowledge.

In addition, Sullivan (2004) contended that being professional is not limited to being a member of a professional organization and achieving certain public status and authority. Professionals also need to assume their *civic identities* by ensuring that their works contribute toward adding "to the public value for which the profession stands" (p. 23). Assuming civic identities requires application of two things. First, professionals must show that their

intentions are "public-regarding" (Peters, 2004, p. 48). Second, the *practices* that professionals undertake must be for "public-regarding ends and in a public-regarding way" (Hatcher, 2008, p. 25). This is crucial because the public expects that professionals will contribute to sustaining and improving public values, or, in economic terms ,'public goods' such as "health care, civil regulation and social justice, technological safety, and environmental regulation, publicly available information that is reliable and comprehensible, and high-quality education" (p. 4). In other words, civic professionals are and should be "active participants in civic life", who "cast their identities, roles, and expertise around a democratic, public mission, suffusing their technical competence with civic awareness and purpose" (Peters, 2004, p. 48).

Civic professionalism emphasizes social reciprocity between professionals and the public. This reciprocal relationship is vital because most of the really critical social issues cannot be resolved without drawing upon professional expertise. Similarly, professionals' lack of understanding of social contexts may not be useful in solving public deliberations. This is why "furtherance of civic orientation among professionals is becoming increasingly significant" (Sullivan, 2005, p. 279).

Additionally, Sullivan's (2004, 2005) civic professionalism held individual professionals accountable for their own ethical actions. This conception stemmed from the perspective of ethics of virtue or character derived from Aristotle's "conception of practical rationality" (Sullivan, 2005, p. 265) and was later influenced by pragmatists like John Dewey and George Herbert Mead. Its concern is on "ethics upon character and mores, those shared

habits of character upon which individual responsibility and virtue depend" (Sullivan, 2005, p. 265). This literature review shares this perspective.

Sullivan's (2004, 2005) conception of civic professionalism contributes towards understanding the qualities of civic professionals. In sum, he views a civic-minded professional as (a) an active participant in civic life, who (b) acts as a community or social trustee of knowledge with the public he or she professes to serve, and (c) utilizes their technical expertise to contribute to enhance public goods and solve public or social problems. He also points out the concept of 'civic identity' of a civic-minded professional, which is (d) having the intention to serve the public and (e) translate this intention into actual practice.

Hatcher's (2008) characteristics of civic-minded professionals

Though Sullivan (2004, 2005) describes civic professionalism in detail, little empirical research has been done to understand the characteristics of civic-minded professionals (Hatcher, 2008). To address this gap in the literature, Hatcher (2008) conducted a study to help operationalize the term 'civic-minded professionals.' Drawing from three bodies of literature – philosophy, political science, and philanthropic studies, Hatcher (2008) constructed a set of 31 characteristics of civic-minded professionals. These characteristics are clustered into three main categories: knowledge, skills, and dispositions that made up Hatcher's (2008) Civic-Minded Professional (CMP) scale. Knowledge of the 31 characteristics of a civic-minded professional is useful in understanding the qualities of civic-

minded instructional designers, as discussed later in this paper. Appendix 1 presents Hatcher's (2008, p. 45) set of characteristics of civic-minded professionals.

Civic professionalism in IDT

The term 'civic professionalism' has not previously been explicitly mentioned in IDT literature. There are attempts, however, to bring forth discussions on the social aspects of the IDT profession and on the roles of an instructional designer in society, one of the characteristics of a civic-minded professional outlined by Sullivan (2004, 2005). This section describes scholarly discussions in IDT literature that relate to the concept of civic professionalism.

Campbell, Schwier, and Kenny (2005, 2008, 2009) are among a few IDT researchers who have consistently attempted to discuss the roles of instructional designers in today's society. Using a combination of grounded theory and narrative inquiry, they conducted a 3-year study, from 2002 to 2005, on the topic of instructional designers' roles as agents of social change, with 20 instructional designers working with faculty (i.e. clients) at six Canadian universities. This research led them through "a web of interacting variables, including things such as professional identity, experience, institutional change, professional preparation, and professional communities of practice" (Schwier, et al., 2006, p. 76), aspects that are not thoroughly discussed in the mainstream IDT literature.

These findings led Campbell, Schwier, and Kenny (2005, 2008, 2009) to conclude that instructional designers are potential social-change agents at interpersonal, institutional, and societal levels. This perception is based on their views of instructional design as "a socially constructed practice… with socially transformative power through the positioning of the self in explicit action" (p. 3). They assert that instructional designers initiate and activate changes by expressing their personal values, beliefs, and convictions while engaging in social intercourse or design conversations with their clients. Through these design conversations, instructional designers discuss issues that challenge clients' perceptions on concept, purposes, forms and cultural implications of learning. By doing so, they have contributed to modifying the social context that leads towards personal, institutional, and social changes. In this sense, the practice of design, at least to these designers, is not just an act; rather it is a process that involves moral and political consequences.

Along the same lines, Inouye, Merrill, and Swan (2005) propose the concept of IDT as a helping profession. Help, they argue, is, has always been and should be the central concern of IDT, but is rarely and implicitly discussed in the literature. As a matter of fact, they contend that helping others to learn "is the very reason for the existence of our [IDT] field – the reason why we apply science, design artifacts, and use technology" (p. 4). Thus, 'help' needs to be acknowledged as the *new* paradigm of IDT about which the other three paradigms revolve.

Instead, our field is dominated by three other paradigms – the scientific, design, and technology paradigms – that may be called the "three traditional centers" of IDT (p. 4). The

scientific paradigm views IDT as a science that focuses on seeking, discovering, and applying invariant laws, relationships, or principles as embodied in IDT instructional research, theory, and measurement. The design paradigm views IDT as a design-based discipline that seeks for effective, efficient, and appealing approaches to design. It is embodied in IDT and the instructional design and development subfields of IDT. On the other hand, the technology paradigm views IDT as technology-centered, that is, using technology to accomplish a user's purposes.

Because the act of helping people and to make a difference in their lives is, "by definition, ethical" (p. 5), the new fourth paradigm is called the ethics-centered paradigm, with 'help' as its main concern. In this realm, other paradigms are viewed as subordinate to it. In other words, ethics is the utmost important purpose –the *ends* of doing instructional design; others – the theories, techniques, models, and the technology – that characterized the other three paradigms are considered as the *means* of doing instructional design, that is, to help learners to learn. Instructional designers, then, are viewed as instructors and teachers, not technologists. Their main role is to help "foster growth of individuals in all of the important venues of their lives: school, workplace, home, church, and community – the traditional locations of interest for education and the social sciences" (p. 4) using "the best available technologies and techniques" (p. 15).

So far we have presented the concept of civic professionalism from perspectives of both sociology and IDT literature. The subsequent sections focus on how these literature fragments help inform the concept of civic-minded instructional designers.

Movement toward development of Civic-Minded Instructional Designers (CMID)

framework

The work of Campbell et. al. (2005, 2008, 2009) and Inouye et. al. (2005) has shed some light onto the concept of instructional designers as civic-minded professionals. First, they contend that instructional designers contribute toward positive social changes, or in Sullivan's (2005) term, 'public goods', by engaging in social relationships and discourses during their design work with people who acquire their services. This is consistent with Sullivan's (2004, 2005) view that a civic-minded professional is an active participant in public life and engaged in a reciprocal relationship with the public they profess to serve.

Secondly, both Campbell et al. and Inouye et al. emphasize the educational role of civic-minded instructional designers. Though one could argue that viewing instructional designers as teachers and instructors undermines this role with respect to larger social contexts, Inouye et. al. (2005) explain that the social purpose of the IDT profession is to help people learn effectively in various learning contexts – formal, informal, and non-formal – that transcend the learners' geographical locations – home, workplace, and places of worship, among others.

Finally, the responsibility for deploying technical expertise for the public good – in the case of IDT, helping people to learn and activate change – is placed on an *individual* instructional designer, not on the profession of IDT as a whole. This view is aligned with sociologists' functionalist view of the role of a profession (Hatcher, 2008).

All four contributions offer some insights into the roles of instructional designers in society. But, how can they be translated to educate or train civic-minded instructional designers? The answer to this question requires one to take a holistic view of the concept of civic professionalism in IDT and to summarize it into a practical conceptual framework. The following overview of the Civic-Minded Instructional Designers (CMID) framework translates the concept based on synthesis of the previously mentioned literature in sociology and IDT.

The Civic-Minded Instructional Designers (CMID) framework

The CMID framework (Figure 2.2) is comprised of two main components: (a) paradigm, and (b) qualities, of civic-minded instructional designers. The CMID framework offers a conceptual understanding of the relationship between an instructional designer and his/her works in larger social contexts – this is the paradigm of the framework. I argue that such understanding is important in transforming the current practice of training instructional designers. Once this relationship is understood, the framework offers insights as to *who* and *what* are the characteristics of civic-minded instructional designers – the qualities that make up civic-minded instructional designers. Both - paradigm and qualities – are the two main components of the CMID framework. I contend that both should be viewed as the desired *ends*, that is, desired goals or purposes of IDT training, so that we, as IDT faculty, will be able to utilize the appropriate *means*, that is, instructional strategies and pedagogical approaches, to achieve these goals. Sullivan's (2004, 2005) writings on civic professionalism

previously mentioned in this paper, along with those of other scholars, is the main point of reference in guiding development of the framework.

This paper defines a professional civic-minded instructional designer as an instructional designer who (a) had the public interest and a sense of civic responsibility at the forefront of his/her work, (b) is attentive, responsible, and responsive to the emergent instructional needs of the members of the community, and (c) utilizes his/her knowledge and skills in instructional design and technology to improve learning and performances of others. This literature review recognizes a person as a professional based on the type of occupation and tasks he/she performs that reflect his or her expertise in the area, rather than on his/her formal education or training in a specific area and/or his/her membership in a specific professional organization. The basis for this choice is grounded in findings of a few studies indicating that a number of IDT practitioners do not necessarily receives any formal IDT education or training (e.g., Cox & Osguthorpe, 2003; Winer & Vázquez-Abad, 1995). They are assigned, rather, to the tasks by their organizations, people who Merrill and Wilson (2007) refer to as designers-by-assignment. Defining a professional solely by his/her occupation enables one to include as many instructional designers as possible in the CMID framework. In addition to the definition, this research contends that a civic-minded instructional designer needs to embrace a civic-minded paradigm and a set of civic-minded qualities. Both paradigm and qualities are the two main components of the CMID framework.

The CMID paradigm

The literature refers to the term "paradigm" as a particular worldview, perspective, or set of shared values that "bind people together into a common community" (Davies, 1997, p. 35). Because civic professionalism relates significantly to issues of professional ethics and integrity, the CMID framework finds its base in IDT's ethics-centered paradigm as proposed by Inouye et al. (2005). As previously described, these authors view helping people to learn efficiently within various contexts as a central concern of this paradigm– the ultimate social purposes of IDT as a profession. An instructional designer, then, is seen as a teacher and instructor who utilizes his/her knowledge and expertise to help people learn.

This paper extends the view of Inouye and his colleagues' (2005) on 'help' and the instructional designer's role to a broader, social level perspective. It takes the view that the social purpose of IDT is to empower people into making informed decisions for any actions undertaken to improve their lives. Civic-minded instructional designers, then, are viewed as *educators* – not just teachers and instructors – and *agents* of social change who have realized their knowledge and technical expertise to help people make informed and wise decisions that result in improvement of their lives. For instance, a civic-minded instructional designer, drawing from his or her knowledge on best practices of designing instruction and technology skills, may design an instructional experience that helps educate people on hygiene concepts. Users of this instructional experience will then be able to make decisions on actions needed to improve their quality of health. Perhaps, for example, they can develop a practical hygienic plan for their family members (i.e., micro-level decision), or, in a larger

neighborhood context, they can acquire legal assistance to sue the factories in their neighborhood that are found to sabotage their quality of health (i.e., macro-level decision).

As highlighted in the example, a civic-minded instructional designer, as an ethical-moral actor and agent of change, is not only responsible to his or her clients, that is, people who acquire their professional services. Rather, their services must consider the implications of their design work in larger social contexts. Similarly, they must consider how their work can contribute to resolution of issues surrounding their social contexts.

What is meant here by 'contexts'? What contexts are being referred to? I use the term 'contexts' to refer to environments or settings. Adapting from Kaufman's (2009) Organizational Elements Model (OEM) to explain three levels of organizational planning, this paper takes the view that a professional civic-minded instructional designer functions at three context levels - micro, macro, and mega. The *Micro* context refers to an individual's immediate environment, such as the organization in which he or she works, the neighborhood in which he or she lives, or the school he or she attends. The *Macro* context refers to an individual's extended environment beyond the immediate environment, in which he or she is directly involved and to which he or she attributes membership, such as the country in which he or she lives, or his or her socioeconomic status, among others. The *Mega* context refers to an individual's larger cultural environment; one that he or she may be indirectly involved and to which he/she belongs, beyond his/her macro context. It also reflects that any instructional design work done by an instructional designer has its own implications with respect to each of the three contexts. Similarly, it views that for each context, there are possible issues to

which a civic-minded instructional designer could contribute in performing his/her design work. For instance, a civic-minded instructional designer can create instructional materials and/or conduct on-site training to educate members of the community in which he/she resides as to what to do in case of natural disasters (i.e., the micro context). Using appropriate technologies, he/she can distribute the materials to wider audiences, for example, to people in other states (i.e., macro context) and/or countries (i.e., mega context) so that they, too, can benefit from the materials. In this example, the civic-minded instructional designer has utilized his/her instructional design knowledge and technological skills to address one important issue, that is, the issue of safety, to others beyond his/her immediate context.

Similarly, instructional materials a designer creates to educate the public on the issue of domestic violence in county A, Michigan, USA (i.e., micro context) is also applicable in county B, Oklahoma, USA (i.e., macro context) and state C of Australia (i.e., mega context), although there may be some cultural differences among these environments to which the designer must attends. Or, perhaps, an educational experience relating to environmental pollution, designed for a group of North American elementary school children, can also be distributed to another group of children in South America through available technologies. These examples exemplify how a civic-minded instructional designer can, through his or her work, utilize his/her instructional design expertise to help address various social issues within and/or across the three contexts by creating effective instructional materials as a means for educating the public on various social issues that may later lead to appropriate social actions.

Figure 2.1 presents a graphical illustration of the connection between each context that affects a civic-minded instructional designer's works.
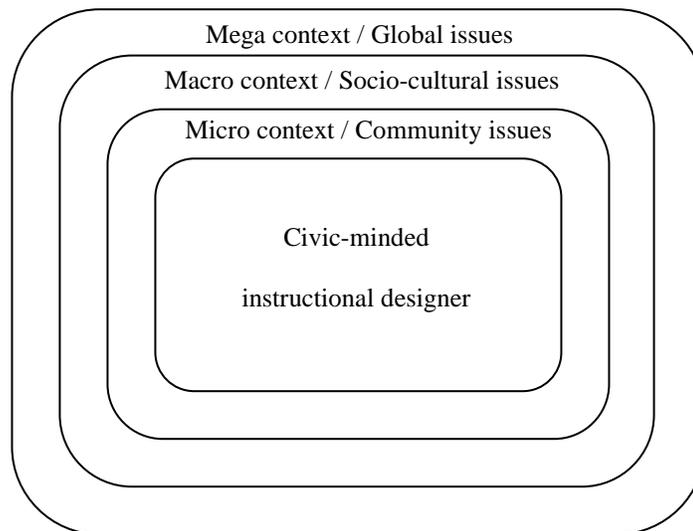
Figure 2.1 A civic-minded instructional designer's contexts

Qualities of a CMID

As previously mentioned, distinguishing a civic-minded instructional designer from a non-civic-minded instructional designer calls for identification of specific characteristics or qualities. Building upon Hatcher's (2008) categorization of characteristics of a civic-minded professional, this paper contends that there are four major components that make up a civic-minded instructional designer – belief, knowledge, skills, and dispositions.

Belief

Having the right/correct/appropriate set of beliefs is an important characteristic of a civic-minded instructional designer. Pajares (1992) contends that beliefs guide individuals to make decisions and act in certain ways throughout their lives. Additionally, Shabajee (2002) states that it is important for a designer to have a clear set of beliefs as it helps him/her to clarify and internalize the overall mission or objective of his/her design works. It also informs the designer's decision when he or she must make compromises during the design and development process. The CMID framework identifies three set of beliefs of a civic-minded instructional designer.

First, he or she needs to be aware that his/her existence and design works are socially interdependent with the clients and the public. That is, the work may have implications with respect to broader societal problems (Sullivan, 2005). Second, the designer needs to believe and represent himself or herself as the community or social trustee of knowledge who vows to deploy technical expertise for "public-regarding ends and in a public-regarding way" (Hatcher, 2008, p.25). Finally, the designer needs to believe he or she has the transformative power to produce positive changes in society (Campbell et.al., 2009) by actively participating in dialogues, activities, and social policies that affect public life.

Knowledge

In the case of civic-minded instructional designers, knowledge about social issues in their local, micro contexts are important to help them understand just how they can utilize their knowledge and expertise to address broader social issues experienced by other communities in macro and mega contexts. It can also inform their understanding of how they can make their design work, especially on issues related to cultural sensitivities, applicable and relevant across these three contexts, However, it should be noted that designs that might be workable in local, micro contexts could be unworkable in macro and mega contexts. In this situation, knowledge about cultural diversity is important to ensure that such design work is applicable to macro and mega contexts.

