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**Extending the Online Distance Course:
Online Student Activity beyond the Online Classroom**

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**Extending the Online Distance Course:
Online Student Activity beyond the Online Classroom**

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Dedication

To all of the journalists who have died for reporting the news.

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I am a proud Scorpion/Ocelot, Hoosier and now an extremely proud Longhorn!

**Extending the Online Distance Course:
Online Student Activity beyond the Online Classroom**

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The University of Texas at Austin, 2012

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Abstract

This study investigated why and how students, who enrolled in fully-online distance course, participated in online activities external to the formal online course (OAEOC) at any point during or after the online course. For this research, OAEOC is defined as any activity pursued by students within an online environment during or after the course that does not take place within their teacher-sponsored online course “home” (such as a Moodle or Blackboard). This research occurred within a fully-online, five-week course that trained journalists in digital tools. Data included: (a) 144 researcher-generated interpretive memos based on activities within the course’s online discussion forums and student chats and (b) 11 student interviews. Results showed that student interactions in course discussion forums were critically important for developing connections between students, which in turn, supported the initiation of online activities external to the online course. During the course, students posted information about their online identities and created a Facebook group and Twitter list, which facilitated online activities external to the course. Data from interviews showed that those students participating in OAEOC did so for social reasons and to continue conversing with classmates. Students who did not participate in OAEOCs indicated work schedule conflicts, lack of interest, and unawareness

of the OAEOCs prevented their participation. During the course, OAEOC participants discussed topics related to the course content. However, once the course concluded, OAEOC participants started discussing more personal and professional topics. The phenomenon studied is new to online distance education and holds the potential to extend the online course experience and support lifelong learning.

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CHAPTER ONE: INTRODUCTION

I began working at an International Education Entity (IEE) that provided online training to journalists at a large university in the Southwest. I have worked at the IEE for several years as a course assistant for fully online courses. The fully online courses focus on different topics related to journalism such as digital tools, social media, mathematics, and digital media development, among others, which are offered in English as well as Spanish. The courses are provided online, and students are located throughout the globe at any given time. In my course assistant role, I observed a curious phenomenon occurring within certain courses. Students from some courses were participating in online activities, not mandated by course requirements, outside the formal online course on their personal time. The fully online students were utilizing different online tools to connect outside of the online course. This phenomenon was transpiring within online courses where it was not required to join a social networking group to earn a certificate. This occurred in several different courses in which I was the course assistant. Anecdotally, I also noticed this phenomenon began to alter itself. Initially, I noticed the phenomena only took place after the online course had ended. Then, I noted students participating in this phenomenon *during* the online course.

Intrigued by the emergence of this phenomenon, I searched the literature, but there was nothing which referred to fully online students participating in online activities external to the fully online course with fellow students taking the same course, independent of completion requirements. The focus of this study is how and why the phenomenon of fully online students' participation in online activities external to the

online course emerges. I use the general term “online external activities” because while I only observed social networking, further research may reveal additional types of online activities taking place outside the formal online course. For this study, online external activities refer to any activity in which the students of the course participated with other classmates of the same course in online activities not required by the online course.

Because of the absence of research literature focused on this specific phenomenon, the literature review focused on research related to distance education and online learning. For this introduction, I elaborate on the background of the study by providing the traditional definition of distance education and interaction as proposed by Moore (1989). Then, I discuss the paradigm shifts in society, teaching, and learning, connecting how these three concepts impact one another, followed by the role technology plays in distance education and the impact of social networking tools for teaching and learning. The final part of the introductory chapter ends with the theoretical background of the study, the research questions, and a definition of terms associated with the study.

Distance Education

One of the largest areas of growth in distance education is the delivery of courses through online environments. According to the Sloan Consortium’s report, *Going the Distance: Online Education in the United States, 2011* (Allen & Seaman, 2011), there has been no decrease in the growth of online enrollments in the U.S. since 2003. However, the smallest percentage in growth was recorded in 2010. For 2010, the growth rate for online enrollments was far greater than growth in higher education enrollments (Allen & Seaman, 2011). In fall 2010, over 6.1 million students were taking at least one online

course (Allen & Seaman, 2011). Sixty-five percent of institutions, a 2% increase from the previous year, reported “online learning was a critical part of their long-term strategy,” (Allen & Seaman, 2011, p. 4). In addition to traditional formal online courses, Massive Open Online Courses (MOOCs) have become popular (Kolowich, 2012). There were over 1.5 million registrations for MOOCs offered through Coursera, Udacity, and edX (Kolowich, 2012). Typically, MOOCs are free and do not offer formal university credit or degrees.

One of the earliest forms of distance education was correspondence courses. Correspondence courses are courses delivered entirely through postal mail. Postal mail evolved into other means of delivering education such as tele-courses, via radio and satellite communication. As distance education continued to evolve, how to define it was debated. In the 1980s there was a great discussion and debate over the definition of distance education (Carl, 1989; Keegan, 1988; Rumble, 1989). Throughout these discussions there were some central elements in the definition of distance education such as the physical separation of teacher and learner, influence of an educational organization, use of technical media, and two-way communication (Rumble, 1989).

Ultimately, the key defining criterion of distance education is that the learner and teacher are physically separated. For this study, the definition of distance education is modified from Keegan’s (1988) definition, which states that distance education is characterized by:

“the quasi-permanent separation of teacher