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Learning, Design, and Technology

**LEARNING AMONG HIGHER EDUCATION INSTRUCTIONAL DESIGNERS IN
AN ENTERPRISE SOCIAL NETWORK GROUP**

A Dissertation in

Instructional Systems

by

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ABSTRACT

This dissertation details a phenomenological interpretivist qualitative research study that examines several instructional designers employed at a major university in the northeastern United States, with the purpose of understanding what the designers learned and gained from membership in a professional online social networking group. This dissertation is based on an initial study of professional online social networking conducted during the spring of 2013 and offers a broader and more comprehensive examination of this new technology. Preliminary implications of the original study addressed practice rather than theory; the proposed study, therefore, aims to determine corresponding theoretical implications. The theoretical framework for the study was a hybrid of social learning theory (Bandura, 1977), Vygotsky's Zone of Proximal Development (ZPD) (Vygotsky & Cole, 1978), and sociocultural learning theory (Rogoff, Baker-Sennett, Lacasa, & Goldsmith, 1995). Data was collected through interviews, observations, and document analysis. All data collected was analyzed using Ian Baptiste's adaptation of phenomenological thematic analysis. After analysis of the data the following themes were found: disseminating information, awareness of new educational media, community building, new knowledge of instructional design, seeking information, awareness of new events, increased cognition, and professional development. It was concluded that a culture of reciprocity existed within the group, encouraging the exchange of information. This exchange allowed professional development to take place among the instructional designers who participated in this study.

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Chapter 1

Introduction

Unlike most familiar social networks, which exist to connect users with family, friends, and acquaintances, Yammer is a social network designed for professional social interaction. Within Yammer exists institution-specific networks, and within these networks exist specialized, or affinity, groups. One such affinity group was created specifically for instructional designers working at a major university in the northeastern United States. The Yammer group, as it shall be known, offered a platform for instructional designers to share information and ideas. There were other affinity groups such as Online Teaching, a public group dedicated to discussion of excellence in teaching (and learning) in the online environment (“Yammer: Online Teaching,” n.d.). The primary purpose of this study is to discover what instructional designers are learning and sharing within this social networking group. To accomplish this, this study adopts a phenomenological interpretivist qualitative approach that takes into account existing literature. It also proposes a sound theoretical framework for further research into this technology. This dissertation describes the details of the study along with its origins in a pilot study conducted during the spring of 2013. A sound theoretical framework based on social learning, informal and non-formal learning, and relevant literature on the topic of online social networks were crucial parts of the proposed study. This dissertation also includes a data collection and analysis plan utilizing interviews (Maxwell, 2005; Seidman, 1991), observations (Glesne, 2011; Maxwell, 2005), and document analysis (Glesne, 2011), as well as a data analysis technique proposed by Ian Baptiste (2012). According to Moustakas, “phenomena are the building blocks of human science and the basis for all knowledge” (Moustakas, 1994b). A phenomenological approach was the most appropriate choice for this study, as the study provides new knowledge of learning

dynamics in online social networking groups. In this study, learning is treated as a phenomenon, as it is never explicitly directed or established among participants. A phenomenological approach was similarly suitable for this study because it was qualitative, and the qualitative study is phenomenological in nature (Giorgi, 1985).

Study Background

Purchased by Microsoft in 2012, the online social network (OSN) Yammer serves as the cornerstone of this study (“Microsoft to Acquire Yammer,” 2012). While Yammer is an OSN, it is restricted to organizations, making it a professional OSN. The network is designed for company collaboration, including file sharing, the exchange of knowledge, and the promotion of team efficiency (Yammer, n.d.). To use the Yammer network, an organization chooses the pricing plan that best suits its needs. This means there is a financial investment to be considered before making the decision to create an account for the organization. Employees (hereafter referred to as “users”) within an organization accessing the social network have the ability to create basic profiles that include photographs, email addresses, career details, and their first and last names. Users also have the ability to create more detailed profiles that include: biographical information; detailed contact information; and personal information such as significant others’ names, children’s names, and work and education details. In addition, users can create organizational charts (“org charts”) and smaller networks, specify the applications they would like to use, and set both their preferences and notification requests.

Within an organization’s network on Yammer, conversations among employees take place in the form of posts and replies. The types of conversations made possible via this social

network determine the kinds of information that can be shared. The primary input interface is a link entitled, “Share an Update,” which a user can click on to share a comment, a question, or a link to an external website. Documents and images, polls, praise, and events may also be shared among others in an organization’s network (Figure 1). This study explores these interactions and identifies what instructional designers are learning and sharing as part of a professional social networking group.

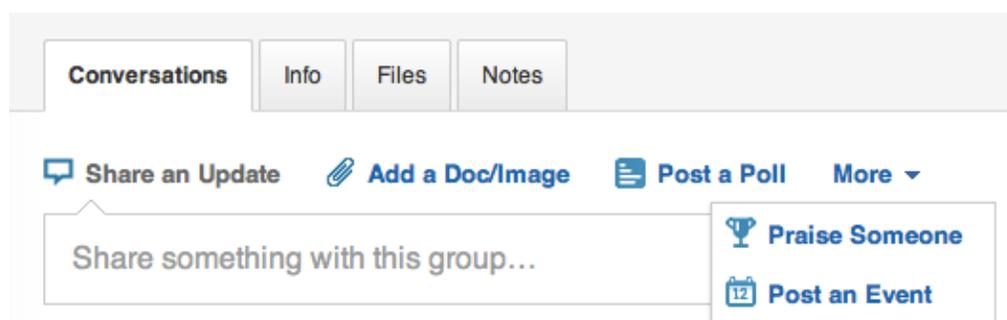


Figure 1 Yammer conversation topics

Goals of the Study

Practical goals of a study focus on what can be accomplished (Maxwell, 2005). A primary area of accomplishment for this study is to offer a better understanding of instructional designers’ learning experiences via professional online social networks. Because the

organizations for which instructional designers work must pay for this service, understanding the organizations' return on their investments is important. Of course, the return cannot be measured in dollars but in the impact the group has on instructional design practices and experiences within their various organizations. As higher education institutions seek to develop new learning strategies using emerging technologies, this study offers them insight by identifying online social networks as a possible means of creating stronger collaboration among employees.

While practical goals focus on what can be accomplished, intellectual goals focus on what is being understood (Maxwell, 2005). The intellectual objective of this study was to understand whether online social networks foster learning, the invention of new workplace practices, and the sharing of valuable information, and if so, how they do it. Most of the previous studies regarding professional online social networks pertain to the implementation of such software rather than its overall effects on employees' learning. The literature review addresses this gap in scholarship in greater depth.

Research Question

A study's research question should reflect what the researcher wants to understand from the study (Maxwell, 2005). The primary research question for this study is: “**what** are instructional designers learning and sharing from being members of the Yammer group?” This question arises from the belief that while professional online social networks may allow users to share information such as their children's names or pictures of their pets, the users are also learning information valuable to the workplace. The belief that learning is taking place in this context is based on social learning theory, which indicates that learning happens through interactions with others (Bandura, 1977). More specifically, it is believed that the interactions

facilitated by Yammer provide a fertile ground for this type of learning, since the interactions are largely in the form of posts and replies.

About the Pilot Study

In the spring of 2013, I conducted an Institutional Review Board (IRB)-approved pilot study to determine what instructional designers were learning from membership in professional online social networking groups. I undertook this study while enrolled in INSYS 574: Applied Qualitative Research for Work Practice, Innovation, and Systems Design, under the supervision of Dr. Heather Toomey-Zimmerman. The pilot study served as practical training for applying qualitative research designs and conducting research. While the pilot study was based on social learning and informal learning theories and roughly approximated an ethnographic-qualitative approach, it was less interpretive by nature; rather, the primary focus of the pilot study was the practice of data collection. Little attention was paid to following data collection protocols, such as Seidman's (1991) qualitative interview guidelines and a clear understanding of the essence of the experience (Moustakas, 1994b).

Though the pilot study did not attend closely to interpretation, it did teach me how to effectively create and utilize data collection plans, interviews, and observation guides (Glesne, 2011). I created many of these documents in advance of the study. One of the most pronounced advantages of creating these documents ahead of time was the ability to pull them from my research toolbox as I needed them, thus preventing me from needing to spontaneously determine interview questions and observation ideas. The pilot study participants were found via invitations sent out to group members based on their participation in the Yammer group. Those who posted most frequently were invited via an email that explicitly stated the purpose of the study and the

participation requirement: one interview of about 30-40 minutes in length. Interviewing was a rewarding experience for me as it was the first opportunity I had to collect data using rented equipment. Ultimately, the pilot study included four interviews (Appendix A) that were recorded and then transcribed. At the time of my original analysis, I believed I was making observations (reviewing interactions among users in the Yammer group). I now better understand my approach to have been document analysis, as I was examining extant documents rather than observing lived action as it occurred. This pilot study helped me shape my current approach to conducting research. The findings of the pilot study have also led to a conference presentation and publication (Argondizza & Wilson, 2014), both of which have allowed me to obtain feedback that has improved the design of the study going forward.

Chapter 2

Literature Review

According to Butin (2010), “The key is to examine the vast majority of research in your specific dissertation area, and understand the issues that surround it” (p. 69). Accordingly, this literature review focuses on publications relevant to online social networks in education, Yammer, instructional design in higher education, and informal learning in the workplace. Support for this study is found in literature based on related research in the areas of online social networks, instructional design, and learning in the workplace. This review also argues for the unique nature of the proposed research, as is part of a literature review’s purpose (Butin, 2010). Moreover, since a literature review should discuss the themes and trends within the literature (Walliman & Buckler, 2008), this chapter outlines themes and trends along with their relationship to this particular study. Finally, a literature review should be expansive, considering both empirical research and theoretical principles that are both directly and peripherally related to the current study (Glesne, 2011). For this reason, this review includes information not only about Yammer, but also on online social networks more broadly.

This chapter’s literature review starts with a broad look at these fields then hones in on the pieces most relevant to the completed study. The review begins by looking at instructional design in higher education, since the research population of the study is instructional designers at a major university. After that I address published work on Yammer, informal learning in the workplace, and finally online social networks in education. The theoretical framework for the proposed study follows the literature review, in which I discuss the theories suggesting that learning may be occurring within the online social networking group.

Instructional Design in Higher Education

Moskal (2012) in “Instructional Designers in Higher Education,” a University of Nebraska published dissertation addresses instructional designers in higher education. This dissertation looks at the “preparation of and competencies of instructional designers and the needs of institutions that employ them” (Moskal, 2012, p. 10). The sample for this study was “seven instructional designers and three supervisors of instructional designers across six institutions” (p. 25). Interviews were used to collect data from the participants. After analyzing interview transcripts, Moskal found five themes for the instructional designers experience working in higher education: “flexibility; moral purpose; relationship building; time and project management; and ongoing professional development” (p. 65). Relationship building and professional development directly tie into the proposed study on the Yammer group. While the relationships discussed in Moskal are solely between instructional designers and faculty, the Yammer group gives instructional designers to form professional peer-to-peer relationships. Moskal also points to instructional designers as seeking online sources such as blogs, webinars, and listservs as for professional development. My study helps fill this gap, exploring the online social interaction of instructional designers and its contribution to the designers’ professional development. For example, one participant “recognized the need for ongoing professional development. He participated in webinars, conferences, online training opportunities, and workshops while he kept current with trends and research through blogs, listservs, books, and online journal subscriptions” (p. 91). I highlight this as evidence that instructional designers are seeking online sources such as blogs as professional development sources.

Gauthier & Jack (2014) in *The Professor and the Instructional Designer: A Course Design Journey* offer a case study in which an instructional designer at Dartmouth College,

Adrienne Gauthier, and Professor Thomas Jack work together to redesign a biology course (Gauthier & Jack, 2014). The case study looks in detail at instructional design work in higher education by discussing the process and results of redesigning a lecture-based biology course. Instead of being published in a traditional academic journal, this case study was posted on The Academic Commons as “a venue for exchanging ideas about the strategic integration of, pedagogy, and technology in liberal education” (“The Academic Commons | for the liberal education community,” 2016). The course evaluations revealed a lack of student engagement; the students felt the course was dominated by presentation and lecture formats that did not individually engage them during class. Admittedly, “Prof. Jack did not know how to efficiently redesign the course” (p. 2) and began to seek help at the Educational Technologies group (Gauthier & Jack, 2014). While there he began working with Adrienne Gauthier on ways to improve the course. The professor was seeking help to “redesign his course to incorporate active learning and student-centered approaches with the end goal of increased student satisfaction” (p. 2). To accomplish this, Gauthier & Jack began by using the practice of backwards design, an approach that first identifies what the instructor wants students to be able to do by the end of each lesson then structures the lesson according to that objective.

The overall course redesign included new items for the instructor and students. A pre-class activity was created for students that included watching short 5-15 minute videos to give students initial exposure to the week’s topics. The instructor was able to review the student performances of the pre-class tasks, identify the muddiest point answers, and construct a plan to address those topics for the next class (Gauthier & Jack, 2014). They also implemented some in-class team work through a Think-Pair-Share/Peer Instruction assessment of lectures, along with team problem-solving sessions (Gauthier & Jack, 2014). Though these changes are offered as information in the article, but the authors never mention the techniques used before the redesign.

It would have been good to see the previous course model to compare and identify the changes and improvements.

Gauthier & Jack (2014) use an evaluation for their findings and to measure the results of their BIO 11 redesign intervention. According to their results, final exam performance went from 68% median score in 2011, to 74% in 2012, and to 91% in 2014. These results are offered strictly as a direct causation with no account for any other changes which may have occurred or extraneous variables. McMillan (2012) states an important reason for identifying extraneous variables: “An extraneous variable affects the independent variable but is either unknown or not controlled by the researcher” (p. 41). The authors only attribute the raise in text scores to their redesign and completely ignore another other factors that may have affected the test scores. In addition to the test scores, surveys were used to collect students’ “reflections on the overall course structure, benefits and difficulties in the course due to the course structure/activities, how the class changed attitudes on the subject, what students will take away from the course, and how they would describe the course to friends” (Gauthier & Jack, 2014, p. 7). This end of term survey revealed that all students showed either great or good gain in enthusiasm for the subject, in interest in discussing the subject area with friends and family, in their confidence that they can do the subject area, and in their comfort level in working with complex ideas. Again there is no thought given to extraneous factors, which may have lead to these gains. For instance, the professor may have had more enthusiasm, as this was the first implementation. How will grades and student satisfaction look after five years? Would this ever work again? I believe a longer look at results from collecting data after a few offerings of the course is in order. If after, say, five course offerings, the results are the same, then they cannot be concluded an odd occurrence. This kind of long-form study would also allow for turn around time if the results are very poor. Still, overall Gauthier & Jack (2014) bring forward the important details of what an instructional

designer in higher education may do in their daily work. However, these details are left out of the other literature pieces listed here regarding higher education.

Terlouw (1997) in *Instructional Design in Higher Education* focuses on instructional design work at colleges and universities. The focus is a case in which a lecture-based course was changed “into a problem-solving course with project groups” (Terlouw, 1997, p. 342). The overall findings suggest two instructional paradoxes: (1) “Instructional improvement, a student-oriented goal, is only achieved through work toward curriculum revision, course revision, and teaching techniques,” and (2) “In order to be effective and efficient, faculty-centered activities need clear goals, a structural availability of financial and human resources” (p. 342). These paradoxes are examined at the administrative, curricular, and unit levels. Though Terlouw (1997) provides a useful discussion of instructional design, and in particular, sequencing learning in a course (p. 358), course assessment and evaluation (p. 359), and instructional goals and objectives (p. 360), he fails to examine the many technological challenges faced by present-day instructional designers. For example, only two entry-learner characteristics are mentioned: “(a) cognitive characteristics like capacities, learning style, available knowledge, and available skills, and (b) affective characteristics like motivation and self-concept” (p. 358). In looking at only these two characteristics, the publication neglects the importance of students’ so-called “technical characteristics,” or students’ abilities to interact with technology and their various technical preferences in doing so (Tissington & Senior, 2011). The publication’s failure to address social learning through social media represents another gap in the literature at large that my study fills.

As the above sources suggest, there has been limited research on instructional design in higher education (Moskal, 2012; Terlouw, 1997). Taken together, Moskal (2012) and Terlouw (1997) provide a glimpse into the work of instructional designers in higher education.

Instructional designers are shown building relationships with faculty (Moskal, 2012), but their

online social interaction among peers must also be examined. The five themes of instructional design in higher education (Moskal, 2012) offer insight into the responsibilities of being an instructional designer in higher education. Similar job responsibilities may be shared with instructional designers. Terlouw (1997) offers a look at the responsibilities of instructional designers in higher education, which may be similar to the responsibilities of instructional designers in the Yammer group.

Yammer

Some literature addresses Yammer specifically from both business and higher education perspectives. I focus on this literature here as this research was relevant to my study.

Nash (2011) in “Yammer On” briefly discusses Nationwide Mutual Insurance’s use of Yammer. To help increase employee productivity, Nationwide Mutual decided to implement a private social network solution. This trade journal publication isn’t based on research but describes the reason and briefly addresses the attitudes of the implementation. Yammer was a replacement for the system Lotus Connections, now called IBM Connections (IBM Connections, 2014). The primary purpose for implementing a social network was to connect people (Nash, 2011a). Nationwide made participation voluntary, believing that forced socialization wouldn’t work. Nash writes, “You cannot mandate the use of these tools. It goes against the concept” (Nash, 2011a), which is similar to the philosophy embraced by the online social network group. According to the article, one approach Nationwide took was using trainers to help employees use the tool. Although this article may be outdated because it is from 2011, I disagree with this idea as a waste of resources. Today (2014), Yammer’s interface is much like the interface of

Facebook with its 1.28 billion users as of March 2014 (Wikipedia, 2014), lessening the learning curve for users. As shown in the “Why Yammer at Penn State” page, “I suggested that if people use Facebook, they can easily use Yammer” (“Yammer | Why Yammer at Penn State,” n.d.).

Raish (2013) in “Yammer in the Classroom: Staging a traditional face-to-face debate in an asynchronous distance environment,” looks at one example of using Yammer in an online higher education course. This debate usually takes place in a discussion forum in ANGEL (Raish, 2013). Raish (2013) instead used Yammer to host a technical neutrality debate over the course of one week. Benefits found from the use of Yammer included: (1) participants faced little learning curve in learning how to use Yammer and (2) the fact that Yammer was distinct from ANGEL. Raish (2013) believes Yammer’s similarity to Facebook is a benefit because “the students were able to pick up on how to use Yammer at a rapid rate of adoption and this seems due to the fact that Yammer incorporates several of the same features as Facebook and Twitter, such as tags and like buttons” (Raish, 2013). In contrast with my study, Raish (2013) takes a positive approach (Butin, 2010), as no mention is made of interaction with research participants. The work instead serves to reflect on what was observed.

Pinto (2014) in “The Use of Yammer in Higher Education: An Exploratory Study” looks at projects teams using Yammer in a higher-education marketing course. Four sets of research questions were investigated:

1. What communication methods were relied upon for group work? How effective was the communication within each team?
2. What Yammer features were most used by students?
3. What were students’ perceptions of online collaboration?

4. What was the relationship between Yammer usage and communication effectiveness toward online collaboration? (p. 7)

The study was conducted using a mixed-methods strategy. At the semester's close, students were recruited to participate in a survey, which was done by 38 students, using a 1-5 Likert scale. In exploring the first set of questions, Pinto found that students communicate "mostly face-to-face, with a mean of 4.68; texting came next at 4.63; followed by email at 3.59; and finally, phone communication at 3.16" (p. 14). The results of the second set of questions showed the most-used feature was: "updates and posts to the entire class" (p. 14); followed by the chat feature (10.6%); then the team note feature (10.6%), praise (7.9%), polls (7.9%), and events (5.2%) (p. 14). In investigating attitudes towards Yammer, Pinto (2014) found that students did not feel Yammer helped facilitate creative discussions and failed to see it as helpful with group projects. In fact, 54% of the class felt "Yammer was a waste of time" (p. 15). Online collaboration results showed students felt that face-to-face meetings helped most at a rating of 3.34, while those who felt they had trouble conveying ideas in an online format rated 3.34 on the Likert scale. The last set of research questions indicated "a significant positive relationship between the amount of Yammer usage and communication effectiveness" (p. 16). The qualitative portion of the study generated both negative and positive comments regarding Yammer. Some students felt it "was a waste of time" (p. 16), while some believed it helped them to coordinate an entire project. The results of Pinto's study show that Yammer has collaboration benefits, although attitudes among participants can be mixed. This same collaboration may be taking place within the Yammer group. It appears as if Pinto (2014) sees organizations' communication needs and use of social networks as a basis for social networks' use in higher education.

Pinto (2014) considers Yammer use in higher education, using qualitative data in the form of quotations from interviews. The lack of a detailed qualitative methodology, however,

offers no insight into the data collection process. Simply mentioning interviews leaves qualitative researchers without information on the interview protocol followed and with no explanation regarding the absence of observations and document analysis. My study doesn't include the workplace, but Pinto (2014) specifically address the use of social media in the workplace, arguing:

Organizations depend more than ever on the ability of their workforce to master the means to most effectively communicate and engage in online collaboration activities. Social media technologies are being called on to help facilitate that process in organizations today. One social media technology that is making inroads into numerous industries, including higher education, is Yammer. (p. 1)

Pinto's argument for social media in the workplace connects with my study, along with the research founding collaboration a benefit of Yammer, as instructional designers in my study's group may bring different skills together to accomplish common tasks.