For example, an instructional designer might be determined to address issues of teen pregnancy in his/her local community. Using the needs analyses he/she conducts, he/she can identify a need to educate teenagers in his/her neighborhood about the importance of using birth control, and may make this the central focus of the instructional materials he/she designed. While the idea of birth control may be well-accepted in the designer's local community, it may be perceived as unacceptable to others, especially those in faith-based communities. In this situation, a designer's knowledge about what works in his/her micro context is non-applicable in macro and mega contexts. Without a sound understanding of how social issues are and can be addressed in macro and mega contexts, the design work may be essentially meaningless.

Skills

Subscribing to a set of beliefs is not enough. A civic-minded instructional designer also must have a particular set of skills to be able to function as an agent of social change. Such skills include interpersonal skills, such as the ability to interact with others, especially those from varied backgrounds. Since civic-minded instructional designers are expected to take the lead in solving public problems (Sullivan, 2004), they also must have leadership or "participatory civic skills," (Hatcher, p. 45) including the ability to inspire and organize others to address community needs, and to participate in voluntary associations. Additionally, they must acquire teamwork skills such as the ability to listen and understand another's perspective, to build consensus across diverse opinions, to engage in dialogues, and to have strong relationships with others (Hatcher, 2008).

Dispositions

The CMID framework recognizes certain dispositions of civic-minded instructional designers. These dispositions include public-spiritedness, having an interest in issues related to public welfare. Sullivan (2005) recognizes public-spiritedness as "the bedrock of civic culture" (p. 265). Because helping others is the fundamental value of the IDT profession (Inouye et al., 2005), civic-minded instructional designers are expected to be motivated to help others improve their lives. They also need to support the public role of the profession

and to see their professional work as the main platform of a vocation to advance people's lives.

Figure 2.2 presents graphical illustration of both paradigm and qualities necessary to civic-minded instructional designers.

Mega context / Global issues

Macro context / National, social issues

Micro context / Community issues

- Socially interdependence
- Social trustee of knowledge
- Agent of change

- Knowledgable about social issues in micro, macro and mega contexts
- Knowledgeable about issues of cultural diversities

Belief

Knowledge

Qualities of Civic-minded instructional designers

Dispositions

Skills

- Public-spiritedness
- Motivated to help others
- Supports public role of profession

- Interpersonal skills
- Leadership skills
- Teamwork skills

Figure 2.2 The Civic-Minded Instructional Designers (CMID) framework

Conclusions and instructional implications of the CMID framework on preparing civic-minded instructional designers

This literature review applies Sullivan's (2004, 2005) conception of civic professionalism in IDT by identifying the paradigm and qualities of a civic-minded instructional designer. The major outcome of this literature review was the construction of a Civic-Minded Instructional Designers (CMID) framework. Defined by the sociologists' functionalist analysis of the profession (Hatcher, 2008), this framework views an instructional designer as a person whose actions and professional practices have larger social implications in three interconnected contexts – the mega, macro, and micro contexts. Opportunity to apply the IDT expertise of an instructional designer is a privilege that should be used to advance the public good.

The need to instill a civic dimension into IDT academic training is also very critical. Moore (2009) administered a survey to 169 faculty members engaged in teaching educational technology graduate programs in order to understand their perceptions of the relevance of embedding a social responsibility component into their graduate curricula. The findings were shocking. Faculty in the survey wrote alarming comments such as "*I don't see my having much chance or responsibility to change those things [the social issues mentioned in the survey] in my instructional technology classes*", "*What is the application [of the social issues] to my work in instructional technology as an instructor?*", and "*As human being or on personal level I certainly think about them [the social issues]… but in my 'profession'… I do not integrate these issues or include them in my teaching or research.*" (cf. Moore, p. 90-91).

These comments, however, "are not representative of all the comments from faculty" (Moore, 2009, p. 91), which signifies two important things. First, it clearly indicates that faculty members – people who prepare instructional designers at higher education institutions –are themselves often unable to see the social implications of IDT to the broader social perspective. Second, because of this, most faculty do not integrate social issues such as war, poverty, substance abuse, disease, and so forth, into their IDT graduate curricula.

Since the issue of faculty preparation is beyond the scope of this research, the focus is centered on just how the CMID framework can guide faculty to instill a civic dimension into graduate curricula. In general, such curricula will encourage students to explore real-life issues in their immediate contexts (i.e., micro context), relate them to broader contexts (i.e., macro and mega contexts), be more reflexive, especially in thinking about how their professional roles and work affect society, and conduct more explicit rather than implicit discussions on moral and ethical issues,. Specifically, the research suggests six strategies for utilizing findings of this literature review to incorporate a civic dimension into IDT curricula.

First, IDT faculty may use the definition and the CMID framework as representing the new standard of competency in their curricula. That is, such competency can be considered in terms of instructional objectives or standards in the curricula, or, in the words of Inouye et al. (2005), the ultimate *ends* of the curriculum. Using appropriate instructional approaches or *means*, faculty can design their courses around the four main components of the framework mentioned earlier – belief, knowledge, skills, and dispositions.

Second, just as IDT faculty nurture students' technical expertise, they also must strive to nurture students' civic identities, starting from the very beginning of their academic programs. This can be done through discussions regarding the social roles of an instructional designer in society and through initiating courses that introduce concepts of social justice and advocacy into students' educational programs. Additionally, these discussions should encourage students' ethical judgments as suggested by Inouye et al. (2005).

Third, faculty can revamp their existing experiential-authentic teaching approaches through a clear focus on solving social problems at the micro, macro, and mega levels. This means that students can be encouraged to address community-based needs (i.e., micro context) and relate them to broader social issues. For example, the need to educate community members on issues of partner abuse (micro context) can be associated with issues such as crime and violence (macro context) and global issues such as international war, stereotyping, and discrimination in profiling criminals (mega context).

Fourth, faculty can steer students' design projects to include more non-profit and community-based organizations that serve socially and economically-disadvantaged people. By serving these populations, students will learn firsthand how their work contributes to the improvement of people's lives. However, faculty members must be careful to have students work *with*, rather than *on* the people they serve.

Fifth, faculty should encourage students to implement user-centered and participatory design approaches in solving design problems. User-centered design approaches direct students, as designers, to honor their clients' needs and to use their clients' input to inform

their designs (Carr-Chellman & Savoy, 2004). On the other hand, participatory design approaches emphasize clients' active engagement in the design process (Nilakanta, 2007). While both approaches have advantages and disadvantages, this research contends that combining them may produce the capability of encouraging students to be civic-minded instructional designers.

Sixth, in terms of students' research, faculty should recommend and support students to conduct research that contributes to understanding and solving social problems. This is consistent with the recommendations of Inouye et al. (2005) that state that the IDT research mission should shift from "concerns about the internal and external validity of inference to include concerns about the more inclusive validity of use or consequence" (p. 22).

Teaching research additionally should be more "problem-driven" rather than merely "method-driven" (Inouye et. al., 2005, p. 22). That is, focusing on solving social problems rather than the technical or the how-to aspects of research. Inouye et. al. (2005) recommends that faculty should model and encourage students to apply naturalistic inquiries such as ethnography, narrative inquiry, and action research in their research-related works. Such research methodologies are viewed as important in balancing the dominant quantitative inquiries of IDT research (Reeves, 2000; Reeves, et al., 2005).

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APPENDIX 1: HATCHER'S (2008) CHARACTERISTICS OF CIVIC-MINDED PROFESSIONALS

Knowledge: Volunteer and pro bono opportunities
- Is aware of volunteer opportunities   - Is aware of pro bono service opportunities   - Is knowledgeable about nonprofit organization
Knowledge: Contemporary social issues; community issues
- Is knowledgeable about community needs   - Is aware of social problems   - Is knowledgeable about public policy
Skills: Competency with diversity
- Has the ability to interact with others from diverse backgrounds   - Listens to understand the perspective of others
Skills: Consensus building across diverse opinions
- Build consensus across diverse opinions   - Engages in dialogue with others   - Has strong connections with others
Skills: Participatory civic skills
Organizes others to address community needs

- Has the ability to inspire others to take action

- Works with others to achieve the public good

- Participates in voluntary associations

- Has the ability to navigate political processes

Dispositions: Values voluntary and pro bono service

- Values voluntary and pro bono service

Dispositions: Motivated to serve others

- Is motivated to serve others

Dispositions: Sense of gratitude

- Has a sense of gratitude for life in general and for work more specifically

Dispositions: Social trustee of knowledge

- Sees oneself as a social trustee of knowledge

- Has a sense of social responsibility to be actively involved in the community

- Has a sense of social responsibility and commitment to the public good

- Supports the public role of professionals in society

Dispositions: Passionate about work

- Enjoys an intrinsic satisfaction from work

- Integrates personal values with professional life

Dispositions: Sense of calling in work for larger purposes, either religious or civic
- Has a sense of calling, either religious or civic, in one's professional work   - Embraces religious values, faith, or transcendent ideals   - Has a sense of obligation to give back to society
Dispositions: Democratic values
- Values democratic ideals (e.g., reciprocity, justice, equality) when working with others   - Values democratic ideals of citizen participation   - Values reciprocity and mutual respect between professional and client

CHAPTER 3: EDUCATING CIVIC-MINDED INSTRUCTIONAL DESIGNERS: AN ETHNOGRAPHY OF AN INSTRUCTIONAL EXPERIENCE

(This chapter is being prepared for publication in *Educational Technology Research and Development*)

Abstract

This ethnographic study takes place in an advanced instructional design course embedded with civic and social interests at a large research university in midwestern USA. It presents an in-depth examination of three students' experiences and the challenges they encountered in being civic-minded instructional technology consultants for three community-based organizations. Data are collected from participant observations, the researcher's reflexive journals, interviews with research participants, and analyses of course artifacts and students' reflections on their learning experiences. Findings reveal that students enhanced their civic-minded agency by addressing community member's needs, giving voices to their community partners, addressing issues of projects' sustainability, being sensitive to community partners' perspectives yet diplomatically voicing professional opinions, and acknowledging their community partners as design partners. They also had to make adjustments, re-configure their roles and build trustful relationships with their community partners as civic-minded

agents. This study makes a contribution toward a better understanding of instructional design roles within larger social contexts.

Introduction

For the past 20 years, scholars have been concerned with the practice of teaching instructional design. There is a consensus among scholars that the major flaw of teaching and preparing instructional designers in the North American context is the discrepancy between what is taught in instructional design academic programs and with the actual practice of design by instructional design practitioners (Bichelmeyer, et al., 2006; Curry, et al., 2009). Rowland (1992) contends that instructional design teaching is often based on instructional design models. While instructional design guides instructional designers, especially novice and designers-by-assignment (Merrill & Wilson, 2007) in their design practices, scholars agree that an over-emphasis on these models should not be the central concern of instructional design education over the overall design enterprise (Bichelmeyer, et al., 2006). Such an approach is seen as a detriment to students' abilities to explore new design approaches (Boling, 2006) and ignores the complexity of the instructional design and technology (IDT) discipline (Winn, 1997). As a matter of fact, a number of researchers called into question the relevance of using systematic instructional design models in the actual practice of design (Visscher-Voerman & Gustafson, 2004; Wedman & Tessmer, 1993; Winer & Vázquez-Abad, 1995; Winn, 1997). These researchers argue that IDT practitioners do not

necessarily follow the processes described in the models and that their design practices vary based on the contexts of the design projects.

In efforts to address this issue, scholars began to call for alternative approaches, specifically ones that integrate knowledge of the field while simultaneously mirroring the actual design practices of the field, to teaching instructional design,. Among these are the studio-based model (e.g., Boling & Smith, 2009); model-centered instruction that meets the criterion of an operational principle (Gibbons, 2009); cognitive apprenticeship approaches to instructional design (e.g., Ertmer & Cennamo, 1995); action learning (e.g., Bannan-Ritland, 1999); experiential learning (e.g., Correia, 2008); (Dunlap, et al., 2008) and authentic learning approaches in design education (e.g., Wilson & Schwier, 2009). In addition, researchers such as Bichelmeyer et al. (2006) call for instructional approaches that address the qualities needed by an instructional designer, just as is the case in other design fields. This kind of teaching approach requires students to acquire more than technical design skills and competencies; it brings about changes in their perspectives, in their activities, and in themselves.

Instructional designers as agents of change

Another group of IDT scholars take another direction in their call to change current methods of educating instructional designers. Instead of emphasizing the *process* of design, i.e., the *what* and the *how* of instructional design should be practiced (Schwier, Hill, Wager,

& Spector, 2006, p. 75),they call for teaching approaches that encourage instructional designers to critically reflect on their professional identities as instructional designers and on "what it *means* to be an instructional designer" (Campbell, et al., 2009, p. 646).

From this point of view, instructional design is seen as a "socially-constructed practice rather than a technology to be employed" (Campbell, et al., 2008, p.3) that has "socially transformative power" to bring about a positive change in the society. Instructional designers, then, are viewed as agents of social change who "act in purposeful, value-based ways with ethical knowledge, and in social relationships and contexts that have consequences in and for action" (Schwier, et al., 2006, p. 76). Through a 4-year study involving 20 instructional designers at six Canadian higher-education institutions, Campbell et. al. (2009)found that instructional designers act as agents of change at four levels: interpersonal, professional, institutional, and societal, by challenging and shaping the institutional and social discourses about the purposes and forms of learning. The next section presents an emerging framework called the Civic-Minded Instructional Designers (CMID) framework used to examine how students, in their capacities as consultants, can enact their civic-minded impulses.

Conceptual framework

The Civic-Minded Instructional Designers (CMID) framework

The Civic-Minded Instructional Designers (CMID) framework (Figure 3.1) is an emerging, on-going framework constructed as a response to the need for preparing civic-

minded instructional designers. A civic-minded instructional designer is defined as an instructional designer who (1) has the public interest and a sense of civic responsibility at the forefront of their work, (2) is attentive, responsible and responsive to the emergent instructional needs of the members of the community, and (3) utilizes his or her knowledge and skills in instructional design and technology to improve the learning and performance of others.

The CMID framework is based on the ethics-centered paradigm of IDT (Inouye, et al., 2005) that views IDT as a helping profession. According to this paradigm, the major concern of IDT is to help people learn effectively in a variety of learning contexts. Extending the conception of IDT as a helping profession, the CMID framework views an instructional designer as a civic-minded professional (Dewey, 1954; Sullivan, 2005) who utilizes his or her instructional design skills to contribute toward the public good. As an educator and agent of social change, a civic-minded instructional designer helps educate people to make informed decisions that result in improvement in their lives. Thus, it is important for such a designer to understand that his/her instructional design works have, explicitly and implicitly, broader implications within social contexts. The CMID framework recognizes three inter-related contexts within which a designer's works may contribute towards social change: mega (i.e. broader cultural environment, especially at the international level), macro (i.e., an extended environment especially at the national level) and micro (i.e., in an immediate environment such as a neighborhood area). The CMID framework identifies a certain set of beliefs, knowledge, skills and dispositions – the four important qualities – that distinguish a

civic-minded instructional designer from a non-civic-minded instructional designer. These qualities are reflected in the center of the CMID framework (Figure 3.1).
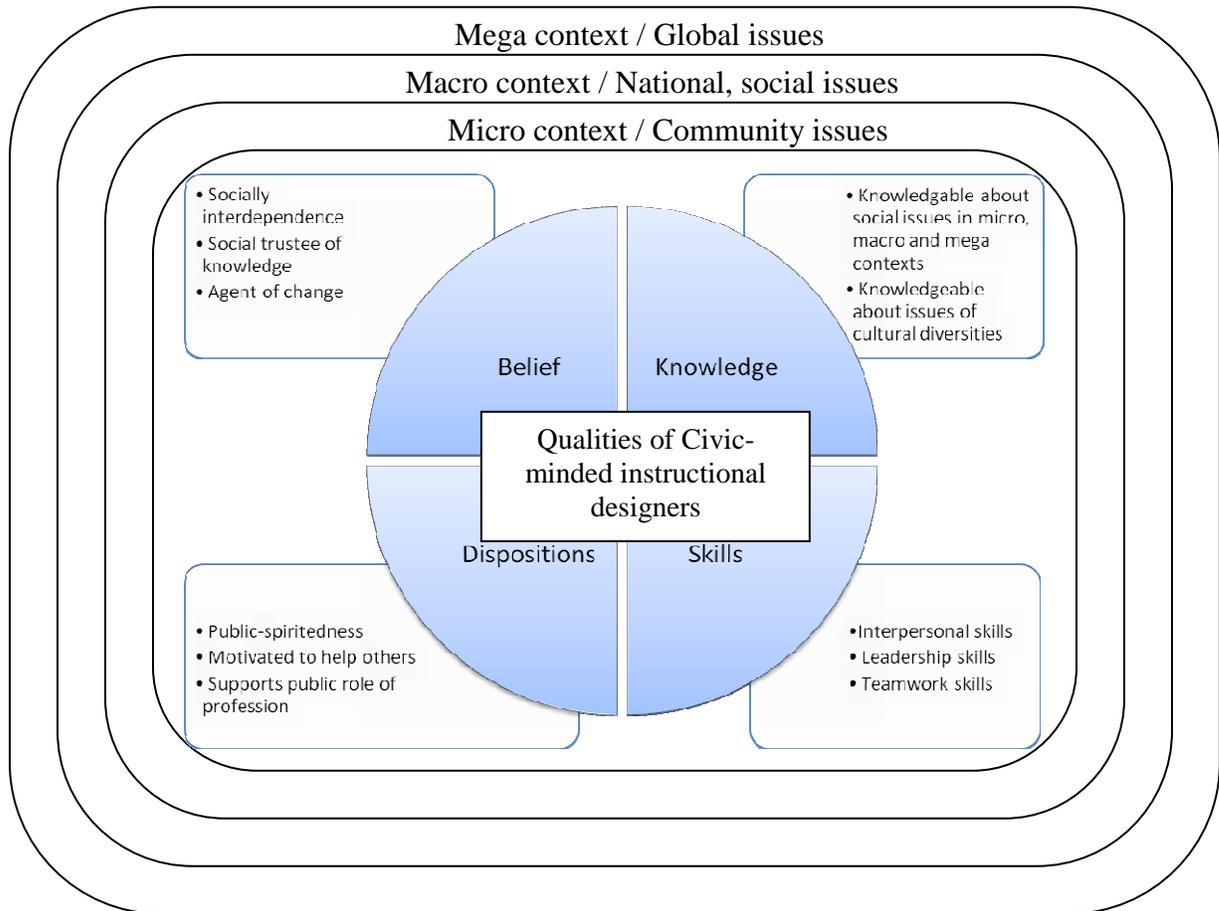
Figure 3.1 The Civic-Minded Instructional Designers (CMID) framework

Critical Service-Learning (CSL) pedagogical approach

The CMID framework provides a conception of the paradigm and qualities of a civic-minded instructional designer. To operationalize it in a classroom context, it needs to be embedded within an identified pedagogical approach. One suitable approach is Critical Service-Learning (CSL). CSL is a version of the traditional service-learning pedagogical

approach, enhanced with social justice purposes to bring about positive social change. In this paper, service-learning is defined as a pedagogical approach that is typically rooted in formal, credit-bearing courses or academic experience in which students learn academic course content by participating in an organized service activity that meets identified community needs. Examination of service-learning literature (Bringle & Hatcher, 1996; Furco and Billig, 2002; Howard, 2003; Root, 1997) reveals several core elements of service-learning:

- Its emphasis on the concept of *mutual benefits* between service-provider and service-recipient in contrast with an internship model that is intentionally designed to principally benefit the service-provider (i.e., an intern), or volunteerism that benefits the service-recipients more than the service-provider;

- Its focus on service *with*, rather than *for*, the community partner;

- The utilization of one's (i.e., the service-provider's) expertise aligned with course content; and

- Active and facilitated reflections of the service-learning experiences.