Rierner, Scifleet, & Reddig (2012) in "Powercrowd: Enterprise Social Networking in Professional Service Work: A Case Study of Yammer at Deloitte Australia" look at Yammer in a professional context, conducting a genre analysis to generate a list of communication genres present on the Deloitte Yammer network in Australia. Deloitte provided posts from September 2008 to April 2011, totaling 1, 985 messages, for examination (Rierner, Scifleet, & Reddig, 2012). No other form of data collection was used. The analysis yielded the following communication genre categories: discussion; sharing; updates; problem solving and advice; social and praise; idea generation and other (p. 9). These categories are applicable to my study's group

interactions. In addition, communication and social interaction may be fertile ground for social learning.

Informal Learning in the Workplace

Le Clus (2011) in “Informal Learning in the Workplace: A Review of the Literature” summarizes existing research. The review is divided into two sections: (1) Learning in the workplace, and (2) Informal learning: past, present and future. Le Clus (2011) differentiates among informal, non-formal, and incidental learning, defining informal learning as “represented by a range of strategies including conversation, social interaction, teamwork and mentoring” (p. 360) and describing non-formal learning as “learning that is not highly structured or classroom-based, not formally assessed, and does not lead to formal qualifications” (p. 363) He defines incidental learning as “unintentional or unplanned learning that results from other activities in the workplace.” The primary findings are that “informal learning can be planned but is often spur of the moment. Informal learning may occur through networking with other employees, or a particular person may be identified as being an ‘expert.’” Overall, Le Clus (2011) offers a valuable look at literature on informal learning in the workplace. Le Clus (2011) provides an insightful look into informal and incidental learning, but in doing so, he focuses less on the workplace as a context and setting.

In “Informal Learning in Organizations,” Bell (1977) takes a non-empirical approach, comparing formal and informal learning while discussing the advantages of informality, conducive learning environments, and social stimuli for learning. Bell (1977) offers a systemic approach when looking at formal learning and informal learning, stating that formal learning “activities may be viewed as the bricks fused into the emerging bridge of personal growth with

the mortar of informal learning” (p. 281). Advantages of informal learning include less planning and coordinating than that which is involved in performing an instructional design process, as well as informal learning’s ability to occur with fewer resources (Bell, 1977). Informal learning is found to be most suitable when organizations “diagnose informal learning opportunities within the organizational setting, removing punishing barriers to learning” (p. 281). Moreover, the stimuli for informal learning are an individual, a superior, subordinates and peers within the workplace or professional organizations (Bell, 1977). The Yammer group in my study similarly has individuals, subordinates, superiors, and peers within its membership, all of which may act as stimuli for informal learning. The Yammer group also serves as an example of how an organization diagnoses something as an informal learning opportunity to enhance informal learning.

Boud and Middleton (2003) in “Learning From Others at Work: Communities of Practice and Informal Learning” look at learning from coworkers in a professional organization. The study was conducted jointly by the University of Technology, Sydney, and a government provider of vocational education and training (Boud & Middleton, 2003). This qualitative study relies on data collected during 45-minute semi-structured interviews with each member of a workgroup. The findings show three categories of learning: (1) Mastery of organizational processes; (2) Negotiating the political; and (3) Dealing with the atypical. Boud and Middleton (2003) offer little discussion of technology in the workplace and how it may be used by people, saying only that “there were examples of virtual networks, such as the HR section manager’s e-mail group, which were not geographically bounded” (p. 200). My study will add to this research, bringing the modern tool of Yammer and how it may harbor informal learning into the picture.

Brotherton (2011) in “Social Networks Enhance Employee Learning” details the results of a survey called “How Informal Learning Is Transforming the Workplace” by the CARA Group, which was sent to 2,000 learning professionals (Brotherton, 2011). The results show 60% work for organizations have internal online communities (p. 18), and 91% believe that informal learning is occurring in the workplace (p. 18). The university has created the online community found within the Yammer group.

Rothwell & Kazanas (1990) in “Informal Learning in the Workplace,” examine workplace learning outside the traditional training room. Members of the American Society for Training and Development (ASTD) were mailed a survey pertaining to informal learning in the workplace. This study found that 29.7% of employees learn by advice provided by co-workers, and 27% learn by watching others. Table 1 shows the findings most relevant to the current study regarding online social networking groups. These statistics may still be accurate, though learning may be occurring through the use of online social networking groups, such as the group described in this study.

How employees learn	Percent
Advice provided by coworkers	20.6
Reading about the work task when time allows	5.3
Watching others	18.7
How employees learn to train others without classroom training	
Advice provided by co-workers	29.7
Watching others	27.0

Table 1. Findings from Rothwell & Kazanas’ study on informal learning in the workplace.

Michael Eraut (2011 & 2004) in “Informal Learning in the Workplace” and examines three questions: first, what is being learned at work; second, how is learning taking place; and

finally, what factors affect the amount and direction of learning in the workplace (Eraut, 2004). Eraut (2004) collected data through interviews and observations. No mention is made of sample sizes; however, the interview process is well-detailed. In the 2004 study, the interviews focused “on how people learned to do what they were then doing” (Eraut, 2004, p. 249). To accomplish this, Eraut (2004) asked participants to “describe their work in a very detailed manner, including all the ordinary everyday aspects, and to recall the activities of the previous and current weeks” (Eraut, 2004, p. 249). In addition, Eraut (2004) asked about the types of knowledge, skills, and abilities required for the work and how they were obtained. The results of the research question “What is being learned in the workplace?” were “presented as a typology we view more as a heuristic for use in research” (Eraut, 2004, p. 265). “Teamwork, and Decision Making and Problem Solving, Task Performance, Role Performance, Awareness and Understanding, Academic Knowledge and Skills, Judgment, and Personal Development” (Eraut, 2004, p. 265) were found to be part of learning in the workplace.

The results of the research question “How is it being learned?” showed participation in group activities, and working alongside others as avenues for learning in the workplace. In his subsequent study, Eraut (2011) looks at two British projects offered by the Economic & Social Research Council (ESRC) on learning in the workplace (Eraut, 2011). The first project focused on mid-level employees, meaning those who had been in their positions for a while, though no time range of service is offered, while the second project looked at workers in the beginning stages of their careers. Eraut (2011) found that consultation and collaboration within the working group and consultation outside of the working group (Eraut, 2011, p. 8) were taking place. When he looked further into the modes of learning at work, he concluded that working together “enables someone to learn by asking questions and receiving feedback about shared activities and events” (Eraut, 2011, p. 9). Additional sources of learning in the workplace include: working for

qualifications; short courses; special events; materials; organized learning support; the challenge of the work itself; and life outside work. Yammer serves as a platform for someone “to learn by asking questions and receiving feedback” (Eraut, 2011, p. 9) The two research questions, “What is being learned at work?” and “How is learning taking place?” are similar to the question posed in by the proposed study and this piece of literature can offer valuable insight. The heuristic for use in research shows “possible aspects of learning” (Eraut, 2011, p.265), the group allows for awareness and understanding through users posts and replies, it can be seen as a location for personal development as users can post questions, seek information in existing postings, and share files. Furthermore, teamwork develops naturally as geographic limitations are non existent allowing broader knowledge and experience in teamwork. It is also a place where teams can meet, collaborate, and share information.

There is no mention of OSNs or other technologies in these studies as there is in my study.

Online Social Networks in Education

Numerous researchers have looked at OSNs and learning. This section will look at those publications most closely related to my study, demonstrating both the relevance of my study and any identified gaps in the literature in online social networks and learning.

Greenhow’s (2011) “Online Social Networks and Learning” may be one of the closest pieces of literature to the topic of this proposed study. In this study, Greenhow (2011) interviewed high school and college students concerning their use of online social networks over a period of two and a half years. A total of 946 students were interviewed, and all of the students’

postings were also reviewed. It was found that social network sites can directly and indirectly support learning along with stimulating a sense of civic duty (Greenhow, 2011). As the focus of the proposed study is learning, I will only detail this study's findings regarding learning and not civic duty.

Students used their online social networks to fulfill social learning functions within and across informal and formal learning spheres of activity. These social learning functions included:

- obtaining validation and appreciation of creative work through feedback on their profile pages;
- peer/alumni support – that is, reaching out to former classmates to give or receive help in managing the ups and downs of high school or college life; and
- help with school-related tasks (p.7)

Since learning is supported by online social networks (Greenhow, 2011), it is possible that it is occurring in the Yammer group as well. The proposed study will not survey social network users as Greenhow did, but it will look for learning within an instructional design group in Yammer using an interpretive qualitative method. Greenhow (2011) looks at “cognitive surplus,” or “people volunteering their time, interest, and ingenuity online to participate,” as a result of online social networking. This university, too, can benefit from the cognitive surplus created by the Yammer group. Greenhow argues that the facilitation of human relationships and connections via social media can bring about great organizational advancements including: “accelerating information sharing; accessing more diverse perspectives; stimulating collaborative knowledge building; and coordination of resources and actions” (p. 6). This finding helps to establish the need for a closer examination of how the university may be benefitting from the Yammer group.

Barnes (2012) in her book *Socializing the Classroom: Social Networks and Online Learning* discusses social networks and online learning. No research study with participants was conducted; instead, Barnes looked at existing research and literature relevant to online social networks in education (2012b). Three chapters of particular interest are Chapter 1: What Are Social Media (Barnes, 2012c); Chapter 4: Structure of Networking Communities (Barnes & Jacobs, 2012); and Chapter 11: Social Capital: The Goal of Social Networking (Barnes, 2012a). Barnes (2012c) defines social media as “sites such as Facebook, Myspace, Second Life, and YouTube” (p. 1). Moreover, some of the book’s content and ideas may translate to socializing in the workplace. Although more about classroom use of social networks, one chapter in Barnes’s text is dedicated to networking communities. Forming a virtual community requires four elements according to Barnes: (1) some level of interactivity; (2) a diverse group of communicators; (3) a location for interaction; and (4) some level of continuous membership (Barnes & Jacobs, 2012). Barnes (Barnes, 2012c) also points out the need for research on social networks and learning. Barnes argues:

Research on social networking includes social networking privacy issues (Barnes, 2006; Gross & Acquisti, 2005); identity (Livingstone, 2008); space (Papacharissi, 2009); knowledge transfer (Cheuk, 2007); social norms (Kazmer, 2007); narcissism (Buffardi & Campbell, 2008); interpersonal impressions (Tong, Van Der Heide, Langwell, & Walther, 2008); social network analysis (Garton, Haythornthwaite, & Wellman, 1997); adolescent social networks (Alison Bryant, Sanders-Jackson, & Smallwood, 2006); uses and gratifications and civic discourse (Byrne, 2007). None of these articles focuses on the issues of social networks and education. (p. 13)

From this it can be seen that learning in professional online social networking groups had not previously been researched, allowing my study an opportunity to add to the literature and research.

The goal of social networking is to build social capital (Barnes, 2012a). Two types of social capital are defined: bridging, or bringing together those who were separate, and bonding, or bringing those with an existing connection closer together. The social capital chapter also discusses the relationship among the Internet, games, and social capital, and social capital in education. According to Barnes, “The key characteristics needed to build social capital are reciprocity, trust, shared norms, and values” (Barnes, 2012a p.166). The Yammer group is an opportunity for the university to build social capital among instructional designers, who come from different educational backgrounds and work in separate divisions.

Tissington and Senior (2011) in *Social Networks: A Learning Tool for Teams?*, looks at college students’ use of Facebook. 290 students from 57 countries were surveyed about how they interacted with social media (Tissington & Senior, 2011). Not only do the authors offer data from their study; they also point towards possible implications for the workplace. This article suggests that “undergraduates-who are in essence the workforce of the future-are immersed in a world for trans global computing from birth, have not lost the evolutionary urge to socialize with each other” (Tissington & Senior, 2011). The study revealed that 95% of students use Facebook. This familiarity with Facebook will lower any learning curve the students may face if they come to use Yammer in the workplace.

Greenhow and Robelia (2009) provide in “Informal Learning and Identity Formation in Online Social Networks” a qualitative study examining how high school students from low-income families use MySpace, for informal learning (Greenhow & Robelia, 2009). This study looks at informal learning in a way that is highly relevant to the proposed study. The authors describe the primary goal of the study as “to illuminate students’ activities within their online SNS [and to] determine what if anything students were learning in these out-of-school spaces and how they interpret their experiences” (p. 122). The qualitative study consisted of 11 participants ranging in age from 17 to 19 years old. Semi-structured interviews, think-alouds, and content analyses of participants’ MySpace pages were the forms of data collection used. The results showed “students identified several ways in which they used their SNS to vent about or get help on school-related issues or assignments” (p. 128). Students also mentioned how they used MySpace for “study groups, assigning tasks, checking progress, and clarifying teacher instructions” (p.129). Students also engaged in self-discovery and self-presentation as there was little exaggeration on the sites. In addition to their study findings, Greenhow and Robelia (2009) offer insight into what informal learning is from several perspectives. For example, the authors cite the National Science Teachers Association (NSTA), which defines informal learning as that which:

- compliments, supplements, deepens, and enhances classroom studies;
- emphasizes creativity through voluntary participation;
- does not use a formal set of guidelines, objectives, or curriculum to guide interactions between participants or state what participants should gain from interaction with media;
- expands the affective, cognitive, and social realms;
- presents opportunities for mentors, professionals, and citizens to share time, friendship, effort, creativity, and expertise

- allows for different learning styles and multiple intelligences and offers alternatives for non traditional and second language learners (p.122).

Informal learning is defined by Greenhow & Robelia (2009) as spontaneous, experiential, and unplanned.

In conclusion, existing research supports my study and identifies a research gap that my data and conclusions help fill. The fact that Yammer members are communicating on various levels (Riemer et al., 2012) means there is an opportunity for social learning to take place. Additional Yammer research (Nash, 2011a; Pinto, 2014; Raish, 2013) looks at Yammer in the contexts of employee usage and higher education class usage, and shows individuals are able to use Yammer and interact with others without instruction. Informal learning is taking place in the workplace (Bell, 1977; Boud & Middleton, 2003; Eraut, 2004, 2011; Le Clus, 2011; Rothwell, William & Kazanas, 1990), which is part of the theoretical framework for the proposed study. Yet current research on informal learning in the workplace (Bell, 1977; Boud & Middleton, 2003; Eraut, 2004, 2011; Le Clus, 2011; Rothwell, William & Kazanas, 1990) examines learning without looking at OSNs in the workplace. For example, research on instructional design in higher education (Moskal, 2012; Terlouw, 1997) examines course design concerns and provides a look at the work of instructional designers. These studies do not mention peer interaction or OSNs. The research that has been done on social networks in education (Barnes, 2012b; Greenhow, 2011; Greenhow & Robelia, 2009; Tissington & Senior, 2011) has taken place outside the professional workplace, looking at K-12 and higher education environments. My study brings these two existing strands of research together, looking at learning in a professional OSN in higher education, a topic not covered in the literature and research. My study fills the literature gap and contributes new research to the field. The research question “what are instructional

designers learning from using the Yammer group?” isn’t in the literature at this time.

Organizations worldwide may face the decision to subscribe to Yammer or not. My study can help answer that question, especially if they are looking at social media to enhance learning. In addition my study can add to social learning research, as social learning in the context of professional online social networking groups within the instructional design community of practice isn’t addressed. In addition my study offers new insight into informal learning in the workplace with a focus on how higher education instructional designers use Yammer and what they may be learning from the experience.

Theoretical Framework

The theoretical framework for this study has its origins in social learning theory (Bandura, 1977) sociocultural learning theory (Rogoff et al., 1995); Vygotsky’s Zone of Proximal Development (ZPD) (Vygotsky & Cole, 1978); and informal learning (Bransford et al., 2012).

People learn from other people (Bandura, 1977; Miller & Dollard, 1941; Vygotsky & Cole, 1978). This can take the form of observation as proposed by Bandura and Vygotsky, or social interaction and outside influences as suggested by Vygotsky’s ZPD.

Social learning theory holds that people learn primarily by observing and modeling others’ behaviors (Osmond, 1999). If social learning theory is correct, humans have always learned from each other. I believe social learning may be inherent to human nature as the most intelligent animals are those that live in social groups (Russell, 2014). I also believe it can occur at any time and with little instructional preparation (Bransford et al., 2012), as with informal learning.

If individuals can learn by observation (Bandura, 1977; Miller & Dollard, 1941), it stands to follow that within an online social network, or a network in which users are observing others' (primarily text-based) interactions, users have opportunities to learn. According to Bandura, social learning can take three different forms: when learners have a live model of an actual person or actual people; when learners have a symbolic model such as a model given in mass media; and when learners have a model created via verbal instruction (Bandura, 1977). The symbolic model is most applicable to this study, as viewing others' posts and learning from the posts' subject content and responses is considered symbolic. According to Bandura (1977):

Unlike their predecessors, who were limited largely to familiar subculture sources of modeling, people today can observe and learn diverse styles of conduct within the comfort of their own homes through the abundant modeling provided by the mass media. Models presented in television form are so effective in capturing attention that viewers learn much of what they see without requiring any special incentives to do so. (Bandura, Grusec, & Menlove, 1966, p.25)

It is this symbolic model based first on television (Bandura, 1977; Bandura et al., 1966) that I believe is relevant to the Yammer group. Yammer constitutes a new form of mass media. The posts, replies, post attachments, file sharing, polls, and a praise for others feature offered are also symbolic models from which individuals can learn.

Another important contributor to this theoretical framework is Les Vygotsky, who developed the Zone of Proximal Development (ZPD). The ZPD suggests that people can only learn so much independently and ultimately require some outside intervention, such as interaction

with their peers, to advance (Vygotsky & Cole, 1978). This suggests that the social interaction that occurs on Yammer may lead to learning. Instructional designers may post questions or ideas, which can lead to further exploration of a particular topic through replies and additional posts by colleagues that assist members in reaching higher levels of cognitive processing (Figure 2). The social basis of the computer is that it can be a venue to connect users (Egert, 2012); thus, the Yammer group's connection of instructional designers can foster social interaction, which may lead to social learning.

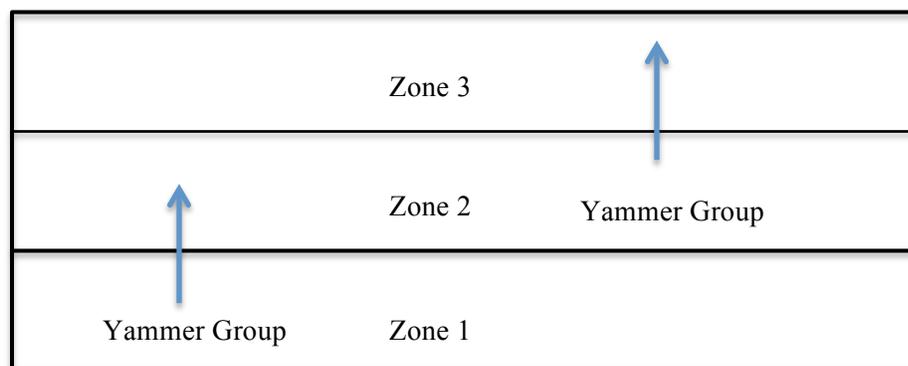


Figure 2 Vygotsky's ZPD and the influence of the Yammer group on learning

Learning is aided by social interactions among individuals with diverse backgrounds and experiences (Rogoff et al, 1995). The online social networking group allows exactly these types

of interaction to take place. Although employed by the university and thus assumed to hold certain qualifications, instructional designers and those who share in designing learning environments, come from different backgrounds. More specifically, they may have different educational, professional, and cultural backgrounds, which they bring to the online social networking group. It is this diversity (Rogoff et al., 1995) fostered by the online social networking group's framework that creates rich interactions and ultimately aids learning. Put differently, the broad reach of the Yammer group allows interactions among the many organizational cultures spread across the university. An organizational culture "is the set of shared, taken-for-granted implicit assumptions that a group holds and that determines how it perceives, thinks about and reacts to its various environments" (Kreitner & Kinicki, 2001 p. 68). The different learning design groups found at the university originate in diverse organizations such as a business college, an online university, educational technology support departments, and an agricultural sciences college. Prior to the formation of the Yammer group, daily interaction among these cultures may have occurred only at in-person meetings. The Yammer group allows these cultures to mix on a daily basis at any time and in any place, as seen in Figure 3. This social interaction among organizational cultures may lead to new ideas, processes, and innovations.

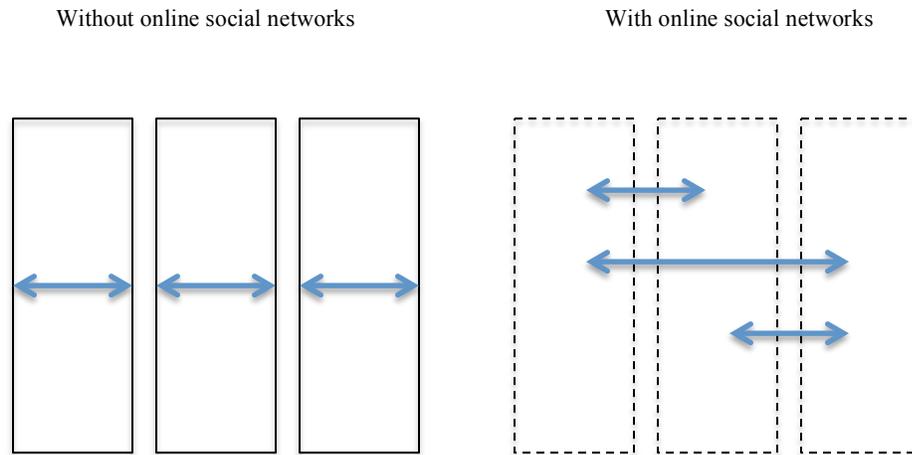


Figure 3 A visual depiction of new interactions among cultures made possible by online social networking

This dissertation also offers an informative look at implicit and informal learning with relation to the study. Implicit learning, or the acquisition of information without conscientious or with little effort (Bransford et al., 2012), is closely intertwined with informal learning (Bransford et al., 2012); thus, implicit learning is crucial for understanding informal learning in the workplace. When reviewing different postings, users may absorb pieces of information that they recall only later. Suggesting that such implicit learning can be connected with social media, in *Learning Theories: A Decade Towards Learning*, Bransford (2012) writes: “A substantial portion of learning from media and technology is implicit” (Bransford et al., 2012; p. 211). Non-formal learning, somewhat different than informal learning, refers to a learner seeking information or knowledge with a particular objective in mind (Greenhow & Robelia, 2009). Non-formal learning may also be present in the Yammer group. Group members may be reviewing or posting in the group to learn something specific or solve a certain problem.