A CSL-based curricula emphasizes the principles of partnership, connectedness, critique, and activism (Wade, Boyle-Baise, & O'Grady, 2001). It values involvement of all stakeholders, including the course instructor, students, and community partners whom the students serve in enriching students' learning experiences. Together with stakeholders, students in a CSL-based curricula are engaged intellectually and analytically in identifying social problems, seeking out multiple perspectives for solutions, and actively engaging in

action that helps create more just conditions (Wade, et al., 2001). These factors are considered as "a prelude to activism" (Boyle-Baise & Langford, 2004, p. 56).

So far I have presented the conceptions of civic-minded instructional designers and the civic-minded agency as derived from literature. But what do these concepts look like in the context of an instructional design and technology (IDT) course? This ethnographic study investigates (a) how students of a civic-minded course can enact their civic-minded agency while working as instructional design consultants in three service learning projects, and (b) the challenges they experienced in this process. The term "civic-minded agency" is defined as an individual's or group's purposeful and reflective acts to bring about positive changes that will benefit members of the world they live in.

Methodology

This study utilizes ethnography to understand how students in the course enacted their civic-minded agency, and describes the challenges they experienced as instructional technology consultants. Ethnography is "a family of methods involving direct and sustained social contact with agents and of richly writing up the encounter, respecting, recording, and representing at least partly in its own terms the irreducibility of human experience" (Willis & Trondman, 2002, p. 394). Ethnography is suitable for the purpose of this study because it allows one to gain a holistic understanding of the "complex dynamics" (Jones, Torres, & Arminio, 2006, p. 57) of a group of instructional design students exposed to the concept of

civic professionalism. It also allows one to "produce historically, politically, and personally-situated accounts, descriptions, interpretations, and representations" (Tedlock, 2000, p. 455) of the students' 'lives' as civic-minded instructional designers within this semester-long course.

Aligned with LeCompte and Schensul's (1999) characteristics of an ethnographic study, this study was conducted in its natural setting, that is, in the real classroom context. It involved an intimate, face-to-face interaction with the participants and allowed me to present an accurate reflection of the participants' perspectives and behaviors. It uses inductive, interactive, and recursive data collection and analytic strategies, supported by multiple data sources, to build a better understanding of how students enact their civic-minded agencies. The next section describes the context of the study. All names used are pseudonyms to protect the actual identities of people and institutions involved.

Context of the study

This study was conducted in the context of an advanced graduate instructional design course at a large research university in midwestern USA. The course, CIT 703, Advanced Instructional Design and Technology, was offered as one of the graduate level courses required for students of the Curriculum and Educational Technology program. The program was primarily designed to prepare students as practitioners and researchers in the field of curriculum and instructional technology, with a focus of appropriate and effective

applications of technology in teacher education. It was administered by the Department of Curriculum and Instruction and housed under the College of Education.

The CIT 703 course is offered every Spring semester, from January to May, within a 14 week time span. Its purpose is to teach the theories and practices of instructional design with an emphasis on IDT consulting. Consistent with the entrepreneurial and civic-minded goals of the course, this course was designed to mimic a small, multi-team instructional design and technology consulting company offering professional-level services free of charge, one of the five types of technology-related services identified in the context of technology-related service-learning projects (Yusop & Correia, 2009). The teaching approach used in this course emphasizes four core types of activities:

Working in real-world situations. The instructor believes that students will learn better when they are actively engaged in learning tasks that occur within the context of real-world projects. Thus, the projects that the students worked on were projects that allowed them to connect with working professionals in real-world situations. Interestingly, all three students in this course chose to work individually instead of working in a group. The major reason for this choice was that each of them preferred to work with a different type of community organization. Even though this decision later affected the students' workload, they appreciated the experience because they were able to learn from each other's unique consulting experiences.

Working as a team member. In an effort to provide real-world learning experiences requiring instructional designers to work collaboratively with other stakeholders in an

organization, the instructor strongly encouraged her students to work in teams. A substantial and important part of this course was dedicated to helping them learn about tools and skills related to working effectively in teams.

Reflecting on professional growth as a consultant. The instructor required students to keep a consulting notebook as part of the students' individual assignments. The design notebook was an individual, sturdy, bound notebook that functioned as a repository for new ideas, observations, and examples of instructional techniques that students collected. It also aided in a continuous effort to record students' thinking, studying, and learning experiences gained in the course. Students were encouraged to record in their design notebooks on a continuous basis. They also were required to submit their design notebooks for examination five times throughout the semester.

Creating entrepreneurship experiences. Since the course was designed to mimic a small instructional design and technology (IDT) consulting company, students were exposed to a variety of lectures and hands-on activities related to entrepreneurship. A series of invited guest speakers was set up and included presentations by DS, a student-led IDT consulting service-center. Realistic business elements (e.g., learning contracts, project management principles, consulting relationships) were also embedded in the course.

Aspects newly introduced to the course

For this particular study, the course was redesigned with the installation of a CMID framework and a CSL pedagogical approach. The redesigning efforts began several months before the course started. The course instructor, Sabrina, and I had several formal (e.g., in her office and the department's computer laboratory) and informal (e.g., at her house) meetings to discuss aspects of the course redesign. This included the selection of course reading materials, the identification of possible community partners and projects, and a search for guest speakers. Three main new aspects were introduced into the course:

Identifying and selecting community partners

The course instructor and I identified 5 potential community partners for students to select. Most of them were either Sabrina's former partners with whom her students worked in previous semesters or new partners introduced to her by her former students. We created a list of criteria to identify the best potential community partners that suited the course's objective. The criteria were:

Preference towards non-profit organizations. Since the focus of the course was to provide instructional technology services to community members who were otherwise unable to acquire these services, we limited our search to non-profit organizations.

Local community organizations. Consistent with Rosenberger's (2001) suggestion to have students address issues of local interest, we selected community organizations that were based within 45 miles of the university.

Types of community partners served. Another important criterion was the type of community partners served by the organizations. Consistent with the focus of critical ethnographic research to empower underrepresented groups in society, we focused our search on people of low socio-economic status, women and children, and elderly citizens. The process of identifying appropriate community partners for the students left us with five potential community partners. We then created a document we referred to as 'community partners' profiles' that briefly explained each community partners' organization, the services each partner provided, and the potential projects for the students.

Encouraging active reflection

Service-learning scholars agree that supervised reflection is the key to successful service-learning pedagogy (Billig & Waterman, 2003; Bringle & Hatcher, 1996; Furco & Billig, 2002; Holland, 2005; Howard, 2003; Mitchell, 2007). Continuous reflections, during and after community service-learning experiences, are crucial in promoting the "development of knowledge, skills, and cognitive capacities necessary for students to deal effectively with the complex social issues that challenge citizens" (Eyler, 2002, p. 517).

Continuous reflections in this course were collected verbally during weekly class meetings when the students reported their progress to the whole class. As the students themselves noted, these weekly meetings where they could re-access their work strategies and planning were the most important activity in shaping the students' experiences as consultants, share concerns about the projects and/or community partners and exchange feedback with the instructors and peers. For instance, one student raised her concern about not getting any feedback from her community partners for almost 2 weeks, slowing her progress in producing the instructional materials. She was quickly offered a variety of creative strategies from the other class members that could be used to solve the problem. Here, members of the class were given equal opportunities to shape the direction of the discussions and became the support system for the class community.

Empowering students as project managers

In contrast with previous instructional strategy, students in this course were given responsibility as project managers of the service-learning projects. They were required to select two out of the five possible community partners that Sabrina and I identified and selected in the first phase. Selection was truly based on students' personal interests. They were responsible for all aspects of the project including negotiation of each project's scope, creating a project timeline, updating community partners on the projects' progress, carrying out the projects, and delivering the final product. These activities were purposely designed to expose each student to the actual experience of being a project manager (Correia & Yusop,

2008; Correia & Yusop, 2009). Sabrina and I believe that having students contact the community partners themselves enabled them to create better relationships with community partners and to be successfully immersed in the projects. Since contracting and negotiating needs and wants are critical in consulting, students should ideally have a first-hand experience on developing these skills as part of the course. Thus, our roles were merely those of facilitators and internal consultants to the students. For example, we assisted the students in drafting their email invitations to community partners, in providing suggestions to move forward in the consulting process and, on some rare occasions, in bridging the communication channel between the student and community partner.

Research participants

There were two categories of research participants in this study. The first is the group of three full-time graduate students – Marina, Julie and Rachel - enrolled in the Spring 2009 course; the other is a group of four representatives of each community organization the students worked with. All three students are female international students, ranging in age from 22 to 38. Two of them, Marina and Julie, work as teaching assistants in different departments, while the other, Rachel, works as the CI department's website designer and webmaster as part of her research assistantship. Three of the four representatives of each of the three community organizations were women, one was a man, and their age range was from 25 to 55 years. Two of them, Karen and Joanne, work in non-profit organizations, while

the other two, Michael and Katy, work with a state public media network that broadcasts educational programs, among others, to the state's audiences.

The service-learning projects

All three students worked collaboratively with their community partners in three different IDT-based service-learning projects. The service-learning projects are described below.

Project 1: Maternal health insurance project

Marina, the Project manager, worked with Karen, a staff member of a non-profit organization serving low-income families in central Iowa. This organization helps families with their basic necessities, such as food and limited health services. These services were made available through various federal and state grants. For this project, they decided to raise awareness of the importance of having maternity health insurance during and after pregnancy in order to avoid higher medical bills later. This need arose from Karen's concerns over the rising number of uninsured pregnant women in the area. She identified two groups of women who fell into this category: college students and international women who were either unaware of the importance of having maternity insurance benefits included in their current health insurance, or who had no idea of the costs of giving birth in the USA and how maternity insurance benefits could help them bear the costs. The outcome was production of bilingual (i.e., English and Spanish) posters designed for the target audience.

Project 2: Evaluation of a training program

The purpose of this project is to improve implementation of a training program conducted by the community partners. Rachel was the project manager, working with Michael and Katy. Rachel's community partners were professional instructional designers working at a statewide public media television network. Her partners conducted a program designed to teach a group of teachers use of a web-based learning management system as a supplementary learning resource for struggling high-school students within the state. The online teacher training program was a joint effort between the organization and the state's department of education, the school district, and other interested higher-education entities. Funding from the state's department of education enabled high school students to enroll in the courses without costs. At the time Rachel entered the project, her community partners were in the process of preparing for the training program, and their initial expectation was for Rachel to assist them in the preparation processes. However, during project negotiations, Rachel decided to work on evaluating the training program that she felt was more appropriate with the course's educational objectives. These different expectations between Michael, Katy, and Rachel later adversely affected their consulting relationship and became Rachel's major challenge in her role as a civic-minded instructional designer.

Project 3: Sandbagging volunteer training

The purpose of this project was to design, develop, and conduct on-site sandbagging training, to be applied in the event of a natural disaster, for community volunteers. The training was seen as very critical to the Brooke County community, especially since this county was one of the largest affected by state-wide flooding in the previous year. Julie, a student in this course, collaborated with Veronica, a former student, for this project. The project was part of a real consulting project undertaken by a student-led IDT consulting organization of which both Julie and Veronica were members. Their community partner, Joanne, works with a community organization that recruits, screens, and places over-55 volunteers into a variety of non-profit organizations, schools, healthcare facilities, and public agencies around the county. She is currently the secretary for the county's coalition for disaster recovery program (referred to as "coalition" later in this paper), a joint effort among her organization, non-profit organizations, clubs, faith-based groups, and businesses. Members of the coalition are responsible for pre-planning and appropriate training in the event of natural disasters and recovery efforts.

Table 3.1 presents a summary of the service-learning projects, community partners, and participants involved.

Table 3.1 Summary of the service-learning projects, community partners, and participants involved

Project/Project outcomes	Community partner(s)	Participants involved	Role in the project
Create a poster advising low-income, uninsured pregnant women to seek maternal health insurance	A community action organization	Marina	Student-consultant
		Karen	Representative of the community partner
Evaluation of an online training conducted for online teachers serving struggling high-school learners using distance education technologies	A public media network organization	Rachel	Student-consultant
		Michael and Katy	Representatives of the community partner
Design, develop and conduct practical on-site proper sandbagging techniques for volunteers in the event of flooding	A volunteer management organization	Julie	Student-consultant
		Veronica	Student-collaborator
		Joanne	Representatives of the community partner

Roles and responsibilities of the ethnographer

I held dual roles in this course, that of an ethnographer and that of an instructional technology consultant to the students. As an ethnographer, I immersed myself in the participants' lives as students in this newly re-designed ID course. I attended the 3-hour weekly class meetings for 14 weeks, participated in class visits or field trips to the community organization workplace, and actively engaged both verbally and in writing (e.g.,

email communications) in class discussions and decision-making processes while simultaneously gathering data for the research. As an instructional technology consultant, I shared my personal opinions and working experiences with the students and often provided feedback to each student's project, especially during the weekly class meetings and also via personal emails and chats with students.

My active participation in the students' lives in the course setting might have altered the research setting; nevertheless it was important in building trustful relationships and friendships with the class members as well as with their community partners. In the eyes of the students, I was considered a friend rather than a researcher and consultant; indeed I was often introduced to community partners as a "friend" of the class by both the instructor and the students. My dual roles were somewhat "blurred"; sometimes I was considered an 'insider' perceived to be a member of the class, while sometimes I became an 'outsider,' especially when I was entrusted with guarding the private stories that they did not feel comfortable sharing with other students. Being both an 'insider' and 'outsider' was truly an advantage to me as a researcher, since I was often able to understand the intrapersonal dilemmas experienced and the reasons behind a participant's decision that might not be evident during normal classroom interactions.

Data collection strategies

Consistent with the ethnographic nature of a prolonged engagement in the field (Creswell, 2009), my data collection activity extended over a nine-month period, beginning in January of 2009 and continuing until early September of 2009. The most active data collection activity occurred in the first 5 months, from January through the end of May of 2009, while the course was in session. The main focus was on the students' interactions with the instructor, their classmates, and community partners. During these five months, I conducted extensive observations of participants and interviews with students and analyzed students' reflections and consulting notebooks. The second period of data collection, from June through September 2009, was focused on community members' perceptions of their involvement in the service-learning projects, their thoughts about the students, and the significance of the projects to their organizational missions.

I utilized multiple data collection strategies for the study. The primary approach was a participant-observation strategy over the 14-week class interval in which I actively participated in all types of student activities in the classroom (e.g., contracting, project management strategies, and commitment to service). Other data collection strategies were used outside the classroom settings and included student-community partners meetings (mostly initial and final meetings) and class visits to the community partners' sites.

I conducted one group interview with all three students at the middle of the semester and an exit interview with each of them at the end of the semester. The purpose of the group interview was to understand their overall impressions and perspectives of the critical service-

learning experiences they were going through at that time (i.e., before completion of the consulting projects). It was meant to capture students' immediate thinking while actively working on the projects. Additionally, I had one exit interview with each community partner and student-collaborator upon completion of the projects. The exit interview was an interview conducted individually with each student after the completion of the projects. Its purpose was to develop an in-depth understanding of their post-project experiences and to detect if there were any differences in the students' perspectives compared to those from their previous group interview.

All interviews were semi-structured to provide sufficient freedom to explore the participants' experiences. In relation to this, 4 sets of interview questions based on the individual groups were used. For example, the student interview questions differed from those of the community partners, as did the interview questions for the student collaborator and the instructor. However, the interview questions were aimed at eliciting participants' perspectives of their experiences in the consulting projects as either student-consultants, community partners, student-collaborators, or course instructor, and were organized into 4 sections: (1) demographic background, (2) perceptions of the critical service-learning component of the course, (3) impact of critical service-learning components on personal understanding and/or development, and (4) perceptions of the overall course design and delivery. All interviews were audio-taped and later transcribed for analysis (See Appendix 1 for a representative sample of interview questions).

In addition, I established a routine memo-writing activity during which I wrote reflective notes of observed phenomena, analyzed interactions between and among research participants, and documented descriptions of any emergent codes and themes from the observations. Finally I conducted a document analysis of (1) the class-related materials such as the course syllabus, instructional materials, and assigned readings; (2) student works including the student design notebook, written reflections of their experiences in the projects, and email communications with their community partners as well as among class members, and (3) community partners-related materials such as the brochure of community partners' organizations and project-specific websites.

Data analysis

I utilized a methodology resembling the grounded theory approach (Charmaz, 2006; Strauss & Corbin, 1990) to the data analysis procedures used . While Strauss and Corbin's (1990) and Charmaz's (2006) data analysis began with the coding processes, I viewed my data-analysis strategies as being conducted in two phases. These phases, however, were not consecutively undertaken; rather they were conducted iteratively and interdependent of each other. I utilized these analysis phases to make my data analysis procedures more explicitly understandable to readers. These two phases are:

Preparation for the analysis phase

Miles and Huberman (1994) recommend that raw data components such as scribbled field notes, dictated tapes, and direct tape recordings collected from the field needs to be transformed into "write-ups" defined as "an intelligible product for anyone, not just for the field-worker, [that] can be read, edited for accuracy, commented on, coded, and analyzed using any of the methods we are about to describe" (p. 51). In this study, I produced write-ups for each weekly observation I conducted and wrote reflexive notes in my journal.

I also transcribed all interviews verbatim to ensure that I would not miss any important cues, including intonations when replying to interview questions, from the participants. I also summarized and interpreted participants' answers to each question, allowing me to gain a holistic view as well as an in-depth understanding of their stories or perspectives.

Coding phase

In this study, data coding and analyses were conducted in two iterative processes: (a) initial/open coding, and (b) selective coding and axial coding (Charmaz, 2006); (Strauss & Corbin, 1990).

Initial/open coding

In the initial/open coding phase, I used interview transcripts of each participant to identify salient themes in the participants' responses. I used gerunds (i.e., nouns ended with –ing, such as reflecting, listening, etc) to describe the participants' sayings (i.e., the initial codes). Later, I compared the initial codes from one participant to those of others to identify any codes that could be grouped together. The use of gerunds was strongly recommended by Charmaz (2006) since it requires the researcher to reiterate a participant's sayings and thus enable the researcher to remain faithful to the data. Secondly, it gave a strong sense of actions and sequence of actions done by the participants. For instance, instead of using "reflection" (noun), I used "reflecting on past experiences" (gerunds or active words) as my initial codes which were therefore more meaningful for later analysis. Some samples of the initial codes generated were "waiting for community partners' responses", "feeling disconnected from community partners", "building trustful relationship" and so on. Some of these initial codes were "in vivo" codes, codes that were generated from the actual language of the speaker (Harry, Sturges, & Klingner, 2005, p.5). Some examples of in-vivo codes in this study were "helping to fish", "free intern", "stand-by mode", among others.

Selective and Axial coding

Following Charmaz's (2006) approach to axial coding, I selected reoccurring initial codes to further sort and analyze the data, and I developed subcategories that included its descriptions or properties. for each category Later, as I moved through the data, I made links between the codes and the categories, and documented my thoughts about such connections

in my reflexive memos. Using a constant comparative approach, I compared the categories and their properties to other categories I found from other participants' analyses. This process is iterative until each category was saturated, which means that each additional data element confirms each of the categories created and no further categories need to be created (Hew, Kale, & Kim, 2007).

Appendix 2 presents the actual document template used to assist the data analysis processes involved in this study. The right column of the template indicates how participants' responses were first summarized and interpreted to extract meanings. Initial codes and emergent themes were then generated. These initial codes were later transferred to another document template that combined the initial codes generated from other participants' data. Then, I cross-compared the codes with all participants (the students, in this case), identified appropriate themes and/or categories and described its meaning and specific vignette, if any, that pointed me to a particular theme and/or category. Finally I identified the relationship between each theme and/or category.

Findings and discussion

Enacting civic-minded agencies

Data analysis revealed that students enacted their civic-minded agency in five ways: (a) targeting to address community member's needs, (b) giving voice to their community partners and community members, (c) addressing the sustainability of the projects, (d) being

sensitive to community partners' perspectives yet diplomatically voice professional critical opinions, and (e) acknowledging their community partners as "design partners".

Targeting and delivering services to address community member's needs

I found that students were just as concerned with the needs of their community members as they were for the community partners they worked with. Community members are the people who would benefit from the services the students provided to the community partners. In this case, the students see their community partners as a medium through which they pass as they extend their services to the targeted community members. This produces a category labeled "layers of services" (Figure 3.2).
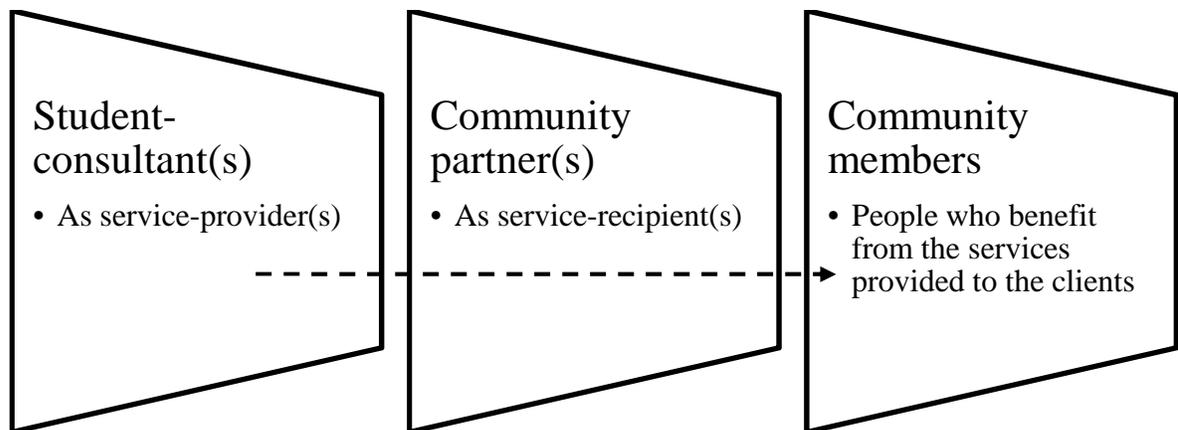
Figure 3.2 The concept of "layers of services"

Figure 3.2 represents the concept of 'layers of services'. It is a representation of how students view themselves, their community partners, and their targeted community members. All three students in this study, in their capacities as consultants, provided services to their

community partners (i.e., community organizations). They viewed their community partners as mediators between them and the community members, and as having the human expertise, facilities, labor, and financial resources to provide help to the community members. The students' real target or concern was the community members, people whom their community partners served (or provided services to). When asked about her perception of her role in the evaluation project, Rachel asserted that she considered herself as a "liaison" whose role was to "hook up the groups that need help with the groups that have the ability to help".

The ability to identify who the real community members are in this consulting was crucial for students and impacted the way they completed the consulting task. Rachel's case is a perfect example of this situation. For Rachel, her community members were not the online teachers who took the training provided by her local television community partner. Rather, she identified her community members as the struggling learners who took the online courses taught by these teachers. She was concerned that her community partners, Michael and Katy, were ignoring the online students' perspectives in the design of the online courses. Thus she was encouraged to represent in her evaluation report the struggling learners' perspectives by focusing and presenting aspects that could improve the online students' learning experiences.

Giving voices to community partners and community members

I also found that students in this course strove to give voices to their community partners and to their community members in their instructional design and consulting works, either directly or indirectly. Marina, who worked on designing posters targeted to inform

uninsured pregnant women, *directly* gave voice to her community partners by inviting them to share their thoughts as to just how the posters should look. In one of the meetings with her community partner Karen, Marina brought a set of markers and a blank piece of paper so they could brainstorm on ideas with respect to what the poster should include. In addition, Marina recruited a group of women – all college students – whose backgrounds represented her targeted community member population as participants in her usability testing phase. These women were shown different versions of English and Spanish drafts of posters and were asked to share their opinions about the posters in terms of factors such as the clarity of the message, the suitability of the images used, and color preferences.

The participants' responses to the drafts of posters surprised Marina as she learned about the women's varying interpretations. In her written reflections, she wrote:

I was really concerned when I realized that the participants could not understand the posters' message or say what MICA does. It was also enlightening to see how an image or a selection of colors changed the participants' interpretation of the message. (Marina's written reflection)

One of the enlightening erroneous interpretations she received from the women was that her community partner was advertising abortion services. Because she was determined to convey a clear message, she had to modify some texts and images in her poster until she was convinced that there were no more misinterpretations of her posters. In completing this task, she had to set aside her personal preferences and establish her community partners' and the targeted audiences' perspectives as her top priority. In our exit interview, she explained:

I believe that the outcome [i.e., the final version of the poster] is, hopefully, clear and that was my goal. If the goal is clear, then I'm happy. Doesn't matter how it looks to me 'cause of course I also have my preferences... And I think it's fair now and I think they [i.e., the participants] should be heard. (Exit interview with Marina, May 2009)

Rachel took a different direction. Because she was unable to reach out to the struggling high school students enrolled in the online learning program she evaluated, Rachel viewed herself as the voice of the struggling students, and felt that it was her responsibility as a designer to communicate her community members' voices to her community partners. When asked why she critiqued the training when the trainees themselves indicated the training was good, she commented:

The participants including Michael, Katy and all the teachers, they are very positive for this training because they think they did a really good job. ... They have very positive feedback about their training but I don't [have positive feedback]. Obviously I don't because... [I think] if everything is [considered] fine, then nobody knows how to improve [the training]. (Exit interview with Rachel, May 2009)

Excerpts from this interview indicated that Rachel was concerned that her community partners and the trainees thought the training was perfect. For her, such thinking was unacceptable, especially when that there was room for improvement. She took the initiative of communicating her critiques of the training to Michael and Katy in her evaluation report. To her, better training will result in better education for the struggling high school students that she indirectly represented in the project.

Addressing the sustainability of the partnership: Leaving something behind

One significant theme arising from this study was the issue of sustainability of the partnership between the students and their community partners. I found that students were very concerned with community partners' abilities to re-use the materials they generated for them during the partnership. Therefore, all three students in this study decided to provide both hard and soft copies of the materials they designed and created for their community partners, with the hope that the community partners would be able to continue using the materials for future purposes, something I called 'leaving something behind'.

Marina, for instance, worked on getting donations from the university's Center for Teaching and Learning Technology (CTLT) in the form of 20 copies, ten in English and ten in Spanish, of color-printed posters for her community partners. She was concerned that her community partners would not be able to produce that many poster themselves s due to their financial limitations. Knowing that the center provides low-cost printing services to the university's students, she took the initiative to ask for donations from the center's director. Earlier, she had asked her community partners about their visions of the usability of the posters, including information on places they would like to see the posters be hung, number of posters they would like to have, and whether or not they had adequate funding to realize their vision. The donation Marina worked on was not part of her consulting deal with her community partners and was not explicitly written in their Memo of Understanding (MOU). In addition to color-printed posters, Marina also provided a soft copy of the posters created in

Microsoft PowerPoint. Interestingly, her decision to use PowerPoint over other fancy design software was due to her concern that her community partners might not have such software and appropriate technical skills to use it and, thus, might have insufficient capability to modify and re-produce the posters in the future.

Like Marina, Rachel and Julie also expressed consideration for community partners. Like Marina, Rachel left her community partners with a set of evaluation questionnaires she created during the evaluation project, with the hope that the community partners would be able to use them as a tool with which to assess and improve their future training. Likewise, Julie and her partner, Veronica, left their community partners with a complete soft copy of the sandbagging instructional materials they created, including a PowerPoint presentation file, a set of flash cards used to assess volunteers' understanding of the presentation, and an executive summary of the sandbagging training they conducted. These products were for the community partners' reference when conducting training in the future. It was hoped that their products and design would continue benefiting their community partners and the targeted community members even when the partnership ended.

Being sensitive to community partners' perspectives yet diplomatically voice professional opinions

Having been exposed to the concepts of mutual respect as reflected in class readings and discussions, student-designers in this study have shown the highest level of sensitivity to meet their community partners' needs, while at the same time striving to find the best way to communicate their views as professional instructional designers to community partners.

Doing so required both parties to put aside their personal biases and ideas, and to instead agree to work together on pre-defined and unified goals that benefit their community members. In addition they had to build trusting relationships and acknowledge each others' abilities and expertise as well as any limitations that each of them brought into a relationship.

One example perfectly portraying this situation was an incident I referred to as the 'flash card incident'. The flash card incident occurred in the sandbagging training project managed by Julie and Veronica. Their concept was to distribute 4 flash labeled "A", "B", "C" and "D" to trainees; each card was labeled and represented a choice of answers. At certain times during the lecture, the presenter would ask trainees some questions to assess their understanding of the material presented so far. Trainees would answer the questions by holding up their chosen answer –A, B, C or D. Initially, the community partners were skeptical and a bit hesitant to accept their ideas. Joanne, the community partner stated:

> *"We had some reservations [in the beginning], some of us, about some of the techniques they were using like the flash cards to answer questions [asked by the presenter]. We thought, you know, people are gonna think that it's kind of silly ... and ... kind of cheesy". (Exit interview with Joanne, June 2009)*

According to Joanne, some members of the coalition also thought that the flash cards would "not gonna work" and thought of both Julie and Veronica as going "way over the top". However, the members agreed to let Julie and Veronica implement the idea and see whether or not it would work. To their surprise, the flash cards turned out to be one of the main motivational factors used by the volunteer-participants to become engaged in learning the

proper technique of sandbagging during the actual training implementation. Laughing, Joanne recalled:

> *"[But] no, no. Not at all [i.e., it was not a silly idea]. That worked very well, it was a very good technique... The sense that we got from the participants was that, you know, they really got into that. They really wanted to get the right answer first and you know, get that card up there. So I think that adds a little competition to the training which I think was good." (Exit interview with Joanne, June 2009)*

Reflecting on the success of the flash card activity, Joanne indicated that it was Julie's and Veronica's diplomatic way of communicating their ideas as consultants that really made the coalition members feel valued and later be open to their suggestions. Joanne stated:

> *"Those two girls [Julie and Veronica]... were very open to hearing what the rest of the team was expressing... but at the same time they were ... tactfully, diplomatically, able to say "I don't think that's a good idea, what do you think about this?... I think there is mutual respect on both sides. We respected them for the expertise that they brought to the table and they were respectful of us for what we needed what the goal was, [which was] to come out with some citizens that were truly trained that could end up being team leaders in the event of a major disaster.* (Exit interview with Joanne, June 2009)

As Joanne indicated, the students' abilities to balance professional ideas while being open to community members' ideas are one of the skills needed by civic-minded

instructional designers. It reflects a need to respect each others' expertise while finding ways to balance them with other factors so that the ultimate needs of the community members they serve can be met.

Acknowledging community partners as "design partners"

Students in this course also viewed their community partners as co-designers whose input was valued and acknowledged. I found that student-designers in this study always tried to include their community partners' perspectives in every aspect of design and development, as well as in decision-making processes whenever possible. They valued their community partners' perspectives, and, more importantly, they saw their community partners as experts in the subject matter as much as the community partners viewed them as instructional design experts. They used a variety of strategies, including phone calls, email updates, and face-to-face communications, to reach out to their community partners in the instructional design process.

Julie's and Veronica's case was a good example of how far the students had to go to engage their community partners in their projects. One of their tasks in producing the sandbagging instructional materials was to update an earlier-developed PowerPoint presentation so that it could be used during the actual sandbagging training. The content of the existing presentation was too old, the information was not up-to-date, and above all, it was literally too plain which, according to Joanne, was too "eeky". While Julie and Veronica

could easily enhance the PowerPoint presentation with a variety of videos, sounds and images, they thought that the new PowerPoint they created was missing one important thing: the perspective of Robert, the coalition's content expert. Thus, they tried to contact him, hoping that he would be interested in working with them to improve the presentation. However, reaching him was not easy.

Both Julie and Veronica tried to contact him a few times via e-mail, but he did not respond to their request to meet in person. Later, they asked Joanne, their main contact person, to contact him. When that did not work, they began to phone him and left a few messages to get in touch with them, but that also met with no success. Just when they had almost given up, Robert returned their call. Their first meeting was not smooth; Robert seemed to be suspicious of their intent to improve the material. However, when they showed him the enhanced PowerPoint draft, he began to cooperate with them. Later, as Robert became more involved in the project, he began to convince other members of the coalition that the training would be good.