Chapter 3

Methods

This chapter focuses on the study's research methodology by describing its data collection and analysis methods (Butin, 2010; Walliman & Buckler, 2008). The overall research design including data collection and data analysis are detailed, stating what was done to complete the research. Data collection consisted of interviews (Seidman, 1991), observations using think aloud protocol (Hannibal, 2011), and document analysis (Glesne, 2011), which are detailed in this chapter. Each data collection technique will be detailed including how I proceeded with each backed with literature. These methods are supported by sample data collection guides in the form of appendixes. A data analysis plan (Baptiste, 2012) is also detailed. Baptiste's rendition of Moustakas (1994) phenomenological thematic analysis was the preferred method for this study. Each of the four steps along with how I completed them is shown in this chapter. A primary part of the data analysis was the coding I conducted using Auerbach & Silverstein (2003) analytical framework, also detailed in this chapter. Details are also offered on transcription and the use of MAXQDA in coding. Finally a researcher identity is offered, where I discuss my own background including professional experience and education with regards to this study.

Research Design

This section of the dissertation details interviews, observations, and document analysis designed specifically for this study, along with providing supporting documentation (appendices) to aid in their completion. In addition to discussing traditional quantitative research

methodologies, this section addresses OSN research issues in light of the recent recommendations that follow below:

In particular we maintain that future OSN research has to (1) be user-centric rather than user-agnostic, (2) abandon the traditional treatment of OSNs as static networks and become serious about dealing with full-fledged dynamic nature of actual OSNs, and (3) give up on traditional descriptive modeling approaches that have proven to be little more than relatively uninteresting data fitting exercises. (Willinger, Rejaie, Torkjazi, Valafar, & Maggioni, 2010, p. 49)

This study addresses the above three suggestions for OSN research by seeking to understand individual experiences, rather than providing an overall social network analysis. As mentioned earlier, a phenomenological qualitative approach is desirable for this study, because my interest is the experience with learning of instructional designers in the Yammer group. This group was not designed for learning purposes, but learning may be occurring regardless. This is the basic phenomenon driving the study. A series of documents have been created to help collect data. These include interview guides, observation guides, and a data collection document. The study utilized interviews, document analysis, and observations to bring into focus any possible learning that occurs within the social network Yammer among instructional designers at the university.

The Research Population

In determining the research population, one must determine the members of the Yammer group. Group membership is not exclusive to instructional designers or learning designers,

though they are the primary population; those involved in creating learning environments at the university, such as supervisors and managers of instructional design projects, graduate students, and staff are also eligible to join the group. These individuals can be part of any number of communities within the university. Acknowledging the diversity of members, the description taken from the group's information page states that the group is an open group for those engaged or interested in learning designs, and encourages researchers to think of it as a space where questions can be asked of colleagues. As of November of 2014, when the data was collected, the Yammer group currently had 511 members.

Data Collection

Data was collected via interviews, observations, and document analysis to help achieve triangulation (Guba & Lincoln, 1994). Interviews (Glesne, 2011; Maxwell, 2005; Moustakas, 1994a; Seidman, 1991) allowed insight into the instructional design culture and how group members feel about the Yammer group's influence on their workplace practices. Observations (Glesne, 2011; Maxwell, 2005; Moustakas, 1994; Rossman & Ralls, 1998) were conducted in the group members' workplace while they are using the social media tool. Document analysis (Glesne, 2011) refers to a review of the users' posts to the group. Posts offer vital information about what individuals have learned; they also suggest individuals' varying levels of willingness to provide information and participate in the group, which is crucial if social learning is to take place.

Members of the Yammer group were invited to participate in the study via email (Appendix B). Those members who have been the most active in the group within the 3 to 6 months prior to the date of the email were invited to join. My rationale for this approach was the

notion that more active group participants would be a better, richer source of data than participants who only post infrequently. Active members offered more Yammer postings, which are a part of this study's triangulation and, more specifically, document analysis. It therefore made sense to seek participation from more active members. The Yammer posts would also offer more information for interviews as they could be used to elicit responses. The invitations detailed the study, provided the IRB number, and outlined participatory expectations. Those who accepted the invitation were interviewed and their postings observed to obtain relevant data regarding changes in workplace practices and overall awareness of new technologies and techniques as a result of being a member of the group. A total of 15 invitations were sent to maximize the number of potential respondents and ultimately research participants. Seeking to avoid over-saturation (Seidman, 1991), my ultimate aim was to have between 4 and 10 participants in the study. In the end a total of eight instructional designers accepted the invitation to participate in this research study, but only seven actively took part in the study, as the eighth participant was unable to meet due to conflicting scheduling. This participant offered to meet after the semester had ended, but then was still unable to meet. The participant population came from different parts of the university (see Table 2). The table excludes the pseudonyms to help protect participants' identities.

Participants	Location in the university
Participant 1	Information and Sciences Technology College
Participant 2	Educational Technology Support A
Participant 3	Agricultural Sciences College
Participant 4	Business College
Participant 5	Educational Technology Support B

Participant 6	Educational Technology Support C
Participant 7	Online University

Table 2. Participants and their work locations at the university

Interviews

Audio-recorded interviews focusing on particular topics are a critical part of the phenomenological research investigation process (Moustakas, 1994b). Interviews are important to such research since it is within interviews that participants have the opportunity to speak openly and to reflect on their experiences. In this study the interviews were conceived of as semi-structured conversations, not seeking an absolute truth, as in a positivist approach (Bulter-Kisber, 2010), but instead seeking an understanding of what is taking place. More specifically, according to Seidman (1991), the purpose of an interview is to understand an individual's unique experience. This study aims to understand an individual's experience within the Yammer group. Seidman (1991) offers a valid protocol or structure for conducting phenomenological interviews that the proposed study will follow. Seidman (1991) suggests three separate interviews: the first interview should focus on the individual's life history; the second interview should address the details of the individual's experiences; and the third interview should explore the meaning of these experiences. However variations of these can be acceptable "as long as a structure is maintained that allows participants to reconstruct their experience within the context of their lives" (p. 15). Due to the nature of this study, separate interviews weren't necessarily feasible or advisable. The subjects of this study weren't children, parents, or students. Their primary role is that of employee, and their time is sacred. It may be difficult to find the time to participate in three interviews and an observation.

Therefore only one interview was offered, focusing on: 1) Life History as Instructional Designer; 2) Details of the Yammer experience 3) Reflection on the meaning. Only active existing group members were invited for interviews. Potential candidates for interviews and observation were identified based on their active participation in the group. Those posting and replying most often within a three-month period were invited to participate in the study via private email invitation. An interview guide (see Appendix C) was used to guide the conversations and assist the researcher in conducting the conversations.

Interviews were conducted in a semi-structured style (Glesne, 2011). The semi-structured style allows for the interviewer to further explore answers given by participants. The first part of the interview consisted of standard questions asked of all candidates. Asking each individual what he or she has learned is not a narrow enough question and could lead to confusion, as it is not often easy to identify what one has learned. Therefore, questions focused on identifying changes in their practices and any awareness that resulted from their participation in the group. They were intended to identify new technologies, events, and instructional design techniques that have been discovered as a result of being a member of the online social networking group.

The interviews were also based on the document analysis data and were tailored to the respondents' different experiences. For example, the interview questions during the second round were based on the users' individual posts and their specific replies to other posts in the group. The research questions for this interview originate from the literature review and the researcher's reasoning (Glesne, 2011). The ability to offer flexibility in each participant interview was necessary to gain a deeper understanding of each individual's lived experiential responses and to collect the data necessary for the study's outcomes. The practice of eliciting responses was also

used during the interviews when participants were asked about their postings. By using their own posts I was able to begin a conversation around that particular post, bringing it into the interview and hoping to understand more about why they posted it. Participants were also asked about their responses to other postings as well, another form of eliciting response. The use of eliciting response within the interviews can help strengthen triangulation (Toomey-Zimmerman, 2014). Interviews were conducted in the offices of the participants in the traditional manner using a borrowed audio recording device called the Zoom Hi Audio Recorder.

Document Analysis

A review of the group's extant discussions was considered to be document analysis for the purposes of this study. Document analysis cannot be done arbitrarily but should be linked to the study's research question, theoretical framework, and supporting literature review (Butin, 2010). The objective of the document analysis was to generate interview questions, support or challenge interview data, and arrive at hunches (Glesne, 2011), as well as bring details of the interactions into the research.

The information, comments, and ideas that group members post offer insight into the kinds of information that is being shared, as well as the potential uses of the group and members' reflections on their practices. This information includes posts, replies, attachments, files shared, polls created or used, and praise for others, all of which are considered data for this study. The document analysis was conducted via computer by viewing the online social networking group. A document analysis guide (Appendix D) was used to help guide the data collection. I reviewed the various interactions of the group and took detailed notes on how these interactions occurred and the content shared during them.

The protocol set forth by Glesne (2011) was used to ensure sound document analysis. To begin, a focused historical search was conducted (p. 86). When reviewing the Yammer group, I looked at precisely what information was being posted that may have lead to learning. Posts and replies were reviewed for links, suggested technologies, and most importantly, questions and answers. After determining the focus, I delineated the scope (Glesne, 2011). Not every post was relevant to this study; only those suggesting changes in knowledge, behavior, or practices are considered desirable for this study.

The collection of this data was only possible by reviewing the Yammer group over the course of months. Since only participants' postings could be used, I used the advanced search tool to search within the Yammer group. Upon receiving participants' acceptance to this study, a pseudonym was assigned. A key was created linking participants' real names with their assigned pseudonym. This key was vital to the collection of data for document analysis; without it there would be no way of determining the participants' postings. The postings themselves gave insight into the information being shared and were part of the basis of the interview questions, as well as the basis of the observations. These postings were copied from the web browser into word documents (Appendix H), which could then be imported into MAXQDA for analysis.

Observations

Observations (Glesne, 2011; Maxwell, 2005; Rossman & Ralls, 1998) used in this study were made at the participants' workplaces. The observations consisted of watching participants while they review the group online and think aloud (Clark, 1997; Jaspers, Steen, van den Bos, & Geenen, 2004). That being said, the think-aloud method proposed by Jaspers et al. (2004) was only a guide; it was not followed precisely. The aim in this study is not to create a cognitive map,

but rather to develop an understanding of why and how participants reply to and read certain posts in the Yammer group. According to Hannibal (2011), “It has been argued that a well organized think aloud protocol session enables observation on behavior of test subjects” (p. 3), which is why a think-aloud session was suitable for observing Yammer use. Hannibal (2011) offers two techniques for this type of session: simultaneous verbalization, wherein subjects speak while performing a task, or retrospective reporting, wherein subjects describe task performance in the immediate aftermath (Hannibal, 2011). The think-aloud method can complement interviews and help strengthen triangulation (Hannibal, 2011). Think-aloud has a few advantages over retrospective reporting because it eliminates lack of memory and reduces fabrication. Studies have also shown simultaneous verbalization, also called concurrent verbalization, may slow down the thought process but “does not alter it fundamentally” (Hannibal, 2011, p. 3). This is important as the participants in this study were not asked to recall things from the past and told me what they are thinking and why with regards to the Yammer group. In addition, Hannibal (2011) offers an eleven-point protocol tool. Table 3.0 below shows the eleven-point protocol and how it was used for observations in this study.

Protocol Tool	Yammer Study
1. Use concurrent verbalization scheme to cancel out unintentional fabrication	Little fabrication was present when participants thought aloud while using the Yammer.
2. Aim at creating an instrument with high familiarity to test subjects	The tool primarily consisted of the Yammer group of which all subjects were active members.
3. Keep a strict and straight forward scenario	Participants were asked to verbalize aloud as

	they looked through the group as they would any other time.
4. Avoid distractions	Observations were conducted in separate rooms with laptop computers or at their work stations.
5. Conduct a pilot test	Each time the observation was conducted something was learned and improved upon in the next observation if necessary.
6. Leave room for test subjects to familiarize themselves with the tool	Participants were given time to become familiar with what I asked for, though some were confused.
7. Make explicit the division of the present scenario	Participants were looking at the tool as they would daily. They weren't, for example, asked to look at very old postings and discuss them.
8. Create a substantial tool	There was no physical tool created, as it wasn't necessary.
9. Brief test subjects throughout the protocol	The investigator talked with participants during the observation as necessary. Similar to the protocol for the semi-structured interviews, this protocol included asking for greater clarification and mentioning important concepts.
10. Enforce the protocol structure	Participants were reminded, "think aloud as to what interests you and why" when they drifted off topic.

11. Debrief test subjects	Participants were thanked for their time and dedication to the study. No other debriefing was necessary.
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Table 3. Hannibal's eleven-point protocol tool and how it was used in the Yammer group study

Simultaneous verbalization was the preferred think-aloud technique for this study. Participants were asked to verbalize their thoughts with special attention to describing what posts they read and why; what posts they replied to and why; what materials they found interesting and why; and which links they were opening and why. An observation of online activity without any participant interaction would not be considered an observation, which is why this approach was taken. To prepare for this data collection, an observation guide (Appendix E) was prepared. The aforementioned information can provide insight into how the user was participating of his or her own volition; what information are users observing, and how can this help us understand what is being learned? Observation of instructional designers viewing the group while in their workplaces allowed the researcher to discover recurring patterns of events and relationships (Rossman & Ralls, 1998). These observations were recorded using the Zoom H1 audio recording device, just as the interviews. The audio recordings were transcribed and placed into word documents (Appendix G) for analysis.

The word documents of the interviews, observations, and the document analysis were imported into the qualitative data analysis software MAXQDA. The compiled data had its own folders (Figure 4) labeled as Yammer Postings, interviews, and observations, respectively.

▼ Documents	34
▶ Yammer Postings	0
▶ Interviews	34
▶ Observations	0
▶ Sets	0

Figure 4 Individual folders for Yammer postings, Interviews, and Observations in MAXQDA for data analysis

Data Analysis

Data from interviews, field notes from observations, and documents were analyzed to determine their meaning. Phenomenological Thematic Analysis (PTA) was the initial choice for data analysis within this phenomenological study. My primary experience with data analysis stems from Ian Baptiste's course on qualitative data analysis. Ian Baptiste's phases of PTA (Baptiste, 2012) was utilized as a framework for the data analysis. The four phases of PTA are detailed below.

Phase 1, horizontalization, looks to create an exhaustive list of horizons and attributes that replicate each participant's experience. Each instructional designer had his or her own experiences within the group. Transcriptions of the interviews and observations of participant activity were a good source for obtaining a list of horizons that helped determine if learning had

taken place. Here listing and preliminary grouping (Moustakas, 1994b) is the goal. Since new knowledge and expertise were the focus of the interview questions, ascertaining shifts in the participants' knowledge or skill sets served as the starting point for creating these lists. Using transcriptions, I created a list of statements that are of interest to me with relation to the research question and might indicate learning, and sharing information. To determine what counts as an expression of learning, I looked for expressions of new knowledge and skills related to instructional design practice. Ultimately I intended to create a list of statements similar to those used in Palmieri's study of child abuse (p. 125), found in Moustakas's *Phenomenological Research Methods* (1994). Portions of relevant text were extracted when they reflected learning, a change in workplace practices, or an increased awareness of instructional design. This approach provided the opportunity to reflect on what these pieces of text identified as learning actually mean. A document labeled "horizontalization" was created to house these horizons and attributes. The question "What is work life like in the Yammer group?" was asked to help form appropriate brackets or extractions of texts from the data.

The second phase, "phenomenological reduction," produces two items: a structural description of each theme of an experience and a textural (that is, meaningful or substantive) description of what was experienced. The horizons of change in cognition and practice from the first phase will be clustered into themes. These horizons and themes were organized into textural descriptions. I created a characteristic description of each listed horizon by drawing on the textural description of the instructional designers' learning or changes via their social networking interactions. A thoughtful look at the users' experiences through feeling will be part of the description. I also further defined the essence of the experience or theme, using the brackets from horizontalization.

Phase three, “imaginative variations,” looks for a textural description of each theme and phenomenon, which in this case was learning. Here, the guiding question is “how” the experience occurs (Moustakas, 1994). How did the experience come to be about learning? One of the primary goals of this phase is to distinguish between textural and structural features of the learning experience. The textural descriptions discovered in phase two helped to identify these structural elements: in order to arrive at the structural descriptions, I looked at the context of the textural descriptions from phase two. These structural descriptions were used to help create overall themes.

The final phase of the PTA is “synthesis.” It is here that an understanding of what the data means comes to light. For this study, the PTA synthesis were the structural and textural descriptions of learning in the Yammer group. These descriptions were used to help answer the research question, “What are instructional designers learning as participants in the Yammer group?”

Upon the conclusion of the four phases of the Baptiste model, a summary of findings was created. It is here that the question “What did your research yield?” is answered. Figure 5 below shows how the focus narrowed, going from horizontalization in the first phase to synthesis in the fourth phase.

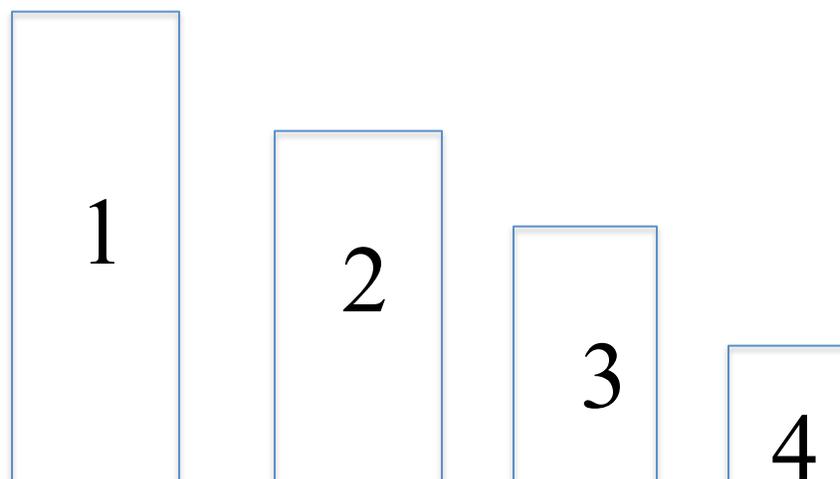


Figure 5. The narrowing of focus in the four phases of Baptiste's PTA

Data Analysis

We do not analyze qualitative data; we analyze data qualitatively (Baptiste, 2013). It is important to remember this when data analysis begins. Given that this is an interpretivist study, this study aims to tell a story (Butin, 2010). Data was analyzed using the software tool called MAXQDA. Originally released in 1989, MAXQDA is a professional qualitative data analysis software program for Windows and Mac (“MAXQDA: Qualitative Data Analysis Software | Windows & Mac - MAXQDA – The Art of Data Analysis,” 2015). This software program allows the importation of documents for coding. A student license for MAXQDA was purchased after providing verification documents such as a student identification card and an academic verification form (“Academic Verifications,” 2015). Although the process of data analysis utilizing a software program is far more automated than data analysis by hand, it still requires great thought, particularly within an interpretive framework. Similar to the difference between using a word processor to write a paper instead of using paper and pencil, MAXQDA helps

eliminate intermediate tasks, thereby allowing researchers to code across multiple documents simultaneously.

During the first phase of analysis, horizontalization coding was employed in order to identify statements of interest. Codes were used to represent where there were horizons, or meaningful themes, such as student engagement. I considered a horizon to be the experience of coming to meaning. In order for coding to take place, the interview and observation audio files were professionally transcribed using Vanan Services (“Vanan Online Transcription Services -,” 2015). To test the quality of the transcription service, I sent one file in and reviewed the results. After concluding that the service was reliable and accurate, I uploaded the remaining files for transcription.

Coding

After importing all documents, interviews, observations, and Yammer postings, I began the coding process. Prior to coding, I had listened to all the audio files to gain familiarity with their content. Hearing the interviews again gave me fresh insight into the data, as I was able to relive the experiences that had taken place months before. While listening, I took brief notes on paper of the remarks that interested me and that related to the research question (Auerbach & Silverstein, 2003). As I began to review the transcriptions, I looked for patterns within the texts, which is the protocol for coding, as per Auerbach & Silverstein (2003).

Since this was my first attempt at coding with such a large amount of data while using special software, I found that it was beneficial to learn more about coding and discover a procedure to follow based on scholarly research. Auerbach & Silverstein (2003) offer six steps for coding that are broken into three categories. The categories are as follows: (1) making the text manageable, (2) hearing what was said, and (3) developing a theory (p. 43).

The table below shows the categories and how they related to the six steps (Auerbach & Silverstein, 2003 p.43).

<p>Category 1. Make the text manageable</p> <p>Step 1. State your research concerns and theoretical framework</p> <p>Step 2. Select and highlight relevant text</p>
<p>Category 2. Hearing what was said</p> <p>Step 3. Record repeating ideas by grouping together related passes</p> <p>Step 4. Organize themes by grouping repeating ideas into coherent categories</p>
<p>Category 3. Developing theory</p> <p>Step 5. Develop theoretical constructs by grouping themes into abstract concept</p> <p>Step 6. Create a theoretical narrative by retelling participants' stories</p>

The first category is particularly relevant to this study as it suggests the importance of explicitly stating research concerns and defining a theoretical framework, as well as selecting relevant texts. The goal of understanding more about what instructional designers may be learning from the social interaction produced in the Yammer group was an explicit part of the study and was written atop all transcripts containing Yammer group postings, regardless of whether they were transcripts of interviews, observations, or documents.

The second category, hearing what was said, is part of phenomenological qualitative research and necessitated understanding the experiences (Moustakas, 1994b) (Baptiste, 2013) of the instructional designers in the Yammer group. Auerbach & Silverstein (2003) do not mean hearing in a literal sense, but are instead referring to a much deeper understanding of the experience. Beginning by recoding repeated ideas through grouping is recommended as the first step for this category (Auerbach & Silverstein, 2003). Once this is accomplished, the next step is

to organize themes by grouping repeated ideas into coherent categories (Auerbach & Silverstein, 2003).

The last category, developing a theory, does not truly match the nature of this study, as the goal at this time is not developing a theory. However, this category also includes developing theoretical constructs by grouping them into more abstract concepts that are consistent with the study's theoretical framework. The final step is to create a theoretical narrative by retelling the participants' stories in terms of these theoretical constructs. It is, after all, the goal of the study to retell the participants' stories in the terms of answering the research question.

After looking at the six steps offered by Auerbach & Silverstein (2003) and Baptiste's PTA I saw similarities, which complemented each other well and seemed to serve a common analytical goal.

Auerbach & Silverstein Six Steps	Baptiste's PTA
1. State your research concerns and the theoretical framework 2. Select and highlight relevant text	Horizontalization
3. Record repeating ideas by grouping together related passages 4. Organize themes by grouping repeating ideas into coherent categories	Phenomenological reduction
5. Develop theoretical constructs by grouping themes into abstract concepts	Imaginative variation

6. Create a theoretical narrative by retelling participants' stories	Theoretical synthesis

The entire coding process occurred three times during the time period from November 2015 through January 2016. As mentioned earlier, before MAXQDA was opened, all audio files, including interviews and observations, were listened to through headphones with pencil and paper available in order to allow for note-taking. Before I listened to the files, I recalled one of my research questions (Auerbach & Silverstein, 2003): “What are instructional designers learning from the social interaction offered by the Yammer group?” I even wrote it atop the paper. This intentional focus was necessary because there was a gap between when I collected the data and when the coding began. It also complied with step 1 of Auerbach & Silverstein’s (2003) coding process, which is to state your research concerns and the theoretical framework. While looking at the data I kept the context of social learning in mind in order to comply with this step. The beginning of this process helped me relive the experience of the interviews since they were conversations. While listening, I took notes on what I found interesting in relation to the research question, which allowed me to begin the process of horizontalization (Baptiste, 2012). In terms of document analysis (Glesne, 2011), when collecting the data I read each Yammer post before including it in the study to ensure confidentiality as the posts often included people’s names. Oftentimes the advanced search feature on Yammer would turn up replies from a participant to an original poster who was not part of this study. I thus needed to read the entire post to understand the context of my participant’s post. While I was collecting this data and using the copy-and-paste function of Microsoft Word to create a document, I also took notes on what was of interest with regard to the research question.

The second iteration of coding came when I imported the documents into MAXQDA and began reading through the text files. Once the files were imported, I began reading through the text and making additional notes when I saw information that was relevant to the research question. Using this process, I started to recognize common elements across statements and created codes in MAXQDA. These initial codes included Ongoing Support, Awareness of New Educational Media, and Disseminating Information, and Awareness of an Event. This process was conducted twice for text documents.

The third iteration of the coding process occurred as I listened to the audio files while reading along in MAXQDA. Viewing the text while hearing the conversations helped me relieve the experiences and gain a greater understanding of the textural nature (Baptiste, 2012) and essence (Baptiste, 2012; Moustakas, 1994b) of the experiences. It was at this point that newer codes were created, along with subcodes. The subcodes were more specific than the original codes, bringing out the textural nature (Baptiste, 2012) of the data.

Codes found within the data were at times taken from the same paragraph and even within the same sentence, as seen in Figure 6 below. Since MAXQDA allows users to assign colors to codes, one paragraph might include an array of colors signaling multiple codes. Here we see the following codes: Disseminating Information/Conferences, Awareness of New Event/Conferences, Disseminating Information/Articles, New Knowledge of Instructional Design, Increased Cognition/Interest, and Professional Development. There were occasions when one sentence would include more than one code. For example, Mrs. Red said during an observation, “Reminders of conferences coming up, like we talked about a few minutes ago, there’s a web conference I attended last June.” The first part of the sentence, “Reminders of conferences coming up,” suggests that Mrs. Red found information that was sent out or disseminated by another group participant. The second part, “there’s a web conference I attended last June,” indicates an increased awareness of a new event/conference, because although Mrs. Red attended

it last June, she comments that she has seen registration for the conference this year. This would be a new iteration of the conference that she found out about in the Yammer group. Perhaps she would have forgotten about the conference and was reminded or made aware of the upcoming date and location due to the Yammer group posting.

which I haven't read yet when the internet delivers its own content, what's left for the teacher. Reminders about conferences coming up like we talked about a few minutes ago, there's the web conference which I attended last June. Here's a reminder that registration is happening right now. Even within the learning design group, people from all over our posting, here's an accessibility related article which looks interesting. I did read this. This is instructional designers by the numbers. This was talking about CNN money says that being an instructional designer is the 38th best job in America. I thought that was ...

Figure 6 Codes found within Mrs. Red's data

The colors in the paragraph in Figure 6 each represent a code in MAXQDA. The first color brown represents disseminating information, the second purple represents webinars, the third yellow represents increased interest, the fourth grey represents community building, and the final red represents instructional design. The highlighting of relevant text is step 2 of Auerbach & Silverstein's coding process and meets the needs for horizontalization as we are selecting points of separation within the text in relation to the research question.

Overall the coding process took approximately three months and included 21 total documents. Depending on the participant, these documents ranged from one to four pages each. When all the documents had been coded, the coding system consisted of the following codes: Yammer as a Tool, Increased Cognition, Professional Development, Community-Building, New Knowledge of Instructional Design, Ongoing Support, Awareness of New Educational Media, Awareness of New Event, Increased Interest, Disseminating Information, and Seeking

Information, with some of the codes containing subcodes that are discussed later. These codes or themes were found through careful reading of the transcripts. As I read, I began to see different topics emerging and being mentioned more often. MAXQDA allows for the attachment of a memo, or description, to each code. I used these memos to define the reasons for the codes and any necessary details. For example, Increased Cognition included a memo that indicated the code was to signal an increase in understanding or increased knowledge of some kind as a result of participating in the Yammer group. Repeating ideas were recorded as per step 3 of Auerbach & Silverstein's (2003) coding process. These were done both on a computer as well as paper. This important step helped lead to the findings in the next chapter.

Researcher Identity

This study addresses personal goals, practical goals, and intellectual goals. My personal goals stem from my own experience with the online social network, as well as my work history as an instructional designer. As an instructional designer and Ph.D. candidate in the instructional design field, I feel naturally passionate about learning. Instructional design is an evolving field with new educational technologies constantly being introduced. My own personal experience with the challenges of learning and implementing new technologies has made me curious about whether the online social networking group has helped to mitigate these challenges for other instructional designers.

My experiences have afforded me a broad knowledge of instructional design practices that I bring to this project. Indeed, from an interpretivist standpoint, I recognize that I cannot separate myself from my research (D. Carr-Chellman, 2014), and that my own prejudices, opinions, and experiences influence my project. Instead of looking through a window and reporting what is seen, there is interaction between myself as the researcher and the participants;

this interaction brings my own instructional design experience into the research. Interpretivist studies seek stories (Butin, 2010), and my instructional design background has helped this endeavor by turning interviews into conversations between instructional designers who share the field's jargon and knowledge. My in-person experience with the participants in this study ranges from work-related experience to no previous experience with them at all. I do, however, have experience interacting with them in the Yammer group itself.

Another important aspect of my identity as the researcher is a presentation I gave at the Association for the Advancement of Computing in Education (AACE) EdMedia Conference 2014 at the University of Tampere, Finland. During this presentation, I obtained feedback on my pilot study from a well-seasoned, experienced international audience of researchers. Two primary lessons were learned as a result of this presentation: first, non-formal learning in the workplace necessitates further study; and second, the unit of analysis should be very clearly defined when conducting PTA.

Chapter 4 Findings

This chapter discusses the findings of this study. As mentioned in the previous chapter, data in the form of interviews, observations, and Yammer posts was collected from March 2015 to May 2015. The majority of this chapter is dedicated to the themes identified during data analysis. These themes are offered along with explanations of how they came to be and how they relate to the research question.

Themes Discovered

In analyzing the various forms of data, including interviews, observations, and Yammer posts, recurring themes began to emerge. This is where Baptiste's (2012) phenomenological reduction contributes textural description to the experiences of the instructional designers in the Yammer group. The descriptions of these themes are also part of Baptiste's (2012) imaginative variation, in which the textural descriptions of the themes are considered. The themes detailed in this chapter are the result of step 4 in Auerbach & Silverstein's (2003) coding process: organize themes by grouping repeating ideas. Repeating ideas were grouped together to form the forthcoming themes. In addition, these themes offer a structural description of the experience per Baptiste's (2012) PTA. Themes discovered include the dissemination of information, awareness of new educational media, community-building, new knowledge of instructional design, the seeking of information, awareness of new events, increased cognition and interest, professional development, and Yammer as a tool.

Disseminating Information

Disseminating information refers to posting something in the Yammer group for the sole purpose of contributing information in the spirit of reciprocity. Doing so provides people with beneficial information and opportunities such as professional development. For example, one participant mentioned using webinars, conferences, and online articles as sources of professional development, as suggested by Moskal (2012). I believe it is important to know what is being put out into the community because that is one way that conversations start. Analysis of the data indicates that it was common for participants to distribute information in the group. Information distributed included meeting reminders, interesting articles, information about conferences, and other learning-related topics. Communication methods for group work was a research question from Pinto (2014), who, in her research on the use of Yammer in higher education, sought to understand not only the methods relied upon for group work but also the effectiveness of those methods. Sharing is a communication genre identified by Riemer, Scifleet, & Reddig (2012) in their look at Yammer as used by Deloitte Australia. I believe that pushing out information, as seen in this study, is similar to someone “sharing” information with a group. Disseminating information shows an awareness of the relevance of certain topics; otherwise no one would be sharing this information with the group. This study not only sought to discover what was being learned within the group, but also what was being shared. Here, the dissemination of information refers to members posting information in the Yammer group with the purpose of sharing it with others, even if the information had not been requested.

The follow pieces of data demonstrate some of the codes used in conjunction with the theme of disseminating information.

From an interview, Mrs. Tan says, “Yeah, I use it more to push information out.” Mrs. Purple, via interview, describes the Yammer group as “a conduit” (Yammer post, 2015). Here Mrs. Tan describes how she uses Yammer, distinctly stating that she uses it “to push information out” (Yammer post, 2015). This comment speaks directly to the use of the Yammer group as a tool to disseminate information. Mrs. Purple, on the other hand, uses the word “conduit” when discussing the Yammer group in an interview. This is an indication of her preference for using the Yammer group as a tool to send or receive messages. Meanwhile, Mrs. Brown says via interview, “I use this group instead of using emails. There are some who like email, but not me,” (Interview, 2015) while Mr. Grey mentions, “The listserv, you had to have a deliberate thought process to post something because you had to go to your email and you had to create an email message, but in Yammer, you just go in and type” (Interview, 2015). Both of these statements mention using the Yammer group instead of email. Yammer and other social-media platforms may be considered a natural progression from email, which was invented in 1972 (Peter, 2004). These comments speak directly to the use of the Yammer group as a tool to “push out” or to disseminate information.

The document analysis considers the Yammer posts, and the posts themselves provide a look at what is occurring within the Yammer group. The posts that I believe directly point to the dissemination of information are presented below. These posts provide other group members with the opportunity to learn something new or help to raise their awareness of something without seeking a reply.

Mrs. Brown posted via Yammer, “FYI - Canvas Town Halls These one-hour virtual sessions are for faculty and staff who have already attended Canvas training and now have follow-up questions” (Yammer post, 2015). Mrs. Red posted via Yammer, “Thought this was

interesting... saw it on NPR's site and then followed some links to this page:

<http://www.selfauthoring.com/index.shtml> could be useful to share with our students.” (Yammer post, 2015). Mrs. Tan posted, “For anyone interested in interactive video assessment tools...(Yammer post, 2015). ”Mrs. Purple posted,

ID-2-ID Program accepting applications from instructional designers through June 12th. Instructional designers (IDs) and graduate students in the instructional design field from across the community are invited to apply for the ID-2-ID Program. The ID-2-ID Program provides a structure for IDs to share their expertise and to improve on areas where they are less knowledgeable. Also, the program helps IDs to increase communication among IDs outside of their reporting unit and to ... (Yammer post, 2015)

The postings above offer a glimpse into some of the information being “pushed out” into the group by the participants. Four of these postings are invitations to participate in events such as Canvas training, town hall meetings, and the ID-2-ID mentor program. There are also postings about tools, such as an interesting NPR site on self-authoring and interactive video-assessment tools. Intentionally posting information that seeks to advertise rather than invite a conversation, as with Mrs. Brown’s “FYI” prelude to her message, denotes that in some cases, the Yammer group may also be used merely for sending out messages. The findings of this study show that more is occurring than disseminating information as is discussed at length later.

Within the theme of disseminating information, there were numerous sub-themes identified. While coding, I asked myself, “What are these instructional designers disseminating or sharing information *about*?” This question prompted me to consider Baptiste’s discussion of the textural nature of experiences (Baptiste, 2012). In this particular study, based on my interpretation of the data (Bulter-Kisber, 2010), I found that members were sharing articles and

information about journals, conferences, meetings, and Canvas as their primary information categories.

Articles/Journals

Articles were the most frequent type of information disseminated within the group. This kind of dissemination included links to articles, links to journals, attachments to posts, and links to webpages with relevant knowledge. It appeared that online education was a common theme among these articles; this commonality is discussed later. What were some of these articles? Knowing this helps shed light on the type of learning that may be happening in the group, as individuals are being exposed to scholarly articles, which if read, may bring new awareness to group members.

One example was offered by Mr. Grey via interview: “*World Journal of Educational Research* publishes research papers covering these subjects: education in different stages such as preschool, primary school, secondary school and high school education, educational technology, educational leadership, teaching and learning skills, etc.” In addition, Mr. Grey posted a link to the *AACE Journal for Online Learning Research* (JORL). Posting a link may be better than simply offering a single article in that the link provides other group members with a resource for finding additional information. The *AACE JORL* offers a wealth of information, as it is an open-access quarterly journal that is both theoretical and practical (“AACE - Journal of Online Learning Research (JOLR),” 2013). Providing instructional designers at the university access to an online journal specifically for “research from multiple fields and disciplines that have a shared goal of improving primary and secondary education worldwide” (“AACE - Journal of Online Learning Research (JOLR),” 2013) is a way to help them directly with their work. Some group

members may look for a topic in *JORL* related to a current work issue, such as role-playing in an online environment, by using this resource.

Mrs. Red said via recorded observation, “Even within the learning design group, people from all over are posting, here’s an accessibility-related article which looks interesting” (Observation, 2015). A post with an article about accessibility, as Mrs. Red observed, is relevant to course design and curriculum in higher education (Argondizza, 2005). This code shows how issues common to instructional design are being discussed and resources are being shared within the Yammer group. In an interview, Mrs. Red commented: “I would say I’m not to give anything specific but I know that often other designers will share links to articles maybe or research studies that have been done that may deal with some of those more abstract concepts” (Interview, 2015). The comment above specifically mentions the group as a source for “articles or research studies.” If instructional designers look to the Yammer group as a resource for scholarly publications and research studies, the group can be considered to be a source of professional development and the creation of cognitive surplus.

Another article shared within the group was “Finland Ditching Single Subjects in New Ed Reform Push” (Schaffhauser, 2015) from *The Journal*. This article discusses a “new approach to education by eliminating individual subjects like math and language and instead integrating them into broader contexts” (Schaffhauser, 2015). The Yammer poster offered that they hated the idea and believed isolating subjects is advantageous.

A different kind of resource shared was “Rapid Prototyping” from instructionaldesign.org. This Web page compares a classic design model to a rapid prototyping

model and offers two prototypes that could be developed: vertical and horizontal (“Rapid Prototyping,” n.d.) as well as multiple approaches to prototyping.

A link to the *Journal of Online Learning Research* (JORL) was also offered, and the post included information about free online access. *JORL* is a peer-reviewed journal focusing on technology’s “impact on primary and secondary pedagogy and policy in primary and secondary (K-12) online and blended environments” (“Journal of Online Learning Research - Learning & Technology Library (LearnTechLib),” n.d.).

Another piece offered in the group was “What’s Next in Online Higher Ed: Legitimacy, Quality And Bespoke Programming” from Forbes Education. In this article, Craig (2015) mentions to “expect that online will resort to new means to convey legitimacy. In place of poor instructional design and high tuition,” we will see connecting online programs to target industries, as well as blended delivery.

A Campus Technology piece, “A Simple DIY Approach to Tracking and Improving Student Learning Outcomes,” was also offered. Another article offered is “Best Practices: Implementing an Online Course Development & Delivery Model,” in which “the authors explain what is involved in an established six-step course development model for developing, reviewing, and delivering a quality online course” (Veronica Outlaw, 2015). This is a topic very relevant to instructional designers who work exclusively with online courses, as many at the university do. Another participant offered an article from the *Wall Street Journal*’s subscription-based online service to help users learn better business English.

One of the blogs that was shared looked at a new network for entrepreneurs focusing on online learning. Online learning was also the topic of a post sharing a link to “The Online College Revolution,” from College Choice. Collegechoice.net is a website offering free online resources to students conducting a college search, including college rankings, admissions advice, along with scholarship and financial aid information. The posting, which I would classify as an infographic, offers statistics on the premise stated in the heading, “The Internet has changed how we live in nearly every conceivable way; why should college education be any differently? In fact, online education is truly revolutionizing the higher education landscape” (“The Online College Revolution | College Choice,” 2016). Here facts are offered on topics such as access where they show that 45% of students are taking at least one online course. The infographic also shows that 1 in 10 of higher education institutions are developing a massive open online course (MOOC). I believe these points are important for an instructional designer at the university. First, if almost half of all students are taking at least one online course that means there is real demand for and possible continued work on additional online design skills. If the instructional designer is strictly working on instructor-led work, he/she may want to consider diversifying their Canvas skills and educating herself or himself about online learning. The statistic that 1 in 10 universities are developing a MOOC suggests that the development of such courses is another skill set and area of expertise for an instructional designer to obtain. Another data set demonstrated in this infographic is MOOC enrollment by top countries outside of the US. India dominates the list with 244,472 enrolled. This information suggests the importance of designing to diverse audiences, another topic which could be discussed within the group. Closed captioning is usually offered to address accessibility issues. Students whose first language isn’t English may get help from reading the text on screen as doing so eliminates accents and dialect, which may make it difficult to understand what is said verbally. This kind of need, of which instructional designers are made aware through professional development, is something instructional designers should

incorporate into the design of MOOCs. Some of this awareness can be cultivated in the Yammer group looked at in this study. The offering of information on online education as discovered in this study could be a starting point for an instructional designer under such a dilemma. There is also information posted on the use of mobile devices, where 6 in 10 have a smartphone and 13% say they take notes on smartphones (“The Online College Revolution | College Choice,” 2016). Armed with this information, instructional designers can advocate for more mobile-based assignments and help prepare themselves for designing to a mobile audience. Knowing learner characteristics are an important part of creating sound instructional design (A. A. Carr-Chellman, 2015; Smith & Ragan, 1990). The Yammer group is providing rich information about online learner characteristics with this posting, giving instructional designers more information and insight into the learners’ origins, and a look into the mobile access and use of students. In addition, the posting shed light on the upward trend in online course enrollment by showing a rise from 23% of students enrolled in at least one online course in 2008 to 45% in 2013.

Finally, a post offered a link to the Web page “Are You Ready to Be an Online Learner?” from Web Learning @ Penn State. This Web page “outlines the qualities and skills you need to be a successful online learner” (“Are You Ready to Be an Online Learner? | Web Learning @ Penn State,” n.d.) Among the Yammer postings was Mr. Grey’s remark: “Just FYI – An Online Faculty Engagement Subcommittee has created ‘Are You Ready to Be an Online Learner?’ - a page for learners new to the online learning experience. It is available at...” (Yammer post, 2015) “Are you ready to be an online learner?” is a student-centered Web page outlining the qualities and skills you need to be a successful online learner. It begins with the topic of self-motivation and offers numerous suggestions for improving self-motivation, such as “participate in online classroom discussions” or “look for study partners.” Instructional designers can use these and other suggestions to improve the classroom environment. For example, they could do more to

help with social presence by requiring students to upload a photo similar to Facebook, so when someone posts the reader can see their picture. ANGEL does not offer this feature. Instructional designers could also cite the importance of self-motivation through discussion participation in the syllabus or in course announcements, which would bring the message to students that participation in weekly discussions can help their own motivation. Regarding the next suggestion, looking for study partners, instructional designers can become imaginative on how to make such things possible. The use of social media groups is one way to do so. The instructional designer can recommend the use of a social media group to allow for interaction among students outside of the traditional classroom space. My own experience with online classrooms using tools such as Yammer has shown me how these platforms allow classmates to interact with each other. I have also seen students create course-based Facebook groups where many questions are posted and responded to. Implementing these types of ideas could increase the chances of students staying motivated and therefore, according to the article, be successful.