Acknowledging their community partners as important stakeholders in the design and development processes is similar to what Allison Druin (2005) referred to as acknowledging clients and users as design partners, considering them as equal stakeholders in the product design and development of new technologies. This perspective is consistent with the CMID framework that encourages civic-minded instructional designers to be mutually respected and engaged with the people they serve.

Challenges students experienced in enacting their civic-minded agency

While the characteristics of a civic-minded instructional designer as presented in Figure 3.1 are the ideal characteristics, it is also possible that the students in this course do not explicitly display all of these characteristics in their experiences. One major reason for this is the challenges they experienced in the study. This section will explore the main challenges students encountered: (a) making adjustments and reconfigurations, and (b) building trustful relationships with their community partners.

Making adjustments and reconfigurations

Applying the concepts of civic-minded instructional designers required both student and community partners to make some adjustments and reconfigurations of their existing expectations, roles, and actions. This consumed a lot of time and required full commitment from both sides. More important, both sides had to be mentally ready to take up these challenges. I found that students always tried to get their community partners' perspectives with respect to almost every single aspect of the process, including inviting community partners to make changes in the meeting minutes and, especially, to get the partners' perspectives on the design prototypes they produced. Most community partners were very helpful in sharing relevant resources with the students during the information-gathering phase. However, as the project progressed into design and development phases, these commitments seemed to fade away as more time and energy were required from the community partners.

The community partner's commitments to the projects were very crucial to the students. Since students had easy access to technological equipment, including both computers and 24-hour free internet access, they utilized email with community partners as their communication tool. They were always anxiously waiting for their community partner's email responses to decide whether or not they would move forward with the design or make necessary changes. Gradually, community partners' email responses became the main indicator of whether or not community partners were still engaged with them as their design partners. Most of the time, during class updates, students would share either their frustrations in not getting responses or express excitement when they got responses from their community partners.

On the other hand, community partners had a different perspective with respect to this email communication. Being surrounded with busy work schedules that sometimes required some travel time, there was a tendency to delay replying to students' emails. In addition, since community partners view students as experts in instructional design and therefore trust the students' decisions on the projects, they often simply did not reply to students' emails. In this situation, not replying to students' emails was intended to mean that they agreed with students' suggestions, but students often translated this lack of response as disagreement.

Building trustful relationships

Building a trustful relationship with community partners is crucial and a priority in consulting. Without a trustful relationship, student-designers would not be able to get information from the community partner, especially insider information such as the community partners' perceptions of the organization's current working environment. This type of information is important to help student-designers perform needed detailed analyses that inform their proposed solutions.

Julie's case was the perfect example that speaks to this issue. Compared to Marina, Julie's community partners paid little attention to her efforts to improve the materials, perhaps due to their limited understanding of what instructional design is and the importance of using ID principles (e.g., needs analysis, learner analysis etc.) in the design, development and implementation of the training. Julie thought that they had only a limited voice during the planning meetings:

> *"I think [that] at first, our voice was kind of little [limited], in the [planning] meeting [with community partners]… they don't [did not] really pay a lot of attention [to our Instructional Design efforts]. (Exit interview with Julie, May 2009)*

However, after seeing the encouraging feedback received by both Julie and Veronica from the participants during their pilot sandbagging training, the community partners began to appreciate their efforts and were eager to share their suggestions to improve the materials. This was rarely the case before the pilot training. Julie recalled:

"Before that [i.e., the pilot sandbagging training], the leaders of the sandbagging training and our community partners [were] not really sure what Veronica and I did. So, later on, after the [pilot] testing training, they realized, one of the leaders realized, "Oh, this one is pretty good, but I can give you some suggestions like enlarge the video", and after that, they said it's good. So, it's kind of big differences." (Exit interview with Julie, May 2009)

Clearly, building trust was a time-consuming process. Julie and Veronica only gained full trust from their community partners at the midpoint of the project. This trust allowed them to gain more support from their community partners. On the other hand, their community partners, too, felt more comfortable in sharing their feedback with Julie and Veronica.

As for Rachel, building a trustful relationship was challenging from the beginning of the project. In her written reflection, Rachel explained that both of parties – her community partners and her – had different expectations of what project Rachel should be involved with. She wrote how her community partners preferred for her to help them set up the course management system they would be using. However, Rachel thought this task was misaligned with the course objectives and thus proposed to work on the evaluation project that would allow her to practice her consulting skills. She wrote:

The client just wanted someone to help set up the [course management system] before the end of May. Training was just one thing they needed to do but not the priority... I do not mind to volunteer but that is not what we wanted to get from this class. I am here to learn how to be a professional consultant but not a free intern as the client

expected… Although [they] did not release too much source to me, I did my best to be

professional even it was a baby project. (Rachel's written reflection)

Even though both Rachel and her community partners managed to find a workable project for

Rachel, she still felt the clients' resistance to share some information with her affected her

evaluation of the training. Likewise, the community members, too, "…could not get the most

valuable information they could utilize" (Rachel's written reflection).

Conclusions and Instructional implications

The purpose of this study was to understand how student-designers of an instructional

design course designed within the Civic-Minded Instructional Designers (CMID) framework

enacted their civic-minded agency while working with their community partners and the

challenges they encountered throughout their learning experiences. Findings indicated that

the students enacted their civic-minded agency by targeting and addressing community

members' needs, giving voice to their community partners and community members,

addressing the sustainability of the projects, being sensitive to community partners'

perspectives while yet diplomatically voicing professional opinions, and acknowledging their

community partners as "design partners". All of these characteristics are consistent with the

view of instructional design practice as a helpful act to improve learning as suggested by

Inouye, Merril, and Swan (2005). Inouye and his associates argue that helping is and should

be the central concern in the IDT field. In fact, they argue that helping learners to learn better

has always been the "the very reason for the existence of our field – the reason why we apply science, design artifacts, and use technology" (p. 4).

Students' commitment to ensure the sustainability of their instructional design projects reflected that they *cared* about their partners and the community members they were trying to reach. Such thinking supports previous research findings on the application of the service-learning approach in an instructional design course ((Correia & Yusop, 2009)). They found that exposure to instructional design projects geared to solve practical, real-world, community-related problems increase a students' inclination for social involvement and civic responsibility.

Findings also suggest that exposure to the concept of civic-minded instructional designers via course readings, lectures, class visits to project sites, and continuous reflections on the experiences designed within the core principles of the CMID framework seem to assist students' understanding of their potential roles as agents of social change (Campbell et.al., 2008, 2009). In addition, the opportunity to be engaged in real-world settings allows students to connect course content with larger social implications of their work and to develop professional identities as instructional designers.

I found three major aspects of course design that contribute to the success in preparing students as civic-minded instructional designers:

Continuous reflections on experiences. The students and the instructor indicated that the ability to continuously reflect on their projects and experiences as IDT consultants is very significant to helping them appreciate the meaning of their roles as civic-minded agents. In this course, it is apparent that active reflections occur during the section of the weekly class meeting called 'update on progress report'. At least one hour in every class meeting, usually at the beginning, is allocated for weekly progress reports.. Interestingly, I found that students utilize this session as a venue in which to share their stories – enlightening moments, concerns, challenges, even frustrations – related to the project. What was initially planned to be a brief technical update report now became intimate moments shared with the class members. The development of mutual trust allowed them to freely express their thoughts and feelings about their projects and their community partners. When asked during interviews, all students agreed that these sessions were the heart of the course, the only place where they felt safe to share their stories as instructional design consultants. In fact, they all seemed to be looking forward to this section every time they met. This finding is consistent with other research suggesting that reflective activities serve as a critical part of an effective service-learning experience that contributes to meaningful learning experiences (Claus & Ogden, 2001; Eyler, 2002).

Students as decision-makers. Another important aspect of the course design is the concept of students as decision-makers. In this course, students played important roles as

project managers of their individual projects, while the instructor and I acted more as facilitators and external consultants. As project managers, students assumed total responsibility for the success or failure of the projects. The major part of these responsibilities were maintaining constant communication with community partners with respect to such items as progress updates, meeting minutes, scope negotiation, product delivery, and developing reasonable project timelines. By assuming these responsibilities as project managers, students are empowered to make final decisions affecting their projects with minimal interventions from either the instructor or myself. This aspect of this course significantly differs with the model of instruction in which the instructor assumes the role of project manager (e.g., Wilson & Schwier, 2009).

Educating community partners about the concept of civic-minded instructional designers and critical service-learning approach of the course. One of the challenges the students encountered was building a trustful relationship with their community partners, a particularly evident problem in Julie's and Rachel's cases. However, the interviews I conducted with both of their community partners suggested to me a different point of view: the need to educate community partners about the concept of civic-minded instructional designers i the instructor and I were attempted to instill in the students. In Rachel's case, I found that her community partners Michael and Katy were much more concerned with understanding what the course was all about and what their roles should be.

In addition, I also found that some community partners have had experiences as supervisors of college student interns and are therefore familiar with the concept of internship. These experiences are no doubt helpful in ensuring that students have meaningful learning experiences. However, their pre-conceptions tended to made them think of this course as an internship project and it is not; it is an academic service-learning experience. Given their experiences, they acted more as the students' supervisors rather than as community partners, and this actually conflicts with the intended outcomes of this study. Nevertheless, their thoughts and actions suggest a critical need for the instructor and myself to ensure that the community partners are clearly aware of the nature and goals of the course.

Future research

Findings of this study are very encouraging. The research participants were found to be committed to their roles as civic-minded instructional designers in the context of instructional design consulting, one of the five types of technology-related service-learning environments identified by researchers (Yusop & Correia, 2009). Thus, future research should consider the application of CMID framework in other types of environments such as one focusing on the production of technology products, social relation services, or tutoring and mentoring services (Yusop & Correia, 2009). Finally, it is important that future research take into consideration students' and community members' social and cultural backgrounds and commitment to service-learning to ensure that such experiences mutually benefit both parties.

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APPENDIX 1: SAMPLE OF INTERVIEW QUESTIONS FOR PARTICIPANTS

Sections	Sample of interview questions
Demographic background	**For student-consultants, contributor and course instructor** • Can you describe your academic and professional background? (Follow-up questions would probe for past and current career details, if any, prior to enrollment in the academic program. For the course instructor, additional questions were asked about the goals and design of the course.) **For community partners** • Can you describe your organization and your role in it? (Follow-up questions would probe for the organization's vision and the purpose of the service-learning projects.)
Perceptions of critical service-learning component of the course	**For student-consultants** • How would you describe your learning experiences in this course? (Follow-up questions would probe for motivation for enrolling in the course and perspectives of how the course contributes towards meeting prior expectations or learning objectives.) • How would you describe your service experiences in this course? (Follow-up questions would probe for the most rewarding part of the experiences, the challenges encountered, and relationships with community partners.) **For community partners and student-collaborator** • Can you describe your overall perspective with respect to the service-learning projects? (Follow-up questions would probe for the most rewarding part of the experiences, the challenges encountered, and relationship with students and/or community partners.)
Impact of critical service-learning components on personal	**For student-consultants, community partners and contributor** • How did participation in this course contribute towards your understanding of the role of an instructional designer in

understanding and/or development	society? • How did the service-learning projects contribute towards your professional development as an instructional designer? **For community partners** • (In addition to the questions above, follow-up questions would probe for the impact of the service-learning projects on the organization and on community members served by the organizations.)
Perceptions of the overall course design and delivery	**For student-consultants** • What did you appreciate most about the course? • What need to be improved? How? **For community partners and contributor** • From your perspective, what are some of the aspects/areas of the service-learning projects that you would like to see improved? Please explain.

APPENDIX 2: SAMPLE OF INITIAL DATA ANALYSIS

Actual transcript	Summary/Interpretation/Emergent themes/Initial codes
Researcher: Why did you say it was important for them to have negative feedback too? Rachel: [Because] if everything is fine, then nobody knows how to improve. Unless you try out some other ways and see if that some other ways will be better. If everybody said, "Oh, this [training] is good" [then] there was no comparison in it. But if somebody said, "Oh, compared with last one [i.e., training], that one has something good; this one has something good" and maybe we can just plug in the something good parts together, then [the training would be improved]. I don't see that [comparison being made in this context].	Summary and interpretation Rachel described her perspectives with respect to the teacher training she evaluated as part of the service-learning consulting project. She stressed the importance of providing negative feedback to the trainers so they could improve their future training design and delivery. However, the trainees' evaluations turned out to be positive; no one mentioned anything negative about the training. In Rachel's perspective, this happened because the trainees were unable to make a comparison of the different training experiences since they were exposed only to one training experience. Emergent theme 1: Advocacy/Change agent Rachel thought that it was her responsibility as instructional designer to inform her clients of any improvements that needed to be made, since the end-users (i.e., the trainees) were unable to make fair judgments due to their limited exposure to other types of trainings. The theme "advocacy" or "change agent" seems to appropriately represent her thinking. Initial code: Being the voice of the end-users Rachel mentioned her role being the voice of the 'end-users' i.e., the teachers who participated in the training. She was concerned that the end-users were unable to provide fair judgments, so she decided to become the voice of her participants.

Rachel: [A]nother reason was [that] I gave out the questionnaire after 2 weeks, making it [difficult for the trainees] … to refresh their memories.	Summary and interpretation Here, Rachel indicated the time factor as another reason for the all-positive feedback of the training evaluation.
Rachel: So the next time, since I've created all the questionnaire, they can just use it right after the training and that would be helpful for them to improve next time, and [if they] keep doing that [evaluating their training] they can [conduct] very professional training.	Summary and interpretation Rachel hoped that the evaluation questionnaire she created could be used to assist her clients in improving their future training. Rachel's concern was similar to Marina's. In Marina's case, she provided 20 printed posters for her clients, a PowerPoint (a commonly used software compatible with any computer's operating systems), softcopy of the posters i.e., so that her client would be able to use (e.g., re-create, re-modify etc.) the material in the future. I think this was one of her characteristics as change agent. Theme: Project sustainability Rachel was concerned with the sustainability of the project after the completion of the course. Thus, she left the evaluation questionnaire with her clients in the hope that they could use it to improve their future training. Initial code: Leaving Something Behind Rachel wanted to leave something useful to her client. She hoped that the client would be able to use the questionnaire she created for other training evaluation purposes.

CHAPTER 4: EMBEDDING SERVICE-LEARNING INTO INSTRUCTIONAL DESIGN AND TECHNOLOGY CURRICULA: BENEFITS AND CHALLENGES

(This chapter is being prepared for publication in *Innovations in Education and Teaching International*)

Abstract

The article presents an exploratory case study of an advanced instructional design and technology course embedded with principles of service-learning pedagogy at a US Midwestern university. The purpose is to identify the benefits and challenges of integrating service-learning into instructional designers' education from students' perspectives. Using naturalistic inquiry methodology, data were collected via observations, interviews with both the students and the instructor, as well as through analysis of students' online discussions, written reflections, and project works. Findings revealed that the service-learning approach benefits students in terms of improvement in academic learning, improvement in learning about additional content and technologies, improvement in learning about project management, increased attentiveness to the needs of the target audiences, increased motivation to learn and serve, escalation of civic values and development of a sense of concern over broader social issues. Two main challenges were found: (1) a combination of relationship, task, and process conflicts that triggered severe group problems, and (2) gaining

access to resources. In spite of this, the conflicts provide a venue for students to understand their strengths and weaknesses as instructional designers and as individuals.

Introduction

Over the past several years, there has seemed to be a growing interest in utilizing authentic teaching approaches in higher education, and the instructional design and technology (IDT) field is no exception. The volume of IDT literature discussing the importance and benefits of incorporating authentic approaches to the education of instructional designers has increased over this interval. Examples of such new developments are the studio-based (Boling & Smith, 2009) and architectural design models (Gibbons, 2008). In these approaches, learning environments are designed to somewhat represent real situations students are about to enter as professional instructional designers.

Despite this interest, there has been little mention of a service-learning approach to IDT education, even though service-learning has increasingly been used in university settings (Waterman, 1997). Service-learning is principally a type of authentic-experiential learning approach that values students' immersion into real-world situations. What distinguishes it from other approaches is its focus on instilling civic values in the learners. This study was designed to understand the benefits and challenges of applying service-learning into IDT academic courses. This understanding is critical if one aspires to expose students to critical

and transformative roles as instructional designers and as agents of social change (Campbell, Schwier, & Kenny, 2007).

Conceptual framework: Service-Learning

Despite of the absence of uniformity of a service-learning definition, there are five common characteristics of service-learning: (1) service-learning is a teaching and learning method, (2) it ties into an academic curriculum, (3) where students have the opportunity to provide a variety of services, (4) to a variety of people who are often identified as a "community", and (5) that service-learning focuses on mutual benefits to both the service provider and the people who receive the services. For the purpose of this study, service-learning is defined as a pedagogical approach that is rooted in formal, credit-bearing courses or academic experiences in which students learn academic course content by participating in organized service activities that meet identified community needs (Bringle & Hatcher, 1996; Furco & Billig, 2002; Root, 1997).

Service-learning is a form of the broader model of experiential education, with community service as the fulcrum (Howard, 2003). It focuses more on community efforts that make a difference for individuals in the community and for the students' commitment to the general welfare of the society. The value and importance of service to the community is reflected in the writings of Thomas Jefferson and in the works of the American philosopher William James. James (1910) called for a national service program for youth that would

function as "the moral equivalent of war" (p. i). Even recent presidents John F. Kennedy and Bill Clinton promoted national and community service as a means for "tapping the best potentials within individuals and integrating youth into the community and the nation" (Waterman, 1997).