The posted Web page also addresses “Personal Responsibility,” then “Study Habits,” in which it specifies students should be willing to spend 8 to 12 hours studying per week per course. At this university, students will soon have the Canvas mobile app, making this recommendation much easier to fulfill. The Canvas mobile app gives students the ability to reply to announcements, submit assignments, view assignment comments from the instructor, take a quiz, view grades, create and reply to discussions, and review course materials. Instructional designers can take advantage of this by increasing students’ awareness of the app and perhaps creating some mobile assignments requiring posting from locations complete with a picture. The Web page then goes on to address “Technology Availability,” mentioning the importance of a reliable internet connection. This could also be a concern for instructional designers. Loading a course with many video requirements when your students have dial up or DSL connections, or are using

satellite or coffee shops for studying, may not be a good idea. In most cases it is the student who has control over this connection, but it is important for instructors to keep in mind that if some of your students are using satellite connection and others are using a dedicated home line such as cable or a fiber optics connection there may be a difference in online video performance between the two groups. The Web page offers a link to a questionnaire for students to measure their preparedness for online learning, then offers information on a 9 week World Campus prep course called Transitions: College and Career Prep.

Based on these data samples, I believe group members are sharing information about specific articles and sharing links to certain journals as well. This dissemination and social interaction can produce a cognitive surplus, as mentioned by Greenhow (2011). Group members do not have to post to learn from the group. They have the opportunity to learn from others' postings and perhaps gain from the cognitive surplus produced by the online social interaction.

Online Education

One topic frequently discussed within these articles/journals is online education. Within the theme Disseminating Information is the theme Articles/Journals, and within that theme is Online Education, similar to the graphical Figure 7 below. Online education refers to courses taught online, or more specifically articles relating to courses taught online. The information shared about online education is of relevance to the instructional designers. Online education appears to be an area of interest among the instructional designers within the Yammer group.

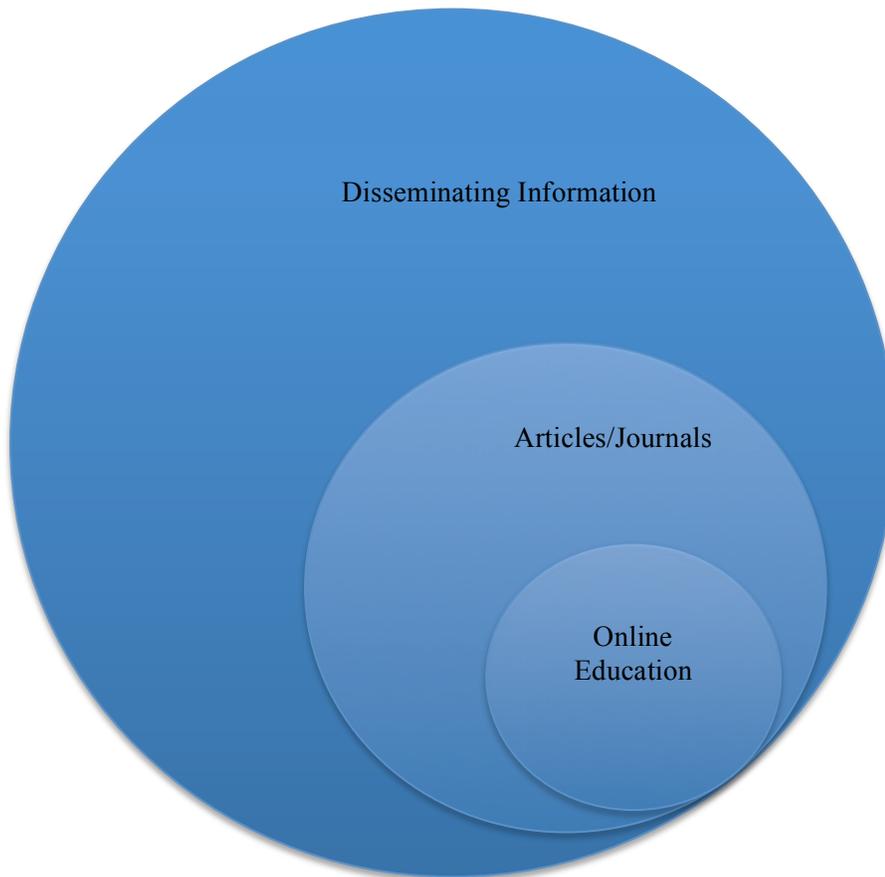


Figure 7 The sub theme of Online Education within the sub theme of Articles/Journals within the major theme of Disseminating Information

Conferences

Another topic instructional designers are disseminating information about is conferences. Learning conferences take place at the university and in other locations. There are many conferences relevant to the learning community including AECT, the TLT Symposium at Penn State, Educause, and EdMedia to name a few. Sometimes a specific conference is the topic, as we see from Mrs. Green's Yammer posts: "Don't forget to join us for our eConversation on Exploring the Course Review and Teaching Review Process today at 10!" (Yammer post, 2015) and "TLT Symposium conference registration has been announced" (Yammer post, 2015). An increased knowledge of conferences can lead instructional designers to information about conferences to which they can submit proposals or simply attend. Conference participation may lead to the learning of new topics, sharing of ideas, and networking with colleagues. At the very least, we see that instructional designers may be learning about conferences from the dissemination of this information.

Conference attendance has benefits. According to a South African company called Knowledge Resources ("Books, Conferences, Seminars, Workshops | About Us - Knowledge Resources," n.d.), which offers human-resources conferences and conducts and publishes research in the human-capital field, the following are among the advantages of conference attendance:

- They create learning communities that bring together delegates from like-minded companies.

- The learning environment encourages delegates to exchange experiences, ideas and practice from their own companies.

- It allows delegates to interact with other companies who may be experiencing similar issues and problems. It allows them to tackle issues together. In turn perspectives will be broadened as a result. This information exchange helps delegates benchmark their companies. ("Attending an academic conference," n.d.)

Although this may appear to apply more to business than higher education, I believe if we replaced the words “delegates” with “instructional designers” and “companies” with “departments,” such as educational technology support or the college of business, the above statements could apply to the participants in this study. They would learn from and interact with one another, tackle issues together, and exchange experiences.

Meetings

Another topic that arose in the Yammer group was the sharing of information about meetings. In the workplace, meetings bring people together to share ideas and information. Meetings in this sense refer to in-person and online meetings. Instead of using email, some members chose to send out meeting details through the Yammer group. One conversation in particular shows the importance of meeting attendance and learning. Below is a posting by Mrs. Green along with replies by Mrs. Red:

Mrs. Green: Next eConversation coming this Thursday courtesy of Dutton!

Mrs. Red reply to post by Mrs. Green: Will this be recorded? Better yet, will notes be taken and made public? I'd love if we had a centralized place where we could see FAQ's about copyrighted materials in online courses. I think a lot of the same questions come up often. (Yammer post, 2015)

Mrs. Red reply to post by Mrs. Green: Yes! I learned a lot when we met last about accessibility and copyright issues. I think it is great that she's so open to answering questions through email, and I definitely think we should email her especially when there are those little nuances in every situation. Always good to get the answer straight from the expert. There definitely are some general things that everyone needs to know, though.? I was planning on attending the Accessing Higher Ground Conference, but it

looks like what I want to see doesn't start until later. I will do my best to attend online Thursday. (Yammer post, 2015)

The part that I find most significant is Mrs. Red's mention that she learned about accessibility and copyright issues in the last meeting. Accessibility is a relevant topic for instructional designers creating and supporting online courses at the university. I also believe it is significant that Mrs. Red mentions how she feels about the meetings in terms of learning new topics and gaining access to certain people. Her inquiry as to whether or not it would be recorded demonstrates her feeling of value in the meeting. From this statement I believe that information being disseminated in the group about meetings gives instructional designers access to colleagues with knowledge to share about relevant instructional design topics.

Other examples of meeting information that arose in the data include:

Mrs. Brown, via observation, mentioned: "Mrs. X posts the reminder about the meetings; I like that." (Observation, 2015)

Mr. Yellow, via Yammer, posted: "Mark your calendars for the Reboot of the Badging Interest Group meetings! The most popular time was 11 – 12 on Friday, September 5. I have 215 IST Building reserved and there will also be a remote connection option." (Yammer post, 2015)

Clearly the Yammer group can be helpful for reminding people of meetings. While it is not appropriate for reminding people of closed meetings that require an invitation, it is suitable for announcing open meetings where additional members or larger audiences might be desired. These meetings give instructional designers the opportunity to interact and learn from others (Bandura, 1977; Miller & Dollard, 1941), as well as share their ideas and knowledge with others, further encouraging an environment for cognitive surplus (Greenhow, 2011).

Canvas

Canvas is a Learning Management System made by Instructure (“Learning Management System | LMS | Canvas by Instructure,” 2016). Canvas was launched in 2011 and is “used by more than 2,000 universities, school districts, and institutions around the world(“Learning Management System | LMS | Canvas by Instructure,” 2016)”. Universities and colleges regularly evaluate and reconsider their course-management systems (Argondizza & Carr-Chellman, 2014). Individuals, especially instructional designers, at the university have begun to prepare for this transition, migrating existing courses over to the Canvas platform. The Yammer group might be a natural location for discussing this transition or sharing general information about Canvas. Mr. Grey offered the following information in two Yammer posts: “Do you, or others in your shop, still need Canvas training? I'm trying to figure out how many support staff, Instructional Designers, Learning Designers, etc. need this. This is NOT training for faculty” (Yammer post, 2015), and “September Canvas training offered to all faculty and staff” (Yammer post, 2015). Here Mr. Grey is offering information on Canvas training. Both posts suggest opportunities for other group members to learn about Canvas, which would constitute professional development for instructional designers at the university.

The Canvas Town Halls are another place where instructional designers can interact as in a face-to-face conference, but in this case using a web conferencing application such as Adobe Connect. Here Mrs. Brown offers information on a town hall via Yammer: “FYI - Canvas Town Halls: these one-hour virtual sessions are for faculty and staff who have already attended Canvas training and now have follow-up questions” (Yammer post, 2015). In a Town Hall, a facilitator fields questions from the attendees, which are typed into the chat section of the application. Other attendees can see the questions, type suggestions, and listen to the facilitator answer the

questions. Since people are able to learn through observation (Bandura, 1977), a Town Hall can facilitate social learning and professional development for instructional designers. One reason for the low level of Canvas discussion is there exists a dedicated Canvas Yammer group. Although not the topic of this research, I might suspect that people with Canvas questions, resources, and learning through online conversation might take place in the dedicated Canvas group, which, as of April 22, 2016, has 350 members.

Awareness of New Educational Media

The second theme that I found within the data was awareness of new educational media. Educational media refers to software or Web 2.0 tools used by instructional designers. The use and selection of media is an important part of the instructional design process (A. A. Carr-Chellman, 2015; Romiszowski, 1988). This theme emerged upon seeing participants posting about and discussing new software or other forms of media of which they had become aware due to group membership. Instructional designers at the university work with many forms of educational media. These include the course-management systems themselves, ANGEL and Canvas, as well as ancillary tools that enhance the learning and teaching experiences for students and faculty. Examples of this theme included: Mr. Yellow, in an interview, indicated: “Here’s a great new tool that I found, here is, um, here’s a question about using something, um, in a different way” (Interview, 2015); Mrs. Purple, in an interview, said: “New trends in instructional design, new tools” (Interview, 2015); Mrs. Tan said via interview: “One of the things that I saw in the Yammer Group was some work that other folks on campus were doing similar to something we were doing. I had the opportunity to pull together a hot team here looking at a set of tools that are basically video assessment tools” (Interview, 2015).

These three codes all emerged during the interviews and address the theme of new tools. The participants were responding to a question about new things they had become aware of because of the group. Below, Mr. Grey suggests that tools are something discussed in the group, noting a writing-assistance tool:

New technologies are discussed on there quite often and people, we usually in a form of a question, hey, I've seen this or I'm thinking about using this as anybody else use it and then that gets the conversation started. Some people will talk, here's one on there not too long ago about some sort of writing assistance tool that people were saying was better than word in terms of its grammar check and all kind of stuff and somebody put question out there and a couple of few response, say... (Interview, 2015)

Another interesting dataset came from the Yammer posts in which participants offered links to specific tools. In one posting, a participant offered a link to Arizona State University's use of HapYak. Although this link was to a story about the tool being used at Arizona State, the post may have given some group members their first look at the tool. Another tool shared in the group was Learning Catalytics, a subscription tool for education. The comments above are fairly general, and just as when I considered the dissemination of information, I asked myself, "What type of new educational technologies are we considering?" This question helped me look within the codes for more specific information about the group participants' experiences. I believed this more specific information to be essential to understanding the essence of the group participants' experiences (Baptiste, 2012; Moustakas, 1994b). VoiceThread appeared to be a sub-theme upon deeper analysis.

VoiceThread

VoiceThread is a subscription-based application that allows users to create recordings using a webcam and microphone and then share them via a Web link. Online courses use this service to help increase social presence and to allow students the opportunity to see each other. For instance: LDT 100: World Technologies and Learning, a course taught online through ANGEL, uses VoiceThread to allow students to introduce themselves to the class and to hold a technical neutrality debate. VoiceThread is something instructional designers should be aware of, as it may be something they deal with or implement in a course. This tool was a topic of conversation within the Yammer group. Examples of this subtheme include: Mrs. Tan, via Yammer post, said: “Hello VoiceThread users! I'm putting together some examples of using VoiceThread for peer discussion. Does anyone have a course example they would like to share?” (Yammer post, 2015); Mrs. Brown, via observation, indicated: “Integration of VoiceThread and that's important because I have faculty that I work with that are using voice thread in their courses” (Observation, 2015). When asked during an interview about new technologies and the Yammer group, Mrs. Tan replied, “VoiceThread. But again, sometimes, they'll post it here but sometimes they'll post it in the other VoiceThread groups” (Yammer post, 2015). This comment demonstrates Mrs. Tan's increased awareness of this educational tool as a result of her participation in the Yammer group; indeed, Mrs. Tan specifically mentioned the tool without prompting. This is important to the research question because it suggests that knowledge of this kind of tool is part of what is being gained in the Yammer group. These comments lead me to believe the participants are increasing their awareness of and sharing information about the educational tool VoiceThread.

Community-Building

An online group may take on the characteristics of a community since it allows people to socialize, and discuss topics. Some group members may become more familiar with others in the community due to their presence in the group. Community-building also refers to how the group can bring people together from across geographical areas. Yammer offers an space in which individuals can interact in an online social networking setting (“Yammer Private Social Networking | Office 365,” 2015). This setting is reflected in the Yammer group. Community-building is important to the research question as it is within a community that individuals can learn from each other (Bandura, 1977). According to Brotherton (2011), organizations have internal online communities. Situated within the broader context of the university, the Yammer group represents one such internal online community. Examples of this theme in the data include: Mrs. Green, via Yammer post, mentioned: “My ID-2-ID buddy and I will be attending a conference during the Oct. 2nd event, but I think he'd like attending in the future too, he's from UNL. Thanks!” (Yammer post, 2015); Mr. Yellow, via interview, said: “There’s somebody if I’m working on a project, I’ll also think later on, “Oh, I need to talk to them about learning communities or labs or whatever it is” (Interview, 2015); Mrs. Tan, via interview, indicated: “One of the things that I saw in the Yammer Group was some work that other folks on campus were doing similar to something we were doing. I had the opportunity to pull together a hot team here looking at a set of tools that are basically video assessment tools” (Interview, 2015); Mrs. Red said: “I feel like I know her because even though I don’t physically see her more than a couple of times a year when we happen to be at a professional development event, she’s very helpful on the Yammer and had shared a lot of information. So, yes” (Interview, 2015).

Community-building can also be seen in a post providing a link to HighEdWeb Association, “an organization of web professionals working at institutions of higher education” (“About HighEdWeb – Higher Education Web Professionals,” n.d.). In this instance, the Yammer group enables networking to an external organization, the Higher Education Web Professionals, furthering the conversation and encouraging the synthesis of information and expertise. Barnes (2012) defines a virtual community has having: 1) some level of interactivity; 2) a diverse group of communicators; 3) a location for interaction; and 4) some level of continuous membership. The Yammer group meets these criteria as this study shows instructional designers from different parts of the university interacting over a period of time in the Yammer group.

New Knowledge of Instructional Design

Another important theme that emerged was new knowledge of instructional design, something very important to the participants in this study. Instructional designers in higher education work with faculty to design online courses. In addition, some work on professional development and training. New knowledge of instructional design may be obvious as the purpose of the group is “learning design environments,” and the participants are all instructional designers. Despite this group title, I do not believe it can be assumed that this would be a topic of conversation and lead to any new awareness. However, throughout the data analysis it appeared as a recurring construct. Examples below include data from interviews, observations, and yammer postings: Mrs. Brown, via interview, said: “I think it (the Yammer group) makes me be more aware of how we design our courses and how that’s going to foster actual learning with the students” (Interview, 2015). Here, it is interesting to note that Mrs. Brown links course design and learning. This linkage shows an awareness of the advantages of instructional design. Gagne

(1992) argues that “the fundamental reason for instructional design is to ensure that no one is ‘educationally disadvantaged’ and that all students have equal opportunities to use their individual talents to the fullest degree” (p. 5). Smith & Ragan (1999) contend that the systematic design of instruction “supports effective, efficient, and appealing instruction” (p. 9). Both Gagne (1992) and Smith & Ragan (1999) agree that instructional design focuses on students and helps students learn, a sentiment that is echoed by Mrs. Brown. Mrs. Brown also focuses on “learning with the students,” which aligns somewhat with Smith & Ragan’s (1999) discussion of “advocacy of the learner” (p. 9), which means putting the learner first, and focusing on how students learn as another advantage of instructional design.

One discussion thread within the group was dedicated to an instructional design conversation: Mrs. Brown, via Yammer post, said: “I haven't weighed in here yet and I find it interesting that the bulk of the conversation is about tools, not processes. Adam, on the processes side, the old-school basics of ID can be found in the book *The Systematic Design of Instruction* by Dick, Carey & Carey. Also, the book *Instructional Design*, by Smith & Ragan.”

Below is a posting from Mrs. Tan with a link about replicating the face-to-face classroom environment in an online class. This is an issue of interest for instructional designers, as they are often tasked with converting traditional classroom-based courses into online courses for ANGEL and Canvas delivery. This post received a total of eleven replies, two of which came from participants in this study. The remainder of the posts were not considered due to IRB restrictions, as detailed in the limitations of the study. The post was titled under the heading, Would you agree? "...[I]nstructional design that more or less slavishly replicates the classroom environment (i.e., weekly lecture, discussion, assignments). While perhaps effective in achieving initial legitimacy, it has been a counterproductive, delaying the opportunity to take advantage of the

medium to develop new delivery models that significantly improve student outcomes. You can read more at What's Next In Online Higher Ed: Legitimacy, Quality And Bespoke Programming <http://www.forbes.com/sites/ryancraig/2015/04/08/a-snowballs-chance-in-hell/2/>" (Yammer post, 2015). Mr. Grey replied: "Uh - I agree that poor instructional design is bad. I agree that replicating the classroom in online instruction is usually bad. I agree that placing things online isn't the same as an online course- unless you offer something unique. Mr. X is Mr. Obvious here." (Yammer post, 2015).

Above we see how another group member responded to this post, by mentioning that the information the member shared is information that is already well-known within the community. This may be true for Mr. Grey; however, there may be others within the group who are new to instructional design at the university and who may need to become more aware of the importance of designing courses so that they are suitable for online delivery, engagement, and interaction. Mrs. Green's reply:

I would think the Ivies have less incentive to be innovative and do the research on good design because they are already the pinnacle of the hierarchy of institutions. They will always have students banging on the door to get in. Why fix what's not broken? Their students are pretty much guaranteed successful careers. Their instructors could slap some PowerPoints with red comic sans on a bright green background up online and students wouldn't see it as bad design because it is coming from the 'best' institution. The name and reputation seem to matter more than the quality of education in the eyes of the general public. The focus is on the endpoint, not the journey. They need to get the degree so they can get the job.

I think another problem is that actually implementing significant change is just

uncomfortable. What happens if it doesn't work? This 'failure' reflects poorly on the institution. What if students don't meet learning objectives? Should we just let them move on to the next level without mastering prerequisites first? How do we implement change within the parameters of a school year or semester? The stakes are set so high that the idea of it not working causes more anxiety than with just sticking with the status quo.

It frustrates me to see countries like Finland making huge changes to their system (K-12 being in the news lately, but I wonder what they are doing online) and knowing we have so many great ideas here, but often don't have the flexibility and support to do the same. (Yammer post, 2015)

What is particularly significant in this post is that Mrs. Green continues the conversation with a discussion of merit through her insight on instructional design practices within universities, as well as a mention of an article about Finland and its educational system's change. Mentioning this change shows Mrs. Green may be learning new information from the article shared to the group and which was categorized as part of the disseminating information findings. The comment "red comic sans on a bright green background" shows knowledge of design standards. I find it interesting she mentions this level of design knowledge. It might seem more like common sense and she casts doubt on students' understanding of color comparisons. Do you need great knowledge of instructional design to know that red on green are not good presentation colors? She also seems to doubt students abilities to understand value. Why wouldn't so many students say, "you are an Ivy League school and you use this horrific bold color clash in the PowerPoint slides?" Regardless of their imagined response, what I think is important is that she is bringing instructional design standards into a conversation about Finland restructuring its educational

system. She makes a connection between sound instructional design practices and “quality of education” by denoting that using red font on green background is a very poor practice. She then goes on to discuss the consequences of failed change, one of which is students failing to meet learning objectives, another key instructional design principle. I believe the dissemination of information by Mr. Grey and the culture of reciprocity within the group brought Mrs. Green to put forth a few instructional design principles and link them not with institutional prestige but with quality education. Mrs. Green also mentions online education and what Finnish educators might be doing in that area. This echoes the finding of online education being a common topic among articles and journals shared within the group. Another important point from this discussion is that Mrs. Green is citing the Finland article posted by Mr. Grey, which is a completely different posting. This shows me that Mrs. Green read that article and was still aware of what is happening with the Finnish education system. Mrs. Green was able to bring information posted in the Yammer group to this discussion about instructional design.

Additionally I would like to offer a comment from Mr. Yellow, collected via observation, who talked “about effectiveness of online courses, college courses. Since I spend a lot of my time at work on support of college courses, specifically masters courses; that would be something I would find interesting” (Observation, 2015). The second part of this statement is of particular significance; “which tool seems to be the best fit” for the learning or educational task at hand is a decision that instructional designers often make (A. A. Carr-Chellman, 2015; Dick, Carey, & Carey, 2015; Romiszowski, 1988; Smith & Ragan, 1990). This task, selecting a tool based on pedagogy, is a sound instructional design practice. Although Mr. Yellow does not cite a source, group participants mention faculty and discuss how they like interacting with them due to their scholarly position. The online social interaction between faculty and staff gives the instructional designers an opportunity to learn from scholars about the implementation of various tools, thus

contributing to the instructional designers' pedagogical knowledge when selecting tools. Eraut (2004) has found academic knowledge and skills to be a part of learning in the workplace.

Interaction within the community between faculty who are pedagogical scholars and instructional designers can increase instructional designers' knowledge and skills.

The data from Yammer conversations leads me to believe that instructional design is a topic of conversation within the group. The discussion regarding Smith & Ragan's foundational instructional-design textbook may have encouraged instructional designers within the group to research the scholars' work and other topics in that discussion thread. Although the entire discussion thread cannot be accessed for this study due to IRB protocol, from what can be seen instructional design is discussed and importantly, as Mr. Grey notes, there is a recognition that placing content online does not constitute online instruction.

Seeking Information

Another theme that emerged from this data is "seeking information." This theme refers to those participants who see the group as a location from which knowledge can be sought and questions answered. According to Vygotsky's theory of the ZPD, people require external influence to help them reach subsequent levels of cognition (Vygotsky & Cole, 1978). Asking for help in a social-network group may constitute such external influence. This theme also echoes Riemer, Scifleet, & Reddig's (2012) discussion of the communication genre of problem-solving and advice. Like them, I see individuals using Yammer as a place to solve problems and seek advice.

Mrs. Brown, via interview, mentioned: "I posted to the Yammer group and instantly got suggestions for how to handle that, which is very helpful" (Interview, 2015). In declaring "I

posted to the Yammer group,” Mrs. Brown identifies the Yammer group as a space in which to ask questions in the form of posts, thereby seeking help and guidance. This is similar to Moskal’s (2012) finding that relationship-building is a theme among instructional designers in higher education. Mrs. Brown’s decision indicates that she has established a relationship with the group’s community of individuals. It also suggests that her interactions with them in the past were fruitful, and that the members were knowledgeable and cooperative. All of this encouraged her to ask for help again. Another interesting comment came from Mrs. Green in an interview: “It was like hoping that somebody has a better answer than maybe what I’ve already found or a different perspective on it” (Interview, 2015). The significance of this statement is that it also speaks to relationship-building (Moskal, 2012), as Mrs. Green indicates that she felt someone in the group might be able to help. Mrs. Green suggests that she sees the Yammer group as a resource for help and advice.

The ability to use the Yammer group as a source of information is important, because as part of this study’s theoretical framework, Vygotsky’s ZPD tells us that external influence is needed to reach subsequent levels of cognition (Vygotsky & Cole, 1978). This external influence is shown to be present in the Yammer group when someone posts seeking outside help. The Yammer group’s activity also confirms Eraut’s (2011) assertion that Yammer allows people to learn by asking questions and receiving feedback from other group members. The statements above show that participants recognize the group as a space where they can seek information. The statements also confirm Eraut’s (2004) finding that decision-making and problem-solving are part of learning in the workplace.

Technical help

Instructional designers work with numerous tools to help students interact and put together online courses. Technical help refers to the seeking of information about any kind of educational tool used by instructional designers. As before, I asked myself, “What are these participants seeking information *about*?” This led to the development of the sub-theme of technical help. My interpretation of the data leads me to believe that technical help is something group members are seeking. Codes that indicate this theme include: Mrs. Purple, via Yammer post, asked: “Does anyone have any experience using Learning Analytics?” (Yammer post, 2015); Mrs. Green, via Yammer post, said: “Hi...I'm looking for a staff member/ID/multimedia person or possibly a student who has a general familiarity with After Effects. I need to ask a question or two...test something. It shouldn't be too consuming. Any help would be greatly appreciated!” (Yammer post, 2015); Mrs. Purple, via observation, indicated: “This one, the student or this person asked question about the size that you can upload to a voice thread, and I did answer her question” (Observation, 2015). These codes demonstrate that group members are seeking technical help in the use of certain types of software.

Awareness of New Events

Another theme that emerged was awareness of new events. This includes sharing information about events, as well as learning about new events due to group membership. Eraut (2004) has found awareness and understanding to be a part of learning in the workplace. An increased awareness of new events falls within this category and confirms Eraut’s (2004) finding. One participant, Mrs. Green, directly highlighted “learning about new events” in an interview when asked about learning from the Yammer group. This explicit mention of learning and new

events as occurring within the group is significant. It shows that through social interaction (Bandura, 1977), Mrs. Green learned of new events taking place in the instructional-design community. Mrs. Yammer, via Yammer post, said: “The LD Meeting is happening now! You can join virtually by using” (Yammer post, 2015). Mr. Yellow, in an observation, indicated: “So I see there's a CMS Townhall meeting reminder” (Observation, 2015).

Sub-themes emerged as I asked myself, “What type of events are we talking about?” It was here that the sub-themes of conferences, webinars, and professional-development events emerged.

Conferences

One topic of conversation within the group was conferences. The sharing of information about conferences may increase the chances that a group member would attend, interact with others, and possibly learn something new from a conference. Mrs. Green specifically mentions a pedagogy conference in Virginia. Mrs. Red mentions in an interview that she became “aware of the TLT symposium” (Interview, 2015) through her participation in the group. Mrs. Red suggests that “reminders about conferences coming up” (Interview, 2015) are a benefit of participating in the group. The Symposium for Teaching and Learning with Technology (TLT) is hosted by Penn State’s TLT department each year. In 2016, the conference schedule included topics such as “Sparkling Student Interest Using Yammer and VoiceThread,” “Canvas User Experience,” “Demonstrating Effective Use of Canvas: Two Micro-Sessions, and Hacking Canvas: Making the Rubric Tool Work for You” (“2016 Symposium for Teaching and Learning with Technology Schedule,” 2016). As the findings of this study indicate, topics such as VoiceThread and Canvas continue to be discussed within the group. This suggests the importance of the group’s

conversation about conferences, as there is a link between the TLT Symposium schedule and the educational tools found in this study to some of the information shared in the Yammer group. Of course, there are also the benefits of conference attendance.

Webinars

Another sub-theme that developed within the awareness of new events theme was webinars. While reviewing the data during coding, I became aware that participants were sharing information about webinars. Mrs. Purple, via interview, indicated: “A lot of the COIL webinars that they have are usually posted to the learning design group as well.” (Interview, 2015) Mrs. Green, via Yammer post, said: “Hi folks, we have an econversation happening on October 2nd about the Online Course Review process. Please feel free to invite any faculty or IDs who may be interested. Click the link below for more info or head over to the eConversations group” (Yammer Post, 2015). Mrs. Red, via observation, mentioned: “little webinars that are being offered are often advertised on the Yammer group and those are valuable as well” (Observation, 2015). These comments lead me to believe that webinars are a topic discussed and shared among instructional designers within the Yammer group.

Increased Cognition and Interest

Increased cognition also emerged as a theme during coding. This theme represents an increase in thought or knowledge of some kind due to membership in the group. Though the emergence of this theme was one of the biggest surprises, its presence makes sense as Greenhow & Robelia (2009) cite the National Science Teachers Association’s definition of informal learning as “expand[ing] the affective, cognitive, and social realms.” As a part of this study’s theoretical

framework, informal learning in the workplace is relevant to this theme. The theme also coincides with Eraut's (2004) finding of awareness and understanding as part of informal learning in the workplace. It emerged in a number of ways in the data. Mrs. Purple, via interview, said: "It did make me think about it and then I did respond with my thoughts about it. That was something that Yammer group prompted me to do some research and to think about it" (Interview, 2015). This comment alone demonstrates her link to the Yammer group and increasing her thoughts and research on relevant topics. Mrs. Red, via observation, indicated: "Read this, I'm like, "There are a quarter of a million instructional designers in the US," and "I didn't even know a year and half ago that this position existed. That's interesting to me, it really is" (Observation, 2015). Mrs. Red, via observation, said: "That was an interesting article. I thought that was valuable to read" (Observation, 2015). These statements show that posts within the Yammer group are causing instructional designers to think, and the posts are drawing in their interest. If a post is of interest, people may be more inclined to dig deeper, investigate, and perhaps learn something new.

Professional Development

There were often professional-development opportunities mentioned in the Yammer postings. But could professional development be taking place within the group? This premise is not unfounded. When asked about professional development for instructional designers, for example, Bryan Alexander recommended social media (Alexander, 2014). The following are some codes from this theme. Mrs. Red, via interview, said: "I think that the Yammer group is a great professional development resource for me," and "I learn from my colleagues as well about which tool seem to be the best fit for different types of online situations" (Interview, 2015). Regarding Canvas training, Mr. Grey, via Yammer post, indicated: "we have one who could use training" (Yammer Posting, 2015).

The quotations above show a pattern related to professional development. The first participant, Mrs. Red, specifically mentioned professional development in an interview. In the next quotation, she mentions learning about how to use new tool from colleagues. There are two parts of that statement that are interesting. “Learn from my colleagues” speaks of social learning (Bandura, 1977), Vygotsky’s ZPD (Vygotsky & Cole, 1978), and informal learning (Bransford et al., 2012), as mentioned in the theoretical framework. This statement helps confirm that social learning is part of the Yammer group interaction. This statement also coincides with Rothwell & Kazanas’s (1990) finding that 20.6% of employees learn from the advice of their coworkers.

Professional development has been found to be a theme among instructional designers in higher education (Moskal, 2012), which corroborates the finding of this study, as this study’s participants are instructional designers at a major university in the northeastern United States. As in Moskal’s study, the instructional designers of this study seek professional development. Eraut (2004) has found professional development to be part of learning in the workplace. Academic knowledge and skills may also count as professional development as long as the academic knowledge and skills pertain to instructional-design topics, as they did in this study.

A culture of reciprocity

This theme came after much analysis, but I believe it is important. Within the Yammer group I believe there exists a culture of reciprocity. This study shows participants disseminating information for the good of the group and also seeking information from the group. When Mrs. Tan calls it a “conduit” and a way to “push out” information, and when participants use the Yammer group to share information on conferences, meetings, professional development opportunities, webinars, articles, and blogs, I believe it is safe to say that based on my

interpretation of the data from these participants a culture of reciprocity exists in the Yammer group. A Google search for the term reciprocity showed “the practice of exchanging things with others for mutual benefit,” I believe it is also a good description of the Yammer group’s culture. This culture may have a special impact on group members, especially with regards to professional development, which will be discussed later.

Yammer as a tool

Although not a major theme in this study or related to the research questions, some participants mentioned how they are using features of Yammer – its interface or its overall performance. During an observation, Mr. Grey said, “I will check it periodically. I also have most of my groups hooked up to email. If an email ping comes in to me, I then to go back to Yammer,” (Observation, 2015) showing he keeps up with the group through email, which he may look at all day long. Mr. Grey qualified for the study, as did others, because he posted often. This also keeps Mr. Grey active in the conversation happening in his groups, which can aid learning (Bandura, 1977; Rogoff et al., 1995; Vygotsky & Cole, 1978). Understanding more about users’ preferences might help those in the Yammer group to determine easier ways to use the software that matches their own preferences. Knowing more about Yammer might increase participants’ access to other users and their knowledge. It is hoped this dissertation will be shared with organizations that may have an interest in these findings. Those organizations include the university and Microsoft.

Participants' Backgrounds

During the first part of each interview the focus was on the participant's background with relation to instructional design per Seidman (1991). The information gathered here didn't necessarily have a great impact on the findings or data analyzed, but it did allow for an easier conversation during the interviews. A better conversation allows for better data as the participant may feel more at ease and provide more sincere answers. A look at the participants' backgrounds is of interest and offered here. One trait common among the participants was formal instructional design education. Without naming institutions where the degrees were obtained to help protect anonymity, it was found that all the participants had studied instructional design and obtained either an undergraduate or a graduate degree. Not all the participants came from the university as some relocated there to take their respective positions with the university. It was also common for the participants to have interactions with faculty in their work. This is important to this study as we saw that community building was a theme, in addition we saw some participants making note of posts to the group made by faculty members. Most, but not all worked creating or redesigning, or updating online courses in ANGEL or Canvas.

Coding Origins

A scatter plot of the data shows where a majority of the codes fell with relation to Yammer postings, interviews, and observations in Figure 8. A majority of the codes came from interviews, and observations, for the most part and the finally Yammer postings.

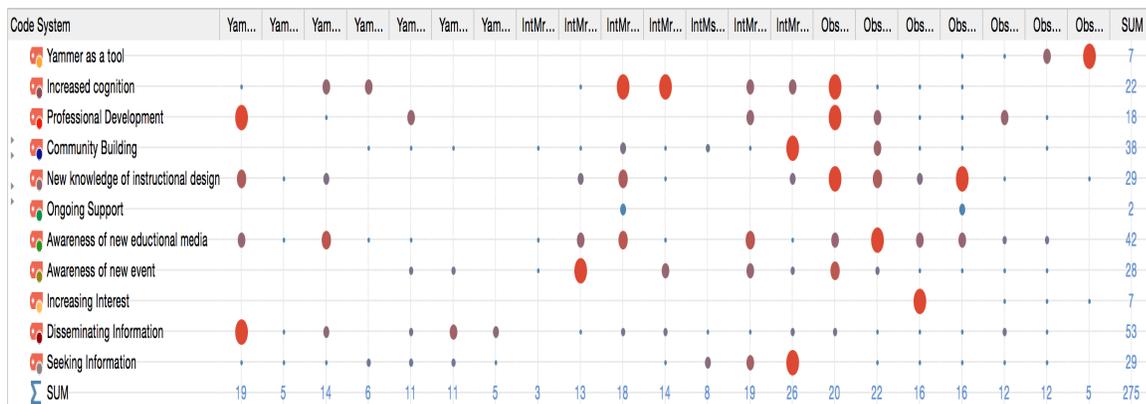


Figure 8 Scatter plot of data from MAXQDA

MAXQDA offered an interesting look at the data from a visual standpoint, allowing me to view where some of the data came from and how the research was conducted or could be improved upon in the future.

What story does this data tell?

A story is what we seek from this interpretivist (Butin, 2010) phenomenological qualitative study (Glesne, 2011; Moustakas, 1994b; Seidman, 1991). Looking at the details of the findings allows me to arrive at the point of synthesis, the final phase of analysis from Baptiste (2012).

The findings of this study offer a narrative. The story comes from the initial themes found: disseminating information, awareness of new educational media, community-building, new knowledge of instructional design, professional development, seeking information, Yammer as a tool, increasing interest, and ongoing support. Instructional designers who participated in this study found the Yammer group to be a place to disseminate information, including articles and details about events such as conferences and meetings. Group membership exposes

instructional designers to new information from other members about new educational media, new events, and instructional design. Instructional designers' awareness of educational media includes VoiceThread, Social Media, and Canvas, while their awareness of new events includes conferences, webinars, and professional development events. Group membership is also causing them to think about ideas and increasing their interest in certain topics. The group is also a place for community-building as members are getting to know each other both inside and outside of the group. Figure 9 below is a graphical representation of the themes found in this study.

Disseminating information and seeking information are what drives or makes possible the other themes. I believe if people weren't disseminating information and seeking information in the Yammer group, there would be little knowledge of new events, knowledge of educational media, community building, professional development, raised interest and cognition, and new knowledge of instructional design taking place within the group.

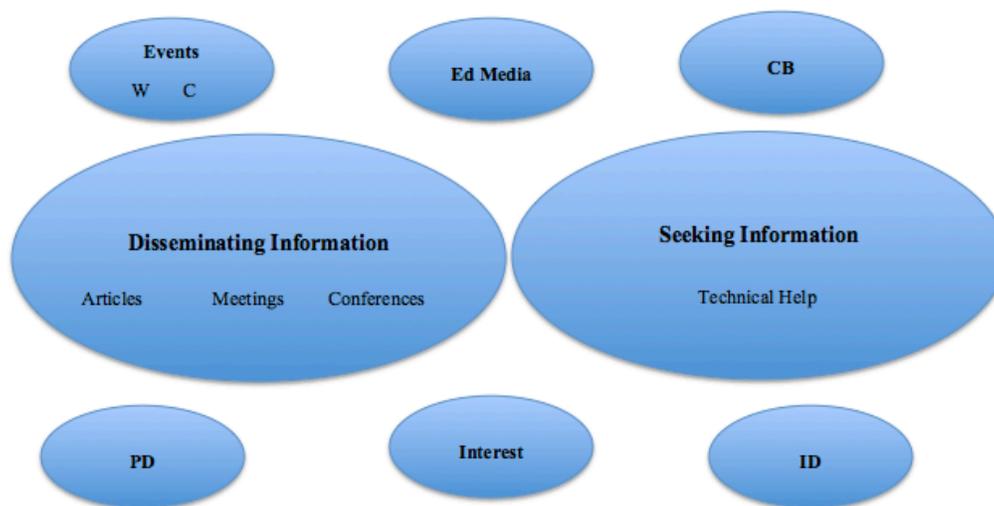


Figure 9 A graphical representation of the themes found in this study

The summary of themes and how they interact as show in Figure 9 is what we would expect from step 5 of Auerbach & Silverstein’s coding process, develop theoretical constructs into more abstract concepts, in addition to offering a structural description of the experience per Baptiste’s PTA.

Another look at the findings offers insight into what Figure 9 tells us about what is happening within the group. Figure 9 looks directly at the research question while Figure 10 shows what that may mean. I believe a majority of what is occurring within the group is professional development, based on a culture of reciprocity.

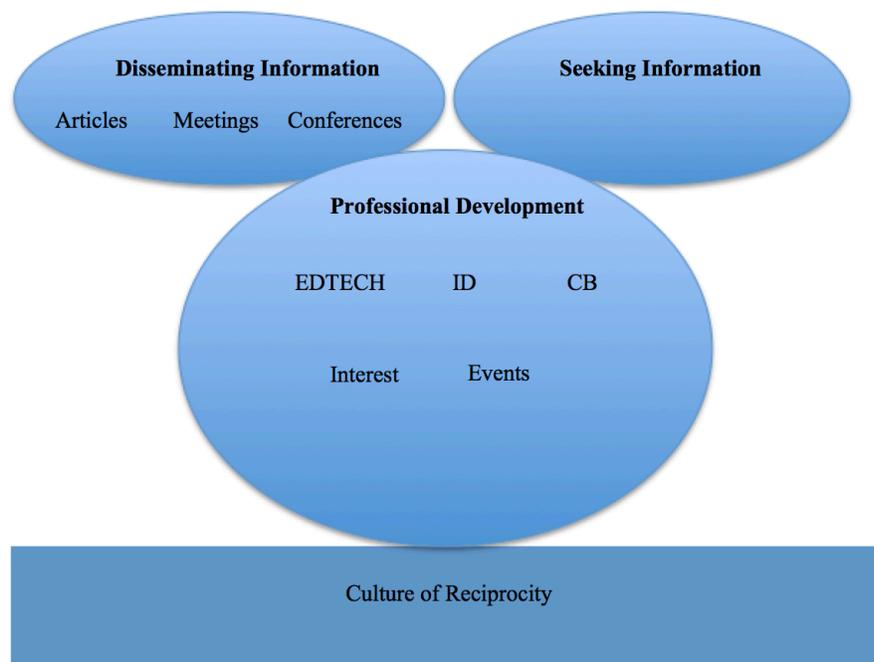


Figure 10 Model of what is happening in the Yammer group

If we look at what instructional designers who participated in this study learned we see things such as new knowledge of instructional design, new knowledge of educational

technologies, and an increased knowledge of new events. These would all be considered topics of professional development for an instructional designer. The use of media tools is an important part in the instructional design process (A. A. Carr-Chellman, 2011). Community building is another theme that could be considered professional development as the data showed the relationships were professional. Moskal (2012) mentions networking as a form of professional development among instructional designers in higher education. Knowledge of new events, such as conferences, if attended based on a Yammer group posting, could also constitute professional development for an instructional designer. Another theme found, increased interest and cognition, may also be considered professional development since the topics of interest were instructional design topics. Mr. Yellow mentioned a webinar that interested him and Mr. Grey mentioned his interest in an instructional design article. I believe if instructional designers are thinking about instructional design topics as shown in the findings that could be considered professional development for an instructional designer.

A culture of reciprocity exists within the Yammer group that allows for the dissemination of information and the seeking of information. This culture has allowed for information to be shared within the group, and certain things learned thus allowing for professional development. It is the members themselves who propel the professional development. I believe the things being learned by the participants of the study – new knowledge of instructional design, new knowledge of educational technology, knowledge of new events, community building, and increased interest and cognition – all serve as professional development for instructional designers in higher education.

I believe this is what Baptiste (2012) called synergy or the textural description of the experience, as the participants' experience has come to light in the form of the story told above. I also believe this to be step 6 of Auerbach & Silverstein's (2003) coding process as it tells a

narrative. It is also, I believe, the essence of the experience as sought according to Moustakas (1994).

Chapter 5 Conclusions

This chapter details the overall conclusions of this study, as well as the study's anticipated implications for the field of instructional design and learning. I believe this research offers an important contribution to the literature, has implications for the professional development of instructional designers and scholars of communications media and instructional design in higher education, and offers a contribution to qualitative research. This chapter also offers final thoughts and considerations for future research.