The higher-education institution has been described as the first type of institution to acknowledge service-learning pedagogy in attempts to replace rote learning and memorization pedagogies. In the early efforts, service-learning projects focused only on practical and technical education in areas such as agricultural studies. Such efforts reached school communities following the economic depression in the 1930s, and community service programs, including the Civilian Conservation Corps, were widely spread (Waterman, 1997).

Most literature on service-learning (e.g., Hironimus-Wendt & Lovell-Troy, 1999; Speck & Hoppe, 2004) point out that service-learning is grounded in experiential learning theory. Experiential learning theory defines learning as a process whereby knowledge is created "from the combination of grasping and transforming experience" (Kolb, 1984, p. 41). The concept of experiential learning theory is very much tied to Dewey's philosophy of education. John Dewey was the founder of the progressive education movement. He was also director of the Chicago Lab School into which his progressive educational theory was put into practice. While he has never used the term 'service-learning', the pedagogical goals and methods of service-learning find a clear basis in his educational theory, especially in his book, *Experience and Education* (1963).

Speck and Hoppe (2004) describe Dewey's views of knowledge as non-objective, always involving an active attempt to respond to one's situation in the world. For Dewey, active student engagement in a learning environment is the key to effective education. As such, he views community as an integral part of a student's educational experience "because what is learned in the school must be taken and utilized beyond its bounds, both for the advancement of the student and the betterment of future societies (Dewey, 1916).

Principles of service-learning

Buchanan, Baldwin and Rudisill (2002) outlined seven main principles of service-learning: (1) students learn the course content as the result of service, (2) the application of course content is in a community setting, (3) there is allocation of time for reflection on the experiences, (4) there is mutual collaboration among participants, (5) the service is *with*, rather than *for*, the community partner, (6) there are mutual benefits both for students and community, and (7) service learning is done in an area of one's expertise.

Advocates of service-learning assert that service-learning can boost students' personal outcomes in such ways as increasing their personal efficacy, their ability to work well with others, and their development of leadership and communication skills (Eyler, Giles, Stenson, & Gray, 2001). In addition, service-learning increases students' desire for community involvement (Manley Jr, Buffa, Dube, & Reed, 2006). It also can be seen as a way to re-center students' education on human relationships rather than merely on course

content (Matthews & Zimmerman, 1999). By immersing themselves in service-learning projects, students develop and enhance their sense of social responsibility and commitment to service. It allows them to discover their potential abilities and to change the social and political systems in which they live. It also prepares students to work in culturally diverse contexts (Boyle-Baise & Kilbane, 2000).

Research Goals

If service-learning is able to produce these benefits in IDT students, then it can be seen as a promising pedagogy to educate instructional designers as potential agents of change able to use their talents to do good for the world (Campbell, et al., 2007). Thus, this study was designed to understand just how beneficial service-learning might be in assisting students' learning about IDT, and what kinds of conditions might prevent IDT students from reaping the benefits of service-learning. Understanding both benefits and challenges is an important contribution of this study, because research on service-learning in IDT has been rarely reported in IDT literature. Second, except for a few studies (e.g., Matthews & Zimmerman, 1999; O'Hara, 2001), research on challenges students have experienced in service-learning are rarely highlighted in service-learning literature. This study attempts to fill in this gap by describing the actual challenges students experienced while being engaged in service-learning projects.

Methodology

This study utilizes naturalistic inquiry as its research methodology. Naturalistic inquiry was chosen because it enables naturalism, the main research instrument, to develop a fuller understanding of the phenomenon studied via interactions with research participants, multiple objects, and realities involved in the setting (Lincoln & Guba, 1985). To support this study, data were collected through observations of the classroom interactions for 11 out of the 16 weeks of class meetings, and also through individual interviews with participants at the end of the course. The interviews sought to understand their experiences as students whose instructional design work would benefit the community.

As the researcher in this study, I wrote analytical and reflective notes in a research journal to document my insights, observations, and reflections on the situation. Analyses of course-related documents, including course syllabi and schedule, students' WebCT discussions, written reflections, and written materials such as design analyses and final products were also conducted to supplement the observations and interviews and to provide the "big picture" with respect to the investigated phenomenon.

Data analysis

The data analysis followed Strauss and Corbin's (1990) and Charmaz's (2006) grounded-theory approaches. This theory helped organize the multi-faceted data collected with the purpose of identifying any patterns that represented the participants' experiences. I

began by conducting an initial/open coding technique that represented the data. Later, using a focused coding technique, I selected the most relevant open codes to construct and organize emergent themes into categories appropriate to the research goals. Then, I developed the description and properties of each category and cross-compared them across each participant's mini-cases to find any similarities or differences.

Context of the study

Research participants

The participants were four graduate students enrolled in the course as part of their educational technology degree requirements. Three of them, Rick, Jenny and Diane, were U.S. citizens, while Nina was an international student. Rick, Jenny, and Diane were master's students while Nina was a doctoral student. Each student had prior experience in community services either during a bachelor's educational experience, in a current career, or as a member of a community organization.

Rick and Jenny were both part-time students in the academic program. Rick worked as one of the university's staff in the hospitality-management area. His job required him to work on both day and night shifts making his academic schedule a bit chaotic. At the beginning of the course, he filed for a documented disability to request academic accommodation to his situation.

On the other hand, Jenny was a full-time elementary school teacher in the state's capitol city that was about a 50-minute drive from campus. This meant that she needed to drive to each class meeting. While she had no problems driving back and forth between work and class, her geographical location during later stages affected the group dynamics and became a contributing factor to group conflicts. Both Diane and Nina were on half-time, 20-hour per week assistantships. Diane worked in the area of an on-campus manager while Nina was a teaching assistant in one of the academic apartments. Both lived near campus.

The course

The study took place in a graduate instructional design course (CIT 553) offered at a large research-based university in midwestern USA. The objective of the course was to introduce students to basic concepts underlying instructional design processes, including understanding of the assumptions and theoretical understandings underlying each instructional design model, ability to perform a variety of analyses sufficient to support informed design decisions, ability to conduct summative and formative evaluation of instruction, and ability to design small units of instruction that incorporate appropriate instructional strategies (CIT 553 course syllabus). To achieve these objectives, the course emphasized the application of knowledge into real-world settings via service-learning projects and collaborative work among students in the class.

With regard to service-learning projects, students were required to create two to three hours of instructional materials for their self-selected and targeted learners on a topic of interest. It was strongly suggested, but not required, for students to design instructional material that addressed a social or community-related issue, preferably one that addressed the needs of an underprivileged and/or under-represented audience. The instructor did not define the terms 'community-related issue' and 'underprivileged/under-represented audience' (CIT 553 course syllabus) but students were encouraged to justify how their projects contributed to the targeted audiences.

The course was a 16-week course, but the projects began during the fifth week of the semester, so the total time for the project was 11 weeks. The projects involved five consecutive tasks:

- Identification of a target audience (also referred to as 'learners' in this paper) and a possible problem to solve;

- Analysis of the learners, the learning contexts, and the learning tasks;

- Design and development of the instructional prototypes;

- Conduct of usability testing of prototypes; and

- Re-design and re-development of prototypes, if necessary.

In addition to producing the instructional materials, students also were required to document details of their design and development processes, including the instructional

models used in their final reports. Three mini-assignments were designed every 3 weeks to assist course completion. The instructor made herself available both online and face-to-face for individual team consultations. Students interacted with their group members via WebCT's chat and discussion tools, personal emails, and face-to-face meetings, both during and after class hours.

The service-learning projects

There were originally two group projects in the course. However, due to intense group conflicts occurring in both groups, two students, Rick and Nina, separated from their original groups and created their own individual projects, while the other two, Diane and Jenny, retained their group identity. Table 4.1 presents the students' service-learning projects.

The projects were all considered to be service-learning projects for three reasons. First, the students considered their target audiences as societal groups in dire need of assistance, but often disqualified as 'under-represented groups' due to their socioeconomic status. Teachers, for instance, often need assistance, especially in designing and implementing instructional activities. However, they are often 'forgotten' because their socioeconomic status does not qualify them to be considered as 'under-represented groups'. Secondly, all of these projects and their target audiences were closely related to the students' working environment. This is consistent with an authentic-experiential learning approach

seeking to prepare students for real-world environments. Additionally, it connects students with their own communities, satisfying one of the principles of service-learning. Finally, all projects related to broader social issues. For example, the project Rick conducted deals with issues of safety, while Diane and Jenny's project specifically deals with morale issues in an educational context.

Findings and discussions

Benefits of service-learning

Based on the data collected through class observations, individual interviews, reflections, and researcher's journal entries, subsequent analysis of the findings of this study was organized according to the two research goals: benefits of applying service-learning pedagogy, and determination of challenges experienced by students while immersed in service-learning. Several categories emerged under each of these organizing themes. This section will first describe the benefits students gained by completing service-learning projects. Then it will present the challenges they encountered while using service-learning pedagogy in the course. All personally identifiable details were removed, and pseudonyms have been used to protect participants' identities.

Table 4.1 Students' service-learning projects

Student(s) or group	Project(s)	Final products
Team Island Members: Diane and Jenny	Re-design existing instructional materials of the Positive Behavior Support (PBS) program that focused on positive behavior such as "staying in seats when expected" (team's final report). Target audiences were second grade students at Marion Elementary School (MES). The purpose was to increase their understanding of the program.	A student guide, featuring several activities related to the program A teacher guide, detailing information to be used with the student guide.
Rick	Production of an instructional unit on how to use mechanical equipment safely. Target audiences were employees of the university's student-and-staff center.	An instructional video embedded in a DVD Instructor's manual, featuring instructions on correct and effective ways of using the video
Nina	Development of a website on how to legally use copyrighted materials for teaching purposes. Target audiences were pre-service teachers enrolled in the university's teacher education program.	An open-source website

Improvement in academic learning

This study has produced findings associating service-learning with improvement in students' academic learning. In this study, all students admitted that they gained better understanding of the course content, i.e., understanding of instructional design processes and application of IDT models and various instructional strategies in designing and developing instructional materials. Similar to the findings of Matthews and Zimmerman (1999), students in this course were at first somewhat confused with the open-ended nature of service-learning. However, upon completion of the course, they agreed that it contributed to their understanding of the instructional design process and how they could utilize the knowledge and skills gained to advance their careers and interests. Jenny was one student clearly indicating her appreciation of the learning experience:

> *When I first enrolled in this class and looked at the syllabus, I was very confused about what this class was going to teach me. I was not sure how I was going to use the content learned in this course in my profession. Following the completion of this course, I am now aware of its importance. This course gave graduate students like myself the opportunity to practice using different models and theories about instructional design in real-world situations... I know that implementing these skills... will improve instructional materials that I design for other graduate school classes and instructional materials I design for teaching. (Jenny's written reflection)*

Diane also expressed her appreciation of this learning experience. She was excited about the idea of making a difference in people's lives through her design works. She wrote:

I love the idea that I can change someone's life by providing sound, effective, and efficient instructional materials. I am ecstatic about my potential career paths that I can pursue in the field of instructional technology. I am again inspired to be the best educator I can be. (Diane's written reflection)

At the end of her reflection, Diane envisioned using her instructional design knowledge and skills to "create and support an institution of higher learning that is vibrant and alive with educational materials that inspire young people to pursue their dreams" (Diane's written reflection).

Improvement in learning about additional content and technologies

In addition to improvement in academic learning, there is another dimension of learning found in this study that has not been discussed in details in other service-learning and IDT literature. I unexpectedly found that the students also gained new knowledge and built expertise in other learning areas beyond that included in the course content as a result of being involved in their service-learning projects. These areas included learning about a specific area pertaining to the content of their instructional material, and learning about other technologies with which they were previously unfamiliar.

Nina's case is a good example of this. One of the topics Nina taught to her pre-service teachers was on copyright issues. She wanted her students to be aware of copyright laws, illegal copying of educational media, and the ethical aspects of the issue. However, as stated

in her final project report, materials on copyright laws were either too extensive to cover in one-week class period or too narrowly focused. This motivated her to create a web-based "self-directed (learning) unit" on the topic that enabled her students, as well as other teachers and internet users, to "choose their own (learning) pathways" related to the topic (Nina's final project report).

To be able to create the instructional unit, she had to first educate herself about the topic, so she consulted numerous "official copyright websites", especially those "specifically designed for teachers", and to consult various reading materials such as the US 2008 copyright law document (Nina's final project report) to ensure that she had enough knowledge about the subject before deciding on just which content knowledge she should cover and deliver on the website. She also sought her fellow teaching assistants' feedback on the appropriateness of the content covered in her website.

Due to her unfamiliarity with the web-authoring software she used for her project, Nina found herself spending extensive time learning about technical aspects of the software in order to create her instructional material outside the classroom context. While this learning process was time-consuming, she admitted that she learned a lot from it. She wrote:

I did not know anything about [the web-authoring software] before starting this project... I tried to find ways to incorporate different ways to make the site engaging and motivating for students. I brainstormed with my friends... [on] how I could improve the design, and we all learned new ways that we could incorporate on [the

software]… [I]t provided opportunities for all of us that we could use beyond this

class. (Nina's written reflection)

As revealed in this reflection, Nina's learning experiences extended beyond the expected learning outcomes of the course. She not only learned a great deal about the copyright issue (i.e., the content knowledge), but also about the technical aspects of the software (i.e., technological knowledge) she used to create her website.

Improvement in learning about project management

Knowledge about project management is an important aspect of instructional design. However, there is limited IDT literature that actually discusses how this topic can be taught to students. This study shows that service-learning is a potential instructional strategy for achieve such instruction. Even though project management was not among the pre-identified goals of the course, students admitted that they learned quite a bit on how to manage a project, ranging from simple items like creating a file organization plan to complex ones such as managing other people with whom they work. Rick's project was a good example. One of the most valuable lessons he learned from his experience was the importance of having a good organizational plan to keep all of his electronic files and documents organized. In his final project report, he described a situation in which he needed to think about and create a proper record-keeping system for keeping track of the various versions of the instructional videos stored in his computer. He stated that he needed to "preserve previous versions [of the

instructional video] in the event there was a need to return them". After some time, he found it was challenging for him "to remember which video was the most current" (Rick's final project report). Rick wrote:

I learned how important it is to keep all the related documents organized when working on project of this scale. I was frustrated several times because I could not find something I was looking for. Next time I develop an instructional item that includes may different steps, I am going to create both electronic and hard copy folders for all of the documents... [I]t is critical to have good organizational plan when working on a project of this magnitude. (Rick's written reflection)

The term 'magnitude' Rick referred to in his reflection was both true and appropriate with respect to thinking about the amount of work he dealt with. Because Rick worked by himself, he needed assistance from many other people around him. As explained in his final report, he needed to ask for special arrangements in reserving the room and using lift equipment when filming the video. He also needed to consult with one of his supervisors who served as his subject-matter expert in developing specific "written instructions on the use of the… lift" as well as the "written expectations" of using the equipment (Rick's final project report). Additionally, he needed to make arrangements with a professional video producer, who happened to be one of his friends, to shoot the videos.

Nina also admitted that she learned a great deal about project management while working on her own project. One important discovery she made was the importance of having access to people. She relied heavily on her colleagues to appear in her video clips

when her professors were reluctant to do so. In addition, she needed to offer extra credit to the students who participated in evaluating her website prototype. In her written reflection, she admitted that, without the extra credit offer, she would not be able to get as many volunteers as she needed. The experience made her realize the advantages of working in groups:

> *I would say that my weaknesses in instructional design would be recruiting people for try-outs and learner analysis. That is another reason for making this a team-work. if I work with someone who is good at convincing people [to participate in the project] that would ease the process a lot for me. (Nina's written reflection)*

In summary, students' involvement in the service-learning projects provided valuable learning experience in project management.

Being attentive to the target audience

Another significant theme emerging from the data analysis was students' appreciation of the importance of listening to their target audiences' perspectives. Nina thought that it was an important aspect of design, given the fact that it was the target audience members themselves who were going to use the instructional materials they created. She wrote:

> *Before this project, I did not think that learners were involved in the design process. I felt like, as learners, we were exposed to materials some outsiders designed and made*

decisions about what we needed to know, how we needed to learn, and how others would measure our understanding of the material...[In] this project, I could see the importance of involving learners in the process, which will save us, as designers, time, money and energy. In addition, our product will be the one that will be actually used by the target audience. (Nina's final reflection)

Like Nina, Rick, too, appreciated the feedback he got from his target audiences. Admitting that he was initially taken back by their comments, he finally decided to modify his video as suggested and found that the modifications made his video better. He explained:

When I took time to experiment with the recommended changes I realized that the video was better with the changes. I could understand what the person saw that concerned him though I may not have agree initially. (Rick's written reflection)

However, listening to the target audience sometimes created another dilemma. Jenny described the dilemma she and Dianne faced with respect to potentially modifying their instructional materials as whether to honor their target audiences' voices or to favor their instructor's feedback . She explained:

[The instructor's comments] kind of hold us when she thought it was bland... [W]e didn't want to just add a bunch of pictures or colors 'cause... we thought like it was against the whole purpose of [our] design. [Besides] I showed every teacher and I am a teacher myself and I know that I don't need an instructional manual that has a ton of pictures or anything like that. I just need it laid out for me, and I need to be able to

follow it, and know what I need, and that's kind what was in there [i.e., the

instructional material]. (Jenny's exit interview, December 2008)

Nevertheless, from an instructional point of view, the dilemma Jenny and Diane faced contributed to a meaningful learning experience as they learned to balance the needs and preferences expected by various stakeholders. It helped them mature as instructional designers as they were forced to creatively think of alternative ways that would satisfy these different needs and preferences.

Thus, this finding supports Boling's (2006) argument that IDT students need to be exposed to alternative ways of learning instructional design, because the current model-centric approach used in designers' education was often contributing to limiting students' design creativity. In this study, the alternative approach was to engage students in real-life service-learning projects.

Increased motivation to learn and serve

Rick was motivated to improve the existing monthly safety training sessions that he and his co-workers were required to attend. In the interview, he stated that the 'trainings' were conducted at night when workers had just completed their full eight-hour shifts. This was seen as being very insensitive to the workers' needs, because they were often too tired to really absorb much of the information. Additionally, the supervisors' read-the-training-materials-aloud approach created negative perceptions among employees, who felt that "the

management sort of talks down to the blue-collar workers" and that they belittled their employees' ability to read the materials themselves. Rick said:

They would just sit there and read to us out of the book like we are not capable of reading for ourselves, which is very irritating because as far as I know, everybody that works in our shop is able to read. Some of them don't read well necessarily but they can at least read. (Interview with Rick, December 2008)

On the other hand, Rick was aware of his supervisors' difficulties in scheduling appropriate training-session time for all employees since each worker has a different working shift. Likewise, it made no sense for the supervisor to conduct multiple training sessions, given the huge number of employees needing training.

Rick's instructional video was based on the concept of empowering his co-workers in determining their own learning paths while simultaneously "uplifting the load off the supervisor's plate" (exit interview with Rick, December 2008). Utilizing his video production skills and his own perspective as an employee, he decided that stand-alone instructional material was well-suited for this purpose. This would allow employees to receive the 'training' by themselves at their own most-convenient times. It also "place[d] the responsibility for learning in the hands of the learners" themselves (exit interview with Rick, December 2008). To ensure quality learning for his co-workers, Rick decided to create an instructor's manual that explains how the materials could be effectively used. This manual was also targeted for supervisors or other instructors who wanted to use the learning materials for whole-group training. A portion of the text in the manual reads as follows:

It is recommended that when this DVD is presented, the actual [name of the equipment] lift shown in the video is available for demonstration and learner tryouts.

The instructor should take each class through an answer and questions sessions.

… the user should have the opportunity to ask questions for clarification after taking the short quiz on safe [name of the equipment] lift use. (Rick's instructor manual)

Rick's case was a representation of how students were motivated to utilize instructional design knowledge learned in the course to serve their targeted audiences. I believe that their motivation relates to the fact that they were involved in actual environments – their neighborhood areas, workplaces, learning institutions, and so forth. In addition, they were motivated by opportunities to create a fair and just environment for the people they serve, one of the principles of service-learning.

Escalation of civic values: The two-in-one benefits

Another emergent theme was that the service-learning component in this course was found to escalate students' civic values. All students, in their own individual ways, expressed their satisfaction with the ability to learn the course content while providing services to others, representing what I have called the 'two-in-one benefits' of service-learning. Jenny has always been advocate of volunteerism. She regularly took part in many volunteering activities throughout her education. However, her status as a full-time teacher and part-time

graduate student didn't allow her to participate extensively in this kind of activity. Therefore, Jenny was thrilled by the idea of being able to combine her passion for volunteerism with her academic learning. Jenny viewed the service-learning project as one way to help other teachers in teaching children positive behaviors under the Positive Behavior Support (PBS) program on which both Jenny and Diane worked. This program focused on instilling good behavioral habits such as "follow line basics" and "keep the bathroom clean" into elementary school children. This teaches children to be respectful, responsible and safe. However, Jenny thought that the message of the program was not delivered well to the students, especially younger kids. The posters and handouts were full of text and were displayed in difficult-to-understand matrix form. She therefore wanted to re-design the material "using kid language" and "even drawings for the younger kids who can't read" (Jenny's online posting, September 2008). Her excitement at the prospect of helping the teachers in her school while satisfying the course requirement was obvious in her online posting:

> *I talked to some of the staff of the PBS team already and they said that the reason it hasn't been redesigned is because they just don't have the time for it. Let's do them (and my school, and possibly other schools) a favor WHILE doing our schoolwork! (Jenny's online posting, September 28th, 2008)*

Similarly, Nina stated that the service-learning project created in her a sense of joy and self-satisfaction. Even though she experienced difficulties in completing the website related to the copyright issue, she was proud that she contributed something to the whole world. She wrote:

At the end of the design process, I was satisfied with my instructional unit. It gave me a sense of fulfillment that I could be proud of developing something that people will use... Designing this instructional unit, I feel I can keep working on similar projects, and knowing that some someone in somewhere on the world will benefit from my product would make me more than happy. (Nina's written reflection)

Clearly, both Jenny and Nina gained the benefits of the mutually-beneficial aspect of service-learning. As students, they were able to learn the course content and satisfy the course requirements. Simultaneously, they were satisfied knowing that there were people who will benefit from their instructional materials.

Developing a sense of concerned: Issue of applicability

All four students in this study were found to be concerned with applicability of the instructional materials they created. Even though the products were targeted for a specific group of audiences, they additionally thought about the applicability of their products to a wider set of audiences. For instance, the student and teacher guides Diane and Jenny created were applicable to school children and teachers beyond the school at which Jenny taught. As Jenny emphasized to her group:

This idea came to me and I'm really pumped about it because this could be something ANY elementary school could implement, and we could test it with the students/teachers at my school! (Jenny's online posting, September 28th, 2008)

Similarly, Rick envisioned that his instructional video would be useful to all users of the equipment. To Rick, the actual emphasis of the video was not merely on *how to*, or the technical aspect of the equipment. Rather, it was on educating people on safety issues in using mechanical equipment in general. The topic of personal safety was universal and applicable to workers using many types of equipment. One immediate example of the applicability of his instructional video was the fact that it could be used by members of his church. Rick explained:

> *My church is looking at buying a used lift that we have here because they do some lighting thing and they thought that might be useful. But there again if individuals is going to be using this, they need to use it in a safe manner. And even though older lifts does not have some of the safety features that were addressed in the video, the safety requirements... of making sure that the lift is safely used, [that]there is no damage to parts of it that are going to jeopardize the safety of the operator, none of that changes. None of that changes. It's still the same. (Rick's exit interview, December 2008)*

Students concerned with the applicability of their instructional materials have encouraged design of materials that were sustainable, reusable, and useful to other groups of people. As Rick explained, the materials should not be judged as a single-use instructional unit only.. It should rather be viewed as an effort to address a larger issue – the safety issue in Rick's case, and ethical and moral issues in Nina's, Jenny's, and Diane's cases.

In summary, the mini-cases exemplified in this study show how students' involvement in service-learning projects obviously benefited them in seven main areas: improvement of academic learning, improvement in learning about additional content and technologies, improvement in learning about project management, being more attentive to the target audiences, increased motivation to learn and serve, escalation of civic values, and development of a sense of concerned over broader social issue. However, all of the benefits described in this section also came with a set of challenges. The next section will describe the challenges students encountered in completing their service-learning projects.

Challenges experienced by students while immersed in service-learning

Data analysis revealed two main challenges students experienced while immersed in their service-learning projects: (1) group conflicts triggered by a combination of relationship, task, and process challenges, and (2) challenges related to gaining access to resources.

Group conflict triggered by relationship, task and process challenges

Group conflict was the most dominant challenge for all students in completing their projects. All students firmly asserted that intra-group conflicts were unique and of greater intensity than they had ever before experienced. Conflicts became so intense that they caused students to openly display their emotions, resulting in tears and outbursts in one of the

course's meetings as well as in the anonymous course online WebCT postings. While group conflicts are not necessarily unique to service-learning, and can occur to any collaborative setting, I argue that it was in this case they are aggravated by the authentic and open-ended nature of service-learning itself. Service-learning requires students to (1) actively engage in real-life environments beyond their classroom settings, (2) carry out and manage real-life projects, and (3) interact with people unfamiliar to them outside their classrooms.

In this study, I identified three challenges – task, relationship, and process – that could trigger a group conflict. Each of these challenges is described below, using Team Island as the representative case. It is important to mention here that the challenges below are actually interrelated in that they tend to build upon each other to contribute to an overall group conflict. Thus they should not be considered as separate challenges.

Task-related challenge: Conflicting interests on project relevance

Both Diane and Jenny stated that their group conflict began as early as during the group's initial brainstorming process. They asserted that Rick was unsupportive to the idea of developing instructional materials for the PBS program, and instead was more interested in working on another project. Diane explained:

Rick was adamant about producing instructional materials for the lift. Jenny and I wanted to hear more about the project but when ask to describe idea he had a hard

time coming forward with something we could wrap our minds around... Needless to

say, Rick was not happy. (Diane's written reflection)

Accordingly, Rick was accused of "show[ing] absolutely no interest in helping to organize the document" and often times was, "short and rude when asking for input" (Diane's online posting).

Despite these accusations, I found that there was no obvious indication that Rick was being unsupportive to his group's project, based on the following evidence: (1) he constantly offered to attend group meetings – face-to-face or online – informed others about his availability and asked for more specific meeting times, (2) he was moderately active in sharing his ideas, especially in WebCT discussion boards, even though most of his postings had not generated replies from his team members.

I believe that the challenge to reach agreement on which specific service-learning project to work on was closely related to (1) students' interpretations as to who would most likely benefit from their services, and (2) students' unique individual qualities such as their professional backgrounds, prior education or training, and idealism. In Team Island's case, two of the members' – Diane and Jenny – had professional backgrounds in elementary education, making it easily understood why they chose to work on the PBS program. On the other hand, Rick's technical background in video production and experiences in youth mentoring might explain why he would choose to work on a project that focused on youths and adults. These explanations seem to support some researchers' suggestions (Yates & Youniss, 2001) to tailor service-learning projects based on students' strengths, interests and

qualities, rather than trying to force them to work on projects they are not motivated to participate in. .

Relationship challenges: The case of a middle person

Even though the group decided to continue working on the PBS program in spite of conflicting interests, tensions began to mount, especially between Diane and Rick. The conflict between them created unique tension for Jenny. Because both refused to communicate with each other, Jenny had to play the role of a middle person for both of them. In the interview, she recalled that Rick would always call her, "like 11 o'clock at night [with a] 9 pm bed [time]", about the group tasks because he refused to talk to Diane. Jenny also was required to convey Rick's messages, "usually bad news", to Diane. Similarly, when the conflict worsened, she sometimes found herself becoming Diane's unintentional target of anger.

The conflicts began to demotivate Jenny with respect to attending class meetings. Even after Rick separated from the group, the emotional challenges continued. She said:

> *During the time, when [they] were having problems... it was really stressful, so it was really frustrating to go to class... and then when that person was [no longer with the group], then it was hard to go to class and try to pick up the pieces or fix the problem. (Jenny's interview, December 2008)*

Since she could not express her feelings to anyone, she had to create her own support system using her own family members. She spent time talking to her family for advice, especially from her college-age sister and brother who shared some ideas on how to tackle the situation.

Process-related challenge: Task delegations

With only 11 weeks to complete their service-learning projects, in addition to the need to deal with the unintended conflict-triggering factors previously mentioned, members of the group - Rick, Jenny and Diane - felt pressure to keep up with the deadlines. The conflict became so severe, especially between Rick and Diane that Rick finally decided to opt out from his group and work individually. While this division eased the tension, it continued to haunt Diane and Jenny. In her reflection, Diane described how difficult it was for her to adjust to the situation, especially feeling the need to pull the weight of three by dividing the works among Jenny and herself. She wrote:

> *Once the group was divided I grew more worried. I knew that we would have to revamp the project and make adjustments quickly. This caused a bit of anxiety for me. I was not ready for the group division but I think it was for the best. (Diane's written reflection)*

Diane and Jenny began to change their work process at this time by having each of them work on one specific task and then share with one another for feedback and follow-up.

The strategy didn't significantly help them. Instead it created another silent conflict for both of them, at least from Diane's point of view. In her written reflection, Diane shared her frustrations at being unable to review Jenny's instructional materials beforehand. Thus, it seemed that the best option for them was to work collaboratively rather than separately. With the deadline nearing, they used remaining time to come up with materials that, while viewed as simplistic by the course instructor, was of sufficient quality for them to pass the course requirement. As Diane described:

"I was not completely satisfied with the instructional materials... I do believe that our end product satisfied the requirements for the project and is a product that can be useful. However, I do think that under different circumstances I could have benefited more from the actual learning process opposed to being distracted by group dynamics and human differentials." (Diane's written reflection)

Jenny shared Diane's dissatisfaction with their final product. Moreover, she felt the instructor's decision to allow Rick and Nina to work on their own individual projects, was unfair to both her and Diane. She said:

I was kind of jealous of the two people that went off and did their own projects, different from what they started with... I felt like, 'oh, ok, so he gets to start something brand new while we worked out with... the mess that he helped us create'... It wasn't like I was jealous of them being alone...but it was kind of nice if Diane and I would be able to maybe pick another project. (Jenny's interview, December 2008)

While acknowledging that the conflict experienced by these students may be idiosyncratic, I argue that understanding as to what triggers such conflicts was crucial, especially if one considers applying service-learning in their courses, so that necessary actions can be undertaken to minimize, if not completely, prevent them from happening. In this study, a combination of task, relationship, and process challenges experienced by members of Team Island were identified to be the triggering factors that contributed to the severe group conflict. The group conflict not only distracted them from focusing on the tasks at hands, but also diminished their work performance. Though there could be many alternative approaches to overcoming this situation, I am inclined to support the idea that students involved in service-learning projects need some time to get to know each other prior to undertaking the projects. Schine (2001) suggested that a service-learning program needs to be carried out in sufficient duration so that students can develop trust and understanding with the people with whom they serve. Analysis of this study supports Schine's (2001) statement, with the additional thought that time is also needed to develop trust and understanding *among* the students themselves *before* they set out to offer their services to others.

My analysis of Team Island's group conflict convinced me that the group members needed sufficient time to understand each other's personalities, styles of handling problems, and styles of communication as well as to attain expertise in specific areas to enable them to identify the best approach to their service-learning project. In this course, service-learning projects officially began only at the fifth week of course, leaving only 11 weeks for students

to complete their projects. My analysis of the course schedule and syllabus revealed that the first four weeks of class meetings were dedicated to individual assignments in which students were required to critique design aspects of selected instructional materials. While this assignment was important in giving students first-time exposure to such aspects as design, and was indeed appealing to some students, it had robbed them of four weeks that might have been more fruitfully used. Moreover, the design critique assignment, as it was called in the syllabus, was an individual assignment and not a group assignment. This, again, left students with limited opportunities to get to know each other before the actual service-learning project began.

Challenges related to gaining access to resources

In order to produce high-quality instructional materials for their targeted audiences, the students realized the importance of connecting with other people and having access to human, space, time, and financial resources. Nina struggled to get assistance from her professors to appear in a series of videos that she would put up in her website. When asked what the major challenge was for her in completing her service-learning project, she explained:

You need to have a lot of connections with people ... I needed video[s] in my project, [for the] website. And the people I could convince were my officemates and colleagues. I tried to ask professors to do that for me and they found a lot of reasons

for not doing... I asked one of my old students [for assistances] and [she] did it [via] email... [There were also] my colleagues, other Teaching Assistants [to help]. So you need, really need that connections. That's what I learned from this experience. (Exit interview with Nina, December 2008)

For Jenny, the geographical distance between her and Diane limited their physical ability to work together, especially in reviewing their instructional materials. She wrote:

We had to communicate frequently through the telephone and email. We would often split up parts of different assignments and then send the documents to each other to review and add to before turning the assignments in. (Jenny's written reflection)

This inability to physically work together on the documents encouraged them to work independently of each other, which later created task-related challenges, as previously mentioned.

The hidden benefits emerging from the challenges

Although challenges are usually associated with negative impact, I viewed them in this as hidden learning opportunities for the students. With regard to the group conflict, I believe that the conflicts exposed the students to real challenges like those they would most likely encounter in their journeys of being professionals in the field. I believe that exposure

to conflicts in this course prepared students to be mentally ready to meet bigger challenges in the real world. As Diane herself noted:

> *I learned patience from this class project. I learned that everyone is not interested in putting their best foot forward. I also learned that maybe I just have bad luck with groups and should just expect to always do more than my share of the work. It's not fair, but it's life. (Diane's written reflection)*

In addition, students asserted that they gained a better understanding of themselves as a result of the conflicts. The intense conflicts they experienced made them aware of their own individual strengths and weaknesses. For Jenny, the conflicts taught her to be emotionally strong and independent. She also learned ways, such as creating a support system and the discussing her feelings with the instructor, for handling such conflicts, As an adult and teacher herself, she at first hesitated to inform the instructor because she didn't want to be labeled as not having group skills or being accused of "trying to get out [of the situation] than to deal with them" (Jenny's interview). The students' discovery of their own strengths and weaknesses was, I believe, an important step in understanding not only who they are as professionals, but also what can they do to contribute to the betterment of society.

Additionally, challenges related to gaining access to resources made them think about the real struggles non-profit organizations experience in real-life situations, as captured in Nina's reflection:

Another learning experience for me, as a designer, was the need to have either connections or resources... in the design process. The people who let me record their videos were my friends. Having good connections [with others] will probably raise the quality of the instructional material especially if we [i.e., instructional designers] are doing this for community service [purposes] rather than for a profit organization. (Nina's written reflection)

In sum, I am in agreement with Matthews and Zimmerman (1999) who argue that these challenges are the reasons why we more than ever need service-learning and other type of experiential learning, because it helps to "provide students with open-learning situations, with group work, … and with taking responsibility for their own learning" (p. 396).