Impact and contributions to the literature

This study makes an important contribution to the literature on social media and learning. As shown in the literature review, scholars have researched learning in online social networks (Barnes, 2012b; Greenhow, 2011), but previous studies have tended to focus on K-12 and higher education and involve mostly Facebook and MySpace, not Yammer. Although it is important to review learning in OSNs in education, it is also important to consider learning in OSNs in the workplace. Of course, some scholars have examined instructional designers in higher education (Moskal, 2012). Learning among instructional designers has not been considered, however; only the “competencies of instructional designers” have been studied (p. 10). Moskal (2012) offers a careful look at the work of instructional designers, finding five themes. Gauthier & Jack (2014) have looked at instructional design in higher education through the view of a redesigned biology course. The case study focused exclusively on the work done to redesign the course and the effects of the change. Yammer has also been looked at in the workplace (Nash, 2011b; Riemer et al., 2012), but not with regards to learning. Although these studies look at Yammer in the workplace, neither looks at learning with Yammer in the workplace. Nash (2011) looks at

Yammer as used in the workplace and merely describes the experience of users, and Riemer, Scifleet, & Reddig (2012) look at Yammer in the workplace, but with a focus on communication. Both of these studies overlook learning within Yammer, which is the focus of this study.

The overall contribution of this study is to look at learning amongst instructional designers in a professional social-network group. A narrative can be constructed based on this study that has not been constructed in the literature thus far. This study offers details on instructional designers' experiences in a Yammer group at a major university in the northeastern United States. More specifically, this study tells the story of instructional designers using a Yammer group to disseminate information.

Impact on the professional development of instructional designers

According to Rothwell & Kazanas (1998), professional development refers to “an individual’s gradual and continuing mastery of a field’s body of knowledge, methods, and procedures” (p. 371). The findings of this study suggest that instructional designers are continuing their individual mastery of the instructional design field and their roles as instructional designers while at the university. Accordingly, if organizations are aiming to promote professional development among their instructional designers, they would be well-advised to consider creating Yammer groups or utilizing other forms of social media. In this particular study, it was found that instructional designers are not only sharing information with each other via social media, but that they are also being exposed to new educational media and information on instructional design via social media. Since Yammer is now a part of Office 365, organizations that subscribe to Office 365 do not have any additional costs in implementing a social-media group such as the Yammer group.

The University of British Columbia created a community of practice, a formal group for instructional designers that meets every six weeks (Sharif & Cho, 2015). The goals of the UBC community are:

to discuss and resolve a design challenge as a team, share best practices, discuss recent instructional design literature and innovations, explore new technologies and tools, and we invite guest speakers. This community and system of collaboration allows for the enhancement of our professional development and is a good opportunity to discuss our challenges and resolve them as a team. (p. 82)

In considering some of the functions of this community, such as discussing recent instructional design literature and innovations and exploring new technologies, it becomes apparent that these goals are similar to the findings of this study and thus the unstated outcomes of the Yammer group. Based on my research, instructional designers at the university are discussing literature and innovations, such as Canvas, online education, and VoiceThread, and they are also exploring new technologies and tools, which is one of the objectives of the community at the University of British Columbia. Yet this strict schedule of meeting once every six weeks is not part of the Yammer group at the university featured in this study. Sharif & Cho (2015) suggest that “further research on whether a community of practice actually advances instructional designers’ professional development is needed” (p. 82). I would argue this study helps fill that gap, as the findings of this study show increased awareness of instructional design, as well as educational tools for instructional designers, due in part to instructional designers’ membership in the Yammer group. More specifically, my findings show that the instructional designers are sharing articles about issues in online education. They are asking questions, seeking assistance, and sharing ideas, much as would be expected to happen in the more formalized meetings that occur every six weeks; with the Yammer group, however, collaboration

and interaction can happen daily. In addition, there are no physical requirements, and Yammer is available on mobile devices, making interaction even easier.

A study by Cheong, Wettasinghe, & Murphy (2006) “presented a professional development action plan or framework for instructional designers” (p. 197), showing that a flexible work schedule, time off for project work, and continuous efforts to build up knowledge are valued by instructional designers as means of increasing an organization’s facilitative role in professional development. The Yammer group offers all of these due to its online nature. Members are able to interact within the constraints of their work schedules; they do not need to request time off because they can access the Yammer application during the work day at their leisure. An OSN serves to provide what some view as a company’s supportive and facilitative role in professional development.

This study has an impact on the professional development of instructional designers. My findings show instructional designers are using the group to share professional development opportunities such as conferences and webinars. In addition group members are sharing information, asking questions, and learning from others within the group.

Impact on communication media

Technopedia defines communication media as “the means of delivering and receiving data or information” (“What is Communication Media?,” n.d.). Some of the themes found in this study, such as disseminating and seeking information, are directly related to communication media. Delivering and seeking information both take place within the Yammer group, making the group a tool or medium for communication. In addition, the comments of Mr. Grey, Mrs.

Brown, and Mrs. Tan suggest that the Yammer group is being used to communicate with others in lieu of other tools, with Mr. Grey and Mrs. Brown stating their preference for using the Yammer group instead of email.

There are five elements in the process of communication: sender, message, channel or medium, receiver, and feedback (Murphy & Hildebrandt, 1988). In this case, the senders and receivers are instructional designers, and the channel or medium is the Yammer group. The channel for communication represents a change in horizontal communication as described by Murphy & Hildebrandt (1988), and is “essential in organizations ranging from two to thousands of employees. These peers must exchange ideas to help solve problems, perform job duties, prepare for meetings, and cooperate on important projects” (p. 5). Within the Yammer group, instructional designers are now exchanging ideas about how to solve problems, preparing for meetings, and cooperating on important projects. Since the university bought a Yammer subscription in late 2011, this can be seen as a change in communication.

Yammer is a Web-based communication tool. This study looked directly at the use of this communication medium among instructional designers at a university. The findings of this study show that instructional designers are using the Yammer group as a form of communication, specifically in order to disseminate and seek information within the group. Organizations may look to Yammer as a new form of communication to disseminate information. In fact, Yammer sent out a tweet (Figure 9) on February 5, 2016, suggesting the use of Yammer as a replacement for email, a possibility that was indicated within this study.

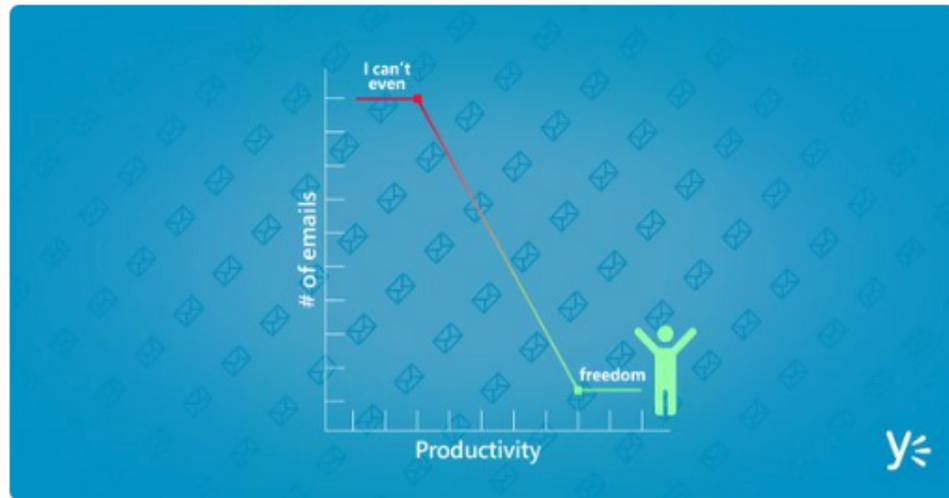


Figure 11 Yammer tweet about using Yammer instead of email

Impact on instructional design in higher education

This study offers a look into what instructional designers are discussing, sharing, and learning in an online social-network group. This study is accordingly of interest to those in higher education, and specifically in the field of instructional design, as it reveals what the study's participants possibly learned from participating in this group. Those who read this study may themselves be considering using Yammer, as it is now part of the Office 365 package ("Yammer Private Social Networking | Office 365," 2015).

Those involved in instructional design at higher-education institutions generally may find some common ground with the participants of this study. Moskal (2012), in her study of instructional designers in higher education, found flexibility, moral purpose, relationship-building skills, time and project management skills, and a desire for ongoing professional development to

be common traits among them. Moskal's study of instructional design in higher education was based on interviewing instructional designers about their work. I believe the present study with its own themes offers another perspective on instructional designers in higher education, this time considering how the designers are using an online social-networking group. The use of this group is a voluntary part of instructional designers' jobs, and it thus offers insight into their discussions amongst each other.

Instructional designers at higher-education institutions other than the university involved in this study may look at these findings and gain new insight into the opportunities available via OSNs. Greenhow (2011) mentioned cognitive surplus and Barnes (2012) mentions social capital. Ideally Yammer would be used to create and harness a cognitive surplus and social capital. Because the Yammer posts will be available in the future, instructional designers are conducting conversations that outlast a verbal conversation and offer long-term learning opportunities. To build social capital in education requires "reciprocity, trust, shared norms, and values" (p. 166). Reciprocity is present as the Yammer group participation is voluntary, and instructional designers are sharing their knowledge of instructional design, educational technologies, publications, and information on industry events. Individuals post questions seeking information as they have found it to be a place of mutual benefit, necessary for reciprocity. Trust is necessary for reciprocity to some degree or the sharing of information for mutual benefit may not work. A lack of trust may create a culture where mutual benefit isn't seen as possible, and people won't take the time to volunteer information if they don't trust other members of the community. Since I found community-building occurring within the group, there may be some level of trust present among the members. It is hard to build a community and relationships with people you can't trust. The group has norms since members post work relevant topics and avoid purely social discussions. The norms also extend to the interface and use of Yammer, as it's a social media

tool. I believe the group also has values in that it's seen as a place for professional interaction. Group members aren't posting pictures of their families, for example.

Impact on qualitative research

When I first began working on the pilot for this study in 2014, I was advised that I was on the cutting edge with this research (Toomey-Zimmerman, 2014), specifically with regards to looking at a group within a social-media platform. This qualitative study looks at an online social networking group in accordance with IRB protocol. Therefore, crucial steps were taken to protect the participants' identities and exclude input from non-participants, although this input was freely available. The methods of data collection, and particularly the document analysis, were unique. I used a think-aloud protocol ((Hannibal, 2011), which wasn't an instant recall, but rather live verbalization of what the user was thinking while looking at the Yammer posts. This was not about the use of the software as in user design, but about which posts interested them and why. This method of data collection, along with the use of document analysis (Glesne, 2011) for looking at the Yammer posts, gives this study a unique foundation. It is the unique use of the think-aloud protocol, document analysis, and semi-structured conversations that make this a different qualitative study.

While my study offers promising results, it also invites further research. There were severe limitations placed on this study in order for the study to adhere to IRB protocol. Only the postings of those group members who agreed to participate were allowed to be considered in the study's analysis. If, for example, there were three replies from non-participants to a participant's posting, no matter how valuable or relevant to the research question they were, the replies could

not be included in the study. This untapped data suggests a new consideration for research. Future qualitative researchers looking at the learning and sharing of information in an online social-network group may look to this study as a guide.

Implications for Yammer

This study provides an in-depth look into user interaction via Yammer. There are two Yammer tweets that offer a look at organizations' use of Yammer. The first tweet, "See how @PizzaHut helped build community for its employees with Yammer," offers a link to the article, "How Pizza Hut is serving up Microsoft Yammer to engage its workforce" (2016). This article discusses how Yammer is being used to help employees communicate issues, ask questions, and solve problems ("How Pizza Hut is serving up Microsoft Yammer to engage its workforce - Computer Business Review," 2016). The second tweet, "See how #Goodyear uses #Yammer to connect teams across the company and enable faster knowledge sharing," offers a case study entitled, "Goodyear fosters innovation with Office 365 for maximum business impact" (2016). This case study looks at Yammer and other tools within Office 365. The article specifically mentions that "team members rely on the Yammer enterprise social network for knowledge sharing across the company" ("Tire manufacturer uses Office 365 to drive innovation for maximum business impact," 2016). The fact that Yammer tweeted both of these articles shows that the organization is interested in how its tool is being used by organizations.

It may also be of interest to the Yammer how its tool is being used by instructional designers at the university. In this regard, I offer a research-based study, providing a scholarly look at Yammer's use at a higher-education institution among a population, instructional designers, that is not often mentioned. The mention of knowledge-sharing in the Yammer tweet

coincides with this study, as this study's participants mention learning from other members and gaining new knowledge of instructional design and increased awareness of educational media. In addition, the dissemination of information also counts as sharing knowledge, as articles on online education appear among the messages being shared. These messages are meant to contribute to the dissemination of knowledge. Yammer also offers customer testimonials that discuss how organizations use the tool. It may be of interest to Yammer how this research study looked at Yammer's usage at a major institute of higher education.

Limitations

Limitations of this study arise from the fact that some individuals in the Yammer group chose not to participate. The transparency of the group allows for all members to read all posts; however, IRB restrictions only allow for those who agreed to participate to be included in the study. This restriction limits the researcher's ability to access posts from individuals that may offer insight into the research questions. Another limitation caused by non-participation is that the research findings are limited to only those group members who were willing participants, thereby excluding certain individuals' experiences from the study. Finally, another limitation was the lack of selection opportunity. Seidman (1991) discusses the selection of participants as part of a sound research design. However, since only eight group members volunteered to participate, I needed to include all volunteers rather than select the most appropriate participants.

Final Thoughts and Next Steps

The completion of this dissertation can be seen as the beginning of research regarding learning in social networking groups. Research options beyond this study are very possible. Because of the interpretivist nature of this study, it is possible that others may conduct similar qualitative studies but arrive at different results (D. Carr-Chellman, 2014). How would the results of this study change if a researcher with a different instructional design background had conducted it? The data collected may look different as the semi-structured conversations (Seidman, 1991) may take a different path with different researchers. It would be interesting to see trends over time with different researchers looking at this topic.

One idea which has arisen from this study is a further examination into this study's findings. This study brought to light that the Yammer group was used to disseminate information about topics such as conferences and meetings. There is an opportunity to look at what may be occurring within these conferences and meetings with regards to professional development, and what may they be sharing and learning. This approach could offer a new research question based on the findings of this study. A qualitative methods study could be created where meetings are observed. In these observations the researcher could watch for and listen for certain things relevant to their research question, if it happens to be different than the one I suggest. In addition participants could be interviewed after the meetings to see what they feel was important and what, if anything, may have improved for them professionally has a result.

It would also be interesting to look at a similar Yammer group at a different university. Are the same things occurring there and why? It might be possible to look at instructional designers in similar social media groups as well, such as LinkedIn groups, which are also voluntary platforms for professionals to interact. It might be interesting to see if the platform itself plays any role in what is occurring. Perhaps LinkedIn allows other posting options for

users. Another interesting research topic would be to look at Yammer groups in the private sector. With over 200,000 organizations using Yammer it would be interesting to know what is occurring within a Yammer group in the business sector, preferably among instructional designers. The culture within a company may be much different than the culture within an institution of higher education. This difference in culture may affect how people interact within the group, and what they post. Are they discussing high-level topics such as literature and offering information selflessly?

In 2014 the Yammer group Canvas Pilot was created upon my recommendation to the training team. I cited my research on the Yammer group and mentioned how people could have ongoing conversations about topics related to Canvas, as instructional designers are having ongoing conversations about instructional design and other topics in the Yammer group. The Canvas Pilot group has since changed its name to Canvas since the university's announcement that they have adopted Canvas as their new learning management system. The primary reason for establishing this pilot group was to offer ongoing support for the training provided by Canvas as well as a location for pilot participants to ask questions, offer help, and provide tips and insight. It would be an interesting study to see how well the Canvas Yammer group has lived up to its expectations. Through a qualitative study, similar to this study, Canvas groups members could be interviewed, observed, and have their postings reviewed in order to help answer a new research question focused on that group.

It is my intention to share this dissertation with relevant units at the university. An educational technology department at the university administers Yammer for the university, and individuals there have expressed interest in the findings of this dissertation (Gitler, 2015). It may be important for the department to know what is happening within the Yammer group as the activity within that group may serve as a bellwether for Yammer as a whole at the university. In addition to sharing my findings with individuals at the university, I hope to share my findings

directly with the Yammer group, as well as All Company (the default recipient for sending a message to all Yammer users). Since participation from group members made this study possible, it may be beneficial for those who participated to see what came of their efforts.

Another reason for sharing this study and its findings on Yammer is that doing so coincides with my findings that the Yammer group is primarily being used to disseminate information.

In addition, with over 200,000 organizations using Yammer (“Yammer : Enterprise Social Network,” 2016), Microsoft, the owner of Yammer, may be interested in the results of this study. Sharing these findings with an organization as large as Microsoft may be difficult, but to help accomplish this, I have been in daily contact with individuals who work with Yammer at the university, as well as some individuals who work at Information Technology Services Training Services.

If someone were to ask, “what has this research changed?” I can proudly say the Canvas group at the university was founded based in part by the findings of this study. The group now hosts 350 individuals who work with Canvas, the new learning management system. The research detailed in this dissertation offers a qualitative study designed to answer the question what are instructional designers learning and sharing in the Yammer group at the university. Gathering data through interviews, observations, and analysis of participants’ Yammer postings offered a small amount of insight into the Yammer group, but a deep analysis performed afterwards provided more insight into what was being learned and shared within the group. I believe the findings of this research can be used by organizations or groups looking for ways of communicating, sharing information, and the benefits of social interaction, including learning. Professional development, a finding of this study, is a concern for most organizations. Perhaps a Yammer group could help with some professional development needs within a company or a university. The narrative told through this research could be of interest to organizations looking for ways to bring people together even if geographically separated. The findings also offer

insight into using Yammer as an ongoing support tool, as was found, but perhaps it can be used more for training support, as with the Canvas Yammer group at the university I also believe this research offers a solid starting place for deeper research into interaction within online social networking groups. This unique research offers insight into conducting a qualitative study on online social networking groups from participant selection to data collection and final analysis. Finally, I believe this research helps fill the gap in the literature identified earlier as it looks at instructional designers within an online social networking group within a higher education institute, something that has until now yet to be studied. I also believe this research has uncovered a culture of reciprocity, something very special within the Yammer group. Perhaps it is the culture of higher education, of working for a learning organization such as an institute of higher education, that allows for professional development to occur among these instructional designers. It very well may not work in another organization without this culture and focus on learning as its mission.

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Appendix A Data From Interviews From the Pilot Study

The primary source of data collected for this study came out of the participant interviews and observations of their postings. Pseudonyms were used to conceal the participants' identities. Data from the four interviews was extracted by coding of the interview transcriptions to seek continually occurring themes from both the interviews and the literature. The interviews brought insight into what kind of workplace changes occurred as a result of information obtained from the social network group. Below is an excerpt from an interview with participant Mr. Blonde, when asked about what workplace practices have changed since joining the group

Mr. Blonde: I find myself using the social network group more often than using email listservs as I once did. I mean, it's an easier way to get the information out quickly without having to revise your listservs and put people's email addresses into a mail application. It also helps me get quicker responses as well. Most people look at the groups rather often. (Mr. Blonde's workplace, Pennsylvania, 2013-03-29)

In addition, this participant also mentioned the creation of groups in his own workplace for specific tasks or projects. "The projects are offered direct attention and a place for clear communications rather than looking through emails," mentioned Mr. Blonde.

Another participant, Mr. Black, offered the following comment about using the group instead of having meetings.

Mr. Black: Instead of having meetings with no clear agenda, it's easier to use the group to transmit information and have a discussion. Used to be we would sometimes flounder in meetings

wondering what was happening and what we were trying to achieve. Now we can post a question or seek information on the fly without inconveniencing everyone with a meeting.

(Mr. Black's workplace, Pennsylvania, 2013-04-10)

Appendix B Participant Invitation Email

Dear _____,

I am PhD candidate in the Learning, Design, and Technology program at Penn State, currently conducting research on instructional designers use of online social networks at higher education institutes. After a careful observation of the Yammer group, you have been identified as an active user and I would like to invite you to participate in this vital research. Your knowledge and experience of using the Yammer group, make your input important to understanding what is being learned and shared in this online social network.

If you choose to participate, your postings will be observed, along with one observation and one interview will be conducted at your convenience. The primary focus of the interview is what is being discussed and not the individual. Confidentiality will be maintained at all times and your identity will not be exposed. This research is IRB approved 42355 and is being conducted in accordance with ethical guidelines. The time period for the interviews is between ____ and _____. If possible interviews will be scheduled during that time period. The interviews will be recorded and will take about 30-40 minutes. During the observation you will be asked to think aloud as you look at the Yammer group.

Please reply if you are interested in taking part in this research. I cannot overstate how your experience is vital to his research and you can make a great contribution to the field. If you have any questions please feel free to contact me.

Thomas Argondizza

Argondizza@psu.edu

315 420 1944

Appendix C Interview Guide

Research Question: What are instructional designers learning from the Yammer group?

Interview questions for online social network participants.

Interview Part One

The purpose is to get the participant to talk as much as possible about being an instructional designer up to the point of the interview

Sample questions:

Tell me about your formal instructional design education if any

Tell me about any non-formal instructional design education you may have had, reading books, attending conferences, Internet resources.

How did you come to be an instructional designer?

Tell me about your career in instructional design. Start from your first real responsibility designing some kind of learning environment or instructional tool.

How did you find out about the Yammer group?

What brought you to join the group?

Interview Part Two

Details of their experience in the Yammer Group and its meaning

The follow questions will be asked based on the participant's postings. Each set of questions may differ, but will focus on the following areas. The interview should last about 30 – 60 minutes.

- What have you learned from being a member of the online social network?
 - Can you list one specific thing you learned as a member of this group?
- How often do you look at the social network group?
- How has your practice of instructional design changed due to information you obtained from this group?
- What do you look for when reading posts in the social network group?
 - What interests you in other people's posts?
 - Their information or information you are specifically seeking?
- Has being a member of the group led to any innovations in your workplace?
- Would you recommend other instructional designers join this group?

Additional interview considerations

Ideally the interview should talk place in the participant's workspace. This will provide access to the physical environment in which they are using the online social network. It is also my hope to have the online social network group present on the computer screen to refer to if necessary regarding the discussion.

Appendix D Document Analysis guide

Research Question: What are instructional designers learning from the Yammer group?

The research will look and recording data about an online social network group used by instructional designers.

The document analysis will be conducted via computer by viewing the online social network group. The primary focus of the observation is to collect the following data through non-identifiable field notes

Documents

Any documents being shared are sources of knowledge and skills sharing. Looking at them will give an idea of knowledge sharing and learning in the social network group.

What do look for

- What documents are being posted?

Talks

The discussions themselves are the cornerstone of the social network group. It is here that social learning can occur and can be evident.

What do look for

- What topics were discussed over the last 3 months?
- What events were discussed over the last 3 months?
- What responses are most common?
- What types of responses to discussions are taking place?

Artifact/Events

In addition to documents, links to help sites as well as events can be shared on the online social network group.

- What links were shared in the last 3 months?
- What events are being shared, such as conferences and learning opportunities?

Appendix E Observation Guide

What are instructional designers learning from the Yammer group?

Observation should be conducted in the participant's workplace. Take time to look at the workplace and see what may be around their work location. Are there any work related papers posted around?

Ask participant to look at the Yammer group and think out loud.

Give participants instructions on what to mention and why?

- Pay more attention to which posts are interesting and why?
- Which posts would they like to reply to and why?
- What information do they think might be helpful to their workplace?
- Are they interested in making an original post and why?

Appendix F Interview Transcript

File Name : IntMrYellow

Length : 0:18:42

Speakers : Mr. Yellow

Verbatim : No

Time codes : No

[Audio Starts]

[0:00:00]

Interviewer: Interview with Mr. Yellow. All right, so, what I would like to do is start off with having a little bit of conversation and asked what is this. Um, tell me a little bit about your background and instructional design. How did you become interested in instructional design?

Interviewee: Okay. So, my undergraduate degree was in Management Information Systems and that provided me an interest in understanding how to support both technology and business interest. It seemed as though a sort of a cross section of that and I looked at instructional design and learning design to be sort of, uh, an additional cross section to where technology and education and at sometimes

organizational considerations, um, come into play and so, thinking about those things based on some of my background. That's how I sort of got interested in instructional design. Uh, I also started of working on a grant in a College of Education where I was doing more sort of, uh, education technology development where I was maintaining websites, building new websites, uh, supporting or pouring structures, uh, that sort of thing for this education project. And as I completed those tasks, I started to work more into, uh, the design and development of more technologies, technology based educational tools. So for example, we built an online learning community, um, a digital budgeting projects, a resource repository and all of those, I more less led the day to day development design development of. So and then more officially, I became an instructional designer a little over year ago. So now, I'm working in be different capacity where it's more supporting, uh, regular ongoing courses and also doing new development as well.

Interviewer: So, some of the first things that you experienced within instructional design where more in the development of some instructional materials, um, as part as, as part of your schooling and your undergraduate or was it more some of their work responsibilities that you had?

Interviewee: Um, I would say both. So, as part of my schooling, we received exposure to a lot sort of technology areas. And so, in that we learned about programming and databases and systems architecture and all those things. So, those became tools that helped me to serve the needs of educational programs. So, I could have applied those to a number different context, um, but to me the educational opportunity was very appealing.

Interviewer: And did you pursue any sort of formal education and instructional design?

Interviewee: I did. Um, so, when I started that work on the grant, within a few months, I was also enrolled in, uh, courses at, um, Instructional Systems Program and, uh, ended up taking, uh, two semesters worth of courses before I applied and was accepted to the Masters Program.

Interviewer: So, you would say sort of it was your work experience that would led you into long to study it more or was it, um, something you wanted to do because you thought it would help work or something you just wanted to do, pursue a formal education in instructional design?

Interviewee: Um, well, I would say that it was probably, it was probably the desire to be, to better understand how to support the projects that I was working on and also to provide me with better understanding of why we, why we might make the decisions that we do in support of this tool or these educators or whatever the context might be. So, it helps to sort of provide with me, um, the necessary background knowledge, the sort of, um, confidence in the field of education because, uh, when you speak with educators, when your working with the educators, um, if you haven't yourself been an educator, you need to have some other additional background to support justifications and design considerations and so, having experienced an education in instructional design really helped me because it gave more credibility.

Interviewer: Great, excellent, excellent, okay good, good. So, you've been an instructional designer for about a year and half that you say, full time, right? And you've done instructional design work in the past, that counts too, yeah Um, so, tell me a little bit

about, uh, how do you find out about this Yammer group, and why did you decide to join?

Interviewee: Um, so, I don't really remember how I found out all about that group. It may have been from, uh, it may have been just from browsing through Yammer. Um, I know that I've been on Yammer for a couple of years and I think, when I initially signed up, I found a bunch of different groups that seems relevant at the time. And I think, I've been in the group for probably about two years or so. And, um, what was appealing to me about joining the group, um, was from exposure to the Learning Design Community of Penn State as somebody working on a project that's more less silod [ph] off from the rest of the university. Engaging in experiences like the, um, throughout the year like the symposium or other workshops gave me exposure to, um, other, to instructional designers across university, exposure to what sort of projects and things that they're working on, things that they're thinking about. And so, what was really appealing about the group was to me for, let's say 5 years, these people were like rock stars and now, being able to identify as a instructionally designer myself, that gave me an opportunity to get to know and work with these people who had been so impactful in learning and understanding of the field for the better part of a decade.

Interviewer: Okay. Um, can you identify, uh, anything new that you've experienced or learned by being in the group? Have you become aware of any new type of educational technologies for example?

Interviewee: Um, I can say that I really enjoy looking at the digest of group conversation. So often, users will post, "Hey, here's a great new tool that I found, here is, um, here's a question about using something, um, in a different way." And so, I can't,

I can't really think of specific examples of tools that I've seen that I've started to adapt but just thinking sort of more long term, um, from exposure to using that, to being in that group, it's given me a much better sense of like how to use the Yammer for example. So, it in itself is a tool to learn about Yammer. Um, and I think that that's been helpful and I've been able to apply that to talking with other faculty and students about how it might be used in, in courses.

Interviewer: Um, have you learned anything new about instructional design principles, practices or theories from the Yammer group that you could think of?

Interviewee: Um, one of things that I have seen is the reference to sort of like upcoming conferences and so, that's also gives me a sense of being new to field. I don't really know what is or is not a good conference. And so, seeing like those discussions, people who've been doing these 10-20 years, seeing, "Oh, I just came back from such and such" or I'm presenting at, gives me a better sense of things that I should also be looking out for.

Interviewer: Yeah. Have you ever attended a conference based on something that was posted in Yammer?

Interviewee: Um, not directly through Yammer but I have had conversations, um, kind of afterwards or I've, through Yammer that I've made around conferences. So, like I've gone, I went to the EDUCAUSE Learning Initiative and in that experience, I was able to meet with a number, uh, of instructional designers that I never really had any sort of personal interactions with. And so, from after that experience, that sort of provided me a better channel of communication. I actually knew them, I felt like I could

comment more freely comment on things that they might post on Yammer, whereas before, um, I might feel like, “Oh, I don’t want to come off this like who’s this guy.”

Interviewer: So, you feel a little more comfortable, uh, injecting or starting social interaction on Yammer because you’ve met some of these people?

Interviewee: Yeah.

Interviewer: Has it ever worked in reverse where you felt little more comfortable talking to somebody because you’re familiar with them only through Yammer and then you meet them for the first time in person?

Interviewee: Yeah. Um, I can think of one in particular that I knew on Yammer first. And so, like I run in to him, I think over the summer and said, “Oh, yeah, I saw some of your post, you have good stuff.”

Interviewer: So, you feel more comfortable, uh, do you feel comfortable asking questions on Yammer if you don’t understand something?

Interviewee: I think it would depend on what is.

Interviewer: So, if it was in the right frame, you would look to Yammer possibly to ask a question about something to see if he could tap this pool of rock stars as you once called them?

Interviewee: Yeah. So, there were definitely be things that I’d be willing to ask or post on Yammer but other one’s, I would be hesitant just because it maybe a question that’s come up before I would, before I was part of that community and I don’t want to pest the people or seem like I don’t know anything.

Interviewer: Okay, all right and, um, let's see. Do you look for something in particular when you look at posts or are you looking for events or do you go on daily, would you say or weekly?

Interviewee: I look at the digest, the Yammer digest every day. So, I don't necessarily go to the Yammer website but I read the email. Um, and so, I'll scan through that. So, things I look for are, um, who's posting, I look for sort of what they're posting most. Probably the majority of what I've seen tends to be links or resources depending on what it's for. So, uh, I'll make decision about if it makes sense for me to check out. Some things will be more about like English and writing, so, that's not necessary applicable to internal college. Um, other things might be about like science and labs, also not necessarily applicable but things I do think I could use for on the job resources, I'll check out. So, it kind of make big decisions based on that but part of it, is also kind of getting a seeing post, knowing who people are, um, within the community you sort of understand their reputation or their standing, um, and know that they are good, that they're just knowledgeable in general or they find very good resources or something else. So, you start to get a better sense of I guess what the community is like and I would say that it also would help me to, with communications outside so I might be able say, "Oh, I see that someone post a lot about X." There's somebody if I'm working on a project, I'll also think later on, "Oh, I need to talk to them about learning communities or labs or whatever it is."

Interviewer: Yeah. Sort of a good way to identify micro, uh, communities or practices within instructional design.

Interviewee: Yes.

Interviewer: Okay, I see.

Interviewee: Right. So, there may be, um, or even like, uh, budges for example. Like if I'm working on something like that, I might see, I might see or no people who have also posted the things about that. So, then those might be people that I would go to for that.

Interviewer: Yeah, okay. Um, have you recommended or would you recommend that others join this, uh, Yammer group?

Interviewee: Um, I would recommend, I don't think I've done it in the past but I find it to be useful resource.

Interviewer: So, if I was in new, let's say I was, uh, an instructional design intern or mentee and you want someone and I said you, "What is this Yammer group, PSU Learning Designers?" How would you describe that to me?

Interviewee: So, I would say that it is largely instructional designers but there are other faculty, staff that might not have that title but are also interested in learning design instructional design education technologies. So, I would say it's broader than instructional designers but it has a lot of good resources for people that are interested in those topics, um, and is a probably one of the more central locations for, uh, ongoing discussion. So, while it's great to attend these large events throughout, there are large events, there's only really like two throughout the year and if you want to engage in that community in any sort of ongoing basis, it's going to be through Yammer because there's really no other, there's really no other tool even if you just want see what other people are doing.

Interviewer: Okay. And, um, can you, um, point to any positive or negative impact that it has had on your carrier? It's okay say no, no nothing like that at all.

Interviewee: I would say that probably, I can't think of any negative but probably the positive would be it affords networking. So, earlier we talk about knowing, knowing people and kind of establishing those connections either first online and then in person or vice versa it allows you to sort of get a better sense of who's out there.

Interviewer: Yeah. Okay. I recommended Yammer as a solution to our problem recently and I was told "No, we don't want to do that, we no more Yammer." Some people get sick of Yammer but, um, okay. Well, you've answered all of my questions and I think we had a good conversation here. I'm going to conclude this interview. If that's okay with you unless you have something else you'd like to add?

Interviewee: Well, the one, uh, the one frustrating thing I've found with the Yammer is that it's hard to search through its archives.

Interviewer: Okay.

Interviewee: So, it, as times goes on and discussions happen, it's great when it's immediately happening and you can sort of bookmark things but I've found it difficult to go back through the history and find a post that I was looking for.

Interviewer: Yeah.

Interviewee: So, that's the only, that would be my probably only negative comment about it.

Interviewer: Okay, all right. Interview end, Mr. Yellow.

[0:18:42]

[Audio Ends]

Appendix G Observation Transcript

File Name : ObsMsBrown

Length : 0:05:50

Speakers :

Verbatim : No

Time codes : No

Special Comment :

[Audio Starts]

Speaker: Observation Mrs. Brown. Okay, go ahead.

Speaker 2: Okay. So the first when we look in here Mrs. X posted yesterday and she's saying what can people tell me about web courses. And that is something that I'm interested in because Mrs. X and I are working with campuses and collaborative programs. And one of the pieces that David Stone, who we work with closely, is finding out the process the registers go through for putting courses in – the scheduled courses and if there are designations as if they're a web course or they are blended or whatever. So to me that was interesting and then what I ended up doing was sharing that – Mrs. X actually said something there, but I shared it with David and Mr. X who is the director of IT at campuses because they have input and experience too.

Speaker: Okay.

- Speaker 2:** Yeah, sorry that's really a lot.
- [Laughter]
- Speaker:** No that's the type of stuff we're looking for, sure.
- Speaker 2:** And I did post actually Tuesday at 4:06 because there was the reminder that Mrs. X said about the meeting. And then I said I was really thought it went well. And my question was we were trying to figure out; Mrs. X and I, who attended from campuses so we could talk with them and see what their thoughts were and needs were from the campuses. And you couldn't see in the meeting their phone numbers or you couldn't see their names because it was Adobe Connect and they connected audio through phone, it was just their numbers. So I was asking is there a way we can change that for next time. And so then we got people responding about that. So to me that was a lot more useful than email, people actually wrote back and answered it.
- Speaker:** Okay.
- Speaker 2:** So yeah, anything else. Oh, when I signed up for this articulate story I told Mrs. X that I want to go to that if she has it.
- Speaker:** Okay.
- Speaker 2:** It's a training.
- Speaker:** So that's another piece of an event that you found out about portrait of a professional development experience –
- Speaker 2:** Yep.

Speaker: opportunity.

Speaker 2: Yep.

Speaker: Yeah, so think out loud while you're looking at all these. I see you scrolling.

[laughter]

Speaker: Let me know what's going on in your head.

Speaker 2: Okay, okay. So someone posted about the LTI integration of voice thread and that's important because I have faculty that I work with that are using voice thread in their courses. So he's saying that that's a pilot and so if they would ask me is there ever going to be a way to integrate this with my grade book? I could say, "Yeah it's in the [inaudible] group and here's the information". He posted a link so I would share that.

Someone posted about the townhall meeting; a reminder. So that was good.

Mr. X posted – he posts all the time all kinds of stuff.

Let's see. This was good, Mrs. X led the meeting last Friday of the Learning Design Community Group and I had asked her if she could share the links and then she put them right here. And so I did add them actually to my own little [inaudible] group. But that was good I liked that.

And, let's see. Oh, this was useful to me too. Brett posted this from the Science Foundation and their free online videos. And I'm working on a biology course with a faculty member who has no resources at all.

So I sent that to him and he said he took look and yeah so that was really good.

Speaker: Did you look at that information?

Speaker 2: Yeah.

Speaker: And did you do anything with it perhaps – you said you were working with a faculty member, right?

Speaker 2: Uh-huh (AFFIRMATIVE). Uh-huh (AFFIRMATIVE).

Speaker: Did you do anything and say according to these resources or based on what I've found I have a recommendation for an instructional –

Speaker 2: Yeah.

Speaker: improvement or an assignment idea of something like that?

Speaker 2: Well he's doing a brand new course and we're not technically in development phase yet. But I've been trying to keep like a list of resources for him so he – because looks at it as he has time. We're going to start in the summer. And so he – yeah so I went through and looked at some things we had talked about before that he was looking for videos. And so then I went in and I said to him, "Okay, I found these three, here they are" and yeah.

Speaker: Okay.

Speaker 2: Yep. [inaudible] And that was – I don't know why it's like frozen. Let me see. But I also liked that they posted – why am I in that?

Pause

Speaker 2: But someone posts the reminder about the meetings; I like that too. And I like in Yammer how it says when there's new message in the group because I keep – we actually keep it open all day so we can chat with people in our group.

Speaker: Do the meetings help you?

Speaker 2: Yeah, usually, usually. The one that Mrs. X did was really useful because that was about project management and online course design and that's always an issue.

Speaker: Okay.

Speaker 2: Yeah and deadlines with faculty, Uh-huh (AFFIRMATIVE).

Speaker: All right. That's that.

Speaker 2: We good?

Speaker: That's it you think?

Speaker 2: I think so.

Speaker: Okay. All right I'll conclude the observation.

Speaker 2: Okay.

Speaker: Miss Brown end of observation

[Audio Ends].

Appendix H Yammer Postings

Yammer Posts Mrs. Green

Post

Next eConversation coming this Thursday courtesy of Dutton!

Post

Interesting read about online cheating

Post

Hi...I'm looking for a staff member/ID/multimedia person or possibly a student who has a general familiarity with After Effects. I need to ask a question or two...test something. It shouldn't be too consuming. Any help would be greatly appreciated!

Post

Don't forget to join us for our eConversation on Exploring the Course Review and Teaching Review Process today at 10!

Post

Hi folks, we have an econversation happening on October 2nd about the Online Course Review process. Please feel free to invite any faculty or IDs who may be interested. Click the link below for more info or head over to the eConversations group.

Reply

Mrs. Red September 23 at 7:23am Mrs. Green is this limited to just Penn State folks
Mrs. Green in **reply to** Mrs. Red

Mrs. Green September 23 at 7:53am Nope! Your mentees are welcome as well as anyone else who wants to join in on the conversation! I will make sure the Adobe Connect room is open to all. Mrs. Tan and Mrs. Brown like this

Mrs. Green I mean ID-2-ID folks...I guess they aren't all mentees... Mrs. Red likes this

Mrs. Brown in reply to Mrs. Green

I'm really looking forward to these. My ID-2-ID buddy and I will be attending a conference during the Oct. 2nd event, but I think he'd like attending in the future too, he's from UNL. Thanks!

Post

Any of you heading to any interesting/awesome conferences this fall? Do share!

Post

New association



www.heedassociation.com

HEED Association

Educational association for higher education instructional designers and multimedia developers.

Mrs. Brown like this

Mrs. Brown in reply to Mrs. Green

Mrs. Brown September 30 at 3:55pm Is anyone joining it? I wonder if it will be similar to <http://www.highedweb.org/> I know Mr. x has found a lot of value in that organization.

Post

Hey folks, in case you haven't taken this TOTALLY AWESOME ID survey yet...now is your chance!! https://pennstate.qualtrics.com/SE/?SID=SV_8cBaiF2D7mRcZsF

Post

Science-U is looking to hire a short-term videographer who (hopefully) has all 3 state clearances and is eligible to work immediately with minors for an appointment that starts Monday June 22, 2015 and runs through Friday, June 22, 2015 (with possible subsequent weeks) to film an all new Science-U Camp called "Infection." This camp is filled with activities and notable PSU faculty all week...an excellent outreach effort to capture. If interested contact

Post

anyone know the status of video.psu.edu? is it in pilot still? is it going live? if so, when? I have some faculty asking about it. Thanks.

VITA

Thomas G. Argondizza Jr.

EDUCATION

- 2017 A.B.D. - INSTRUCTIONAL SYSTEMS, THE PENNSYLVANIA STATE UNIVERSITY
- 2004 M.S. - INSTRUCTIONAL DESIGN, DEVELOPMENT, & EVALUATION, SYRACUSE UNIVERSITY
- 1996 B.S. - BUSINESS MANAGEMENT, CONCENTRATION: HUMAN RESOURCES BINGHAMTON UNIVERSITY, STATE UNIVERSITY OF NEW YORK
- 1994 A.S. - ACCOUNTING, SUFFOLK COMMUNITY COLLEGE

PUBLICATIONS

- 2015 Argondizza, T. (In Print). "Response to Mike Molenda's The Systems Approach to Instructional Development" Carr-Chellman, A., & Rowland, G. (eds.) *Dialogues in Learning, Design & Technology*
- 2015 Argondizza, T. & Carr-Chellman, A. (In Progress). "Instructional Design for Teachers: The Second Addition" *Learning, Design, and Technology: An International Compendium of Theory, Research, Practice and Policy*. AECT and Springer
- 2014 Argondizza, T. & Wilson, D. "Learning in Professional Online Social Networks" *World Conference on Educational Multimedia, Hypermedia and Telecommunications*
- 2014 Zaballero, A.G., & Argondizza, T. "Developing and Training the Best People." Rothwell, W., Zaballero, A.G., & Park, J.G. (eds.) *Optimizing Talent in the Federal Workforce*
- 2014 Kirby, M. Argondizza, T. "Recruiting and Selecting the Best People." Rothwell, W., Zaballero, A.G., & Park, J.G. (eds.) *Optimizing Talent in the Federal Workforce*
- 2014 Argondizza, T. & Carr-Chellman, A. "Decisions, Decisions: Selecting a Course Management System in Higher Education." *Research on Course Management Systems in Higher Education*, Benson, A. & Whitworth, A. (eds). Information Age Publishing: Charlotte, NC
- 2013 Argondizza, T. "Blackboard Mobile Pilot at Penn State University" *World Conference on Educational Multimedia, Hypermedia and Telecommunications* Vol. 2013, No. 1 (Jun 24, 2013) pp. 1829–1835
- 2012 Argondizza, T. "Teaching Faculty and Instructional Designers at Higher Education Institutes to Utilize Innovate Tools of Learning Management Systems" *World Conference on Educational Multimedia, Hypermedia and Telecommunications* Vol. 2012, No. 1 (Jun 26, 2012) pp. 2555–2557
- 2005 Argondizza, T. "Tools for Universal Instruction." Ben-Moshe, L., Feldbaum, M., Cory, R. and Sagendorf, K. (eds.). *Building Pedagogical Curb Cuts: Incorporating Disability in the University Classroom and Curriculum*. Graduate school, Syracuse University: Syracuse, NY

PROFESSIONAL EXPERIENCE

- 11/02 – present INSTRUCTIONAL DESIGN CONSULTANT