Conclusions and instructional implications

This study provides an understanding of the benefits and challenges of incorporating service-learning into an IDT graduate course. Seven benefits were found in this study: improvement of academic learning, improvement in learning about additional content and technologies, improvement in learning about project management, being attentive to the target audiences, increasing motivation to learn and serve, escalation of civic values, and development of a sense of concern over broader social issue. The first two benefits are consistent with other studies in which service-learning was rarely incorporated, such as in

technical communication (Matthews and Zimmerman, 1999), natural sciences (Sherman & MacDonald, 2009) and IDT (Correia & Yusop, 2009).

Additionally, two main challenges were found: (1) group conflict, and (2) gaining access to resources. The group conflicts found in this study exhibit a mix of relationship, task, and process conflicts (Jehn & Mannix, 2001, p. 238). Relationship or affective conflict involves personal issues such as frustration and dissatisfaction, while task or cognitive conflicts involve "conflict about ideas and differences of opinion about the task" (Jehn & Mannix, 2001, p. 238). Conversely, process conflicts refer to issues related to how tasks will be accomplished and involve conflicts with respect to task delegation. Students in this course experienced all three types of conflicts. However, relationship conflicts seemed to not only dominate, but also to initiate the other two types of conflict. In Team Island's case, the conflict started with disagreement on choice of topic (i.e., task conflict) that later produced an intense relationship conflict intertwined with process conflicts. Undoubtedly, these conflicts proved to negatively affect the overall students' work performance and limited their ability to fully benefit from the intended service-learning outcomes. Nevertheless, it also taught students to better understand their own strengths and weaknesses as individuals preparing them to be better professionals in the future.

To reduce or eliminate these conflicts, instructors interested in designing and developing similar educational experience may consider these recommendations:

- Provide students with the option of working either individually or collaboratively;

- Prepare students who choose to work individually for the heavy workloads they will encounter;

- For small-size classes, allow students to choose their own group members. The instructor should, however, reduce the possibility that they will choose only people who have similar backgrounds by offering suggestions and guidance on selection criteria;

- To maximize service-learning benefits, instructors must educate students with respect to service-learning via readings and discussions;

- Assist group work processes by discussing ways to solve group problems; and

- Provide an open environment in which students can express their thoughts and emotions, perhaps by using a variety of communication tools such as journals, blogs, and anonymous messages, as shown in this study.

Contributions and future research

One of the main contributions of this study was the utilization of qualitative methodology to understand what really happens in a service-learning oriented course. This is an important contribution, especially given the fact that most service-learning literature has been quantitative-based. The study goes beyond numbers and statistical measures to provide useful insights into the actual experiences of the students as the main actors/actresses in service-learning projects, in terms of the benefits they gained and the challenges they experienced.

Second, this study provided first-hand information on students' perspectives of service-learning, in contrast to dominant service-learning literature that sought to understand the phenomenon from an instructor's perspective. I believe that such understanding is important for service-learning instructors in terms of designing appropriate and meaningful learning experiences for their students.

Finally, the study shed some light onto the emotional challenges experienced by students, an overlooked aspect of dominant service-learning literature. Perhaps the most valuable part of this study was in illustrating the fact that in some cases intense group conflicts can positively assist students in better understanding themselves as individuals and professionals.

Several questions that could be useful in designing future research emerged in relation to the conflicts described in this study. The service-learning model used in this study was a production-based model that focused on product development rather than social relationships. Could the conflicts be reduced when other models - instructional technology consulting, content knowledge consulting, social relation services, and tutoring and mentoring services - were used? What is the intensity level of the conflicts in this study compared to production-based model services? Perhaps, future research should be specifically designed to investigate this issue.

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CHAPTER 5: SYNTHESIS AND RECOMMENDATIONS

Introduction

This dissertation focuses on the installation of ethics and civics components into instructional designers' academic preparation at higher education institutions using service-learning as its main pedagogical strategy. Two identified key problems became the basis for conducting this research.

First, there has been a lack of research directed toward understanding what ways ethics and civic-based components can be incorporated into instructional designers' education. Even when these components are incorporated into the curriculum, it has usually been taught from the perspective of "ethics of rules or principles" (Sullivan, 2005, p. 262) which emphasizes understanding and application of a profession's ethical codes. This dissertation argues that ethics of principles should be practiced along with "ethics of virtues or character" (Sullivan, 2005, p. 262), a perspective that views an individual as a moral actor who is responsible for his/her actions.

With respect to the first problem, it is also found that there is a dearth of research directed toward the concept of civic-minded instructional designers. Inability to define the concept and identify its required qualities has limited our understanding of our own professional identities as instructional design and technology (IDT) academic practitioners

and scholars. Consequently, this affects the way IDT faculty prepare professional instructional designers in higher education institutions.

This dissertation was conducted to fill in the gaps in the current IDT literature by addressing these two key problems. **Chapter 2** of this dissertation aims to provide a conceptual framework for civic-minded instructional designers based on existing and current literature in sociology and IDT. This framework was utilized to re-design an advanced instructional design course as presented in **Chapter 3,** whose aim was to understand how students of this course enacted their civic-minded agencies and the challenges they encountered in doing so. While the second chapter describes *what* makes up a civic-minded designer, the third chapter presents the process, or the *how*, of enacting it through the lenses of three students and their community partners. **Chapter 4** takes a slightly different perspective by exploring the use of service-learning pedagogy as a potential tool for educating instructional designers. The findings provide an understanding of the benefits and challenges of incorporating service-learning into an IDT curriculum. **This chapter** aims to briefly summarize the major findings of the three studies conducted as part of this dissertation and discusses the implications of the studies in two areas: instructional and design approaches to educate civic-minded instructional designers.

Summary of the findings

Inouye, Merrill and Swan (2005) argue that an inability to define our goals and purposes results in our inability to clearly define IDT as a discipline and profession. Without clearly-defined goals and purposes, we are unable to understand our "fundamental nature and reason for existing" (p. 2). They propose an ethics-centered paradigm with the view of IDT as a helping profession as the central concern of the field. Ethics, they argue, should be the main goal – or the *end* - of the profession.

The first research element (Chapter 2) of this dissertation utilizes the ethics-centered paradigm to incorporate Dewey's (1927) Sullivan's (2005) conception of civic professionalism into IDT. There are two major contributions of this study:

*Definition of a civic-minded instructional designer***.** Supported by synthesis of literature, a civic-minded instructional designer is defined as an instructional designer who (1) has the public interest and a sense of civic responsibility at the forefront of their work, (2) is attentive, responsible and responsive to the emergent instructional needs of the members of the community, and (3) utilizes his or her knowledge and skills in instructional design and technology to improve the learning and performance of others.

Construction of this definition is viewed as important since it is the first step in operationalizing the term "civic-minded instructional designers". As Hatcher (2008) noted, a clear definition allows researcher to conduct further research on the concept, such as constructing a set of procedures "through which it can be measured" (p. 5). In this

dissertation, its contribution results in identification of a set of beliefs, knowledge, skills and dispositions, or what I call as the 'qualities' that one must have to be considered to be a civic-minded instructional designer. These qualities are embedded in the Civic-Minded Instructional Designers (CMID) framework presented in Chapter 2 of this dissertation.

Construction of the Civic-Minded Instructional Designers (CMID) framework. The CMID framework positions an instructional designer as an active contributor in the process of solving social issues. The framework is grounded in the ethics-centered paradigm of IDT (Inouye, et al., 2005). It supports the view of instructional designers as agents of social change (Campbell, Schwier, & Kenny, 2005; Campbell, et al., 2009), that is, an instructional designer has critical and transformative power for bringing positive change to the society. The framework is built upon my exploratory work on the topic of educating instructional designers as agents of change (Correia & Yusop, 2009; Correia, Yusop, Wilson, & Schwier, 2010; Yusop & Correia, 2009). Of importance is identification of the 'qualities' composed of specific beliefs, knowledge, skills and dispositions, of civic-minded instructional designers. Detail descriptions of the framework and its graphical illustration are presented in Chapter 2 of this dissertation.

To further understanding as to how IDT students enact their civic-minded impulses, the **second research element (Chapter 3)** presents an ethnographic study of an IDT course designed with principles of critical service-learning (CSL) pedagogy that suits the CMID conceptual framework. Data analysis suggests that such students, in their capacities as

instructional design and technology consultants, virtually always take into consideration their community members' needs. They also tend to pay great attention in giving voice to their community partners. Additionally, they were found to go beyond the stated purpose of the project by addressing the issue of sustainability. That is, they ensured that the materials they created can be re-used by their community partners once the projects are completed. This is done by making sure that the materials are easy to manage and self-sustainable. In their roles as consultants, the students were found to be sensitive to the community partners' perspectives while diplomatically voicing their professional opinions, and acknowledging their community partners as "design partners". In enacting their civic-minded impulses, students were found to encounter challenges that forced them to make adjustments, re-configure their roles as civic-minded instructional designers and build trustful relationships with their community partners.

The final research element (Chapter 4) provides an understanding of the potential benefits of service-learning pedagogy in educating civic-minded instructional designers. Findings revealed that the pedagogy improved students' academic learning, learning about additional content and technologies, improvement in learning about project management, increased attentiveness to the needs of the target audiences, increased motivation to learn and serve, escalation of civic values and development of a sense of concern over broader social issues. Two main challenges were found: (1) severe group problems triggered by a combination of relationships, task, and process conflicts, and (2) gaining access to resources. Even though the problems distracted students from reaping the full benefits of service-

learning, the conflicts provide a venue for students to better understand their own strengths and weaknesses as individuals and instructional designers.

Implications of the studies

The three studies produced three major implications: (1) conceptual, (2) instructional and (3) design implications.

Conceptual implications

These studies contribute towards a better understanding of the ethics-centered paradigm, the least understood paradigm of IDT. It does so by operationalizing the term "civic-minded instructional designers" using two bodies of literature, sociology and IDT, to guide its conception.

It also defines the paradigm and qualities of a civic-minded instructional designer. As is often the case with a front-end analysis, the definition, paradigm, and qualities resulting from this dissertation provide a clearer picture of the direction, goals and purposes – the *ends* - of IDT education. Consequently, it allows academics to identify the appropriate pedagogy, strategies, and tools – the *means* – for incorporating a civic dimension into IDT curricula. Additionally, it contributes towards a better understanding of the instructional design role within larger social contexts.

Instructional implications

The two studies in this dissertation (Chapters 3 and 4) explore the applicability of traditional and critical service-learning pedagogy for educating civic-minded instructional designers. Both types are found to support students' academic learning while simultaneously escalating their civic values. However, applicability depends on careful design of the instructional experiences. Three things were found to be critical in incorporating civics education into IDT curricula:

a) Educate students about their potential transformative roles as social change agents

It was found that students have a better understanding of their potential critical and transformative roles to bring good to society when exposed to civic-minded concepts both *before* and *during* their service-learning projects. This can be done via class readings and reflective discussions on social issues. As exemplified in Chapter 3 of this dissertation, students became more mentally prepared to enact their civic-minded agencies when they understood *why* and *how* they can deploy their instructional design knowledge and skills to solve community-related problems.

b) Encourage active and continuous reflections on their roles as civic-minded instructional designers

Active and continuous reflections on learning experiences are found to be critical to nourish students' civic-minded agencies. This finding echoes findings of other studies in service-learning literature (Boyle-Baise & Kilbane, 2000; Claus & Ogden, 1999). Students in the ethnographic study (Chapter 4) were given ample time to continuously verbally reflect on their experiences with their classmates and instructors in weekly class meetings. They also reflected on their writing experiences at the end of the semester. These two types of reflective activities – reflections done both with classmates and alone – were proven to assist students to develop their identities as civic-minded professionals. More active reflections are recommended and Eyler's (2002) "reflection map" should be very useful for these activities. Eyler (2002) recommends that students' reflections can be organized into three categories: reflecting alone, reflecting with classmates and reflecting with community partners. Such reflection can be done within three timeframes: before, during, and after service. It can also be done in a variety of formats such as 'letter to self', list serve discussions, and presentations to community partners.

c) ***Involve community partners, or clients, in planning and implementation***

       processes

The findings of this dissertation emphasize the importance of involving community partners, clients, users and/or target audiences in the instruction during the planning and implementation processes. This is because they are considered the main stakeholders in students' learning experiences, just as much as the course instructors and students themselves. However, this does not mean that they should act as co-teachers as in the case of internships and other authentic learning approaches. Rather, they should act naturally as clients, but they should be educated on the goals and structure of the course so they can assist students in completing their learning tasks.

Design implications

The application of the civic-minded instructional designers (CMID) framework requires some transformation of the design approaches students use while working with their community partners. Participatory design and user-centered design approaches seem to work well in this context.

Participatory design is defined as "a systems design approach from the field of software design that promotes direct stakeholder participation as co-designers in all phases of design and development (analysis, design, development, implement, and evaluate)" (Nilakanta, 2007, p. 11). Originated in Scandinavia in the 1970s, PD has ever since been

widely used in the areas of Human-Computer Interaction (HCI) and Information Systems (IS) (Ehn, 1993).

On the other hand, user-centered design empowers end-users to authentically engage in the process of creating their own systems (Carr-Chellman & Savoy, 2004). User-centered design focuses on users' needs and information to inform the design of a system or instructions. Here, users play the roles of a user, a tester, and an informant (Druin, 2002) who supply information to the designers. However, the final design decisions remain in the hands of the designers (Carr-Chellman & Savoy, 2004).

Both participatory design and user-centered design approaches contrast to the traditional instructional design approach emphasizing a designer's expertise in solving instructional problems. However, the two most distinguishable characteristics between PD and user-centered design are participatory design's emphasis on democratic participation of end-users and the issue of the power relationship between a designer and a client. Although both approaches involve end-users in the design processes, the role of end-users in user-centered design is not explicitly described in the literature and is mainly limited to inform the design (Karat, 1996, 1997). This functional user empowerment contrasts with participatory design's approach that acknowledges the end-user's participation as a "design partner" (Druin, 2002) beyond just being an "informant" (i.e. providing and giving access to needed information) and "tester" (i.e. testing the design prototype).

Finally, both design approaches fit well with Inouye, et. al., (2005) and Gibbons, et. al., (2008) descriptions of fundamental elements of the ethics-based paradigm in IDT:

- More contextual, rather than a-contextual;

- More person-centered, rather than environment- or system-centered;

- More agent-centered, rather than object-centered;

- More psychology-centered, rather than technology-centered;

- More learner-centered, rather than instruction-centered; and

- Emphasis change from doing things *to* people to doing things *with* people.

Limitations

Research described in chapters 3 and 4 of this dissertation enhance the understanding of why and how ethics- and civic-based components should and can be incorporated into IDT education. They also describe the potential challenges and barriers to its implementation. However, there are three main limitations present in these studies that provide investigation opportunities for future research.

First, there was only one exit interview conducted with each individual research participant at the end of the instructional experiences. Even though other data sources (for instance, my extensive reflexive memos, participant-observations and document analyses) provide rich descriptions of the studies, I would like to have had the opportunity to interview the participants at different points of their experiences, such as at the beginning and at the mid-points of their experiences. This especially applies to my research participants in Chapter 3 of this dissertation whom I could only interview once. Nevertheless, I am satisfied

that I could gather their after-thoughts by applying a member-checking procedure (Creswell, 2009) months after the course was completed. In this way, I would be able to check validity of my interpretations with them.

Secondly, in regards to my ethnographic study (Chapter 3), I was unable to fully participate in their lives as consultants to the three community organizations, that is, I was unable to attend – physically - *all* of their meetings with their clients. This occurred for two main reasons. First, some of the meeting schedules changed at the very last minute, mostly due to community partners' emergent schedules. This conflicted with my initial plans for the day and I had no other choice than to miss the meetings. Secondly, in the context of the sandbagging project, I was unable to attend both the tryouts and actual on-site trainings. This was because both trainings were scheduled when I was participating at two international conferences. However, in both cases I was fortunate enough either to have the participants' audiotaped conversations with their community partners or, in the case of the sandbagging project, to have the participants to verbally present their projects to me with assistance of a variety of artifacts such as PowerPoint slides, pictures of the training activities, and final reports to the community partner. These rich artifacts allowed me to draw valuable conclusions with respect to the meetings and trainings I missed.

Future research

In my previous works on the use of technology in service-learning projects (Yusop & Correia, 2008; Yusop & Correia, 2009), I found that technology-related services provided to community partners fall into five categories: instructional technology consultation, content knowledge/expertise consultation, production of technology products, social relation services, and tutoring and mentoring services. The two studies in this dissertation utilize only two main categories of technology-enhanced service-learning projects: media production (Chapter 3) and consulting (Chapter 4). In the first model, students did not work with *real* community partners, clients, users, and/or target audiences as did the students in the second model. Rather, they worked with a group of people who represented their intended community partners, clients, users, and/or target audience. Thus, their learning experiences and challenges were somewhat different from the students in the second model of instruction. More research is needed to understand in just what ways the application of different types of instructional models may affect students' experiences.

Finally, all students in both studies (Chapters 3 and 4) have pre-existing experiences and value the concepts of service-learning. These factors might affect their dispositions and perspectives on the concept of civic-minded instructional designers and their preferences over participatory and user-centered design approaches. Future study can specifically investigate how students who did not value the concept navigate their learning experiences and the challenges they encountered.

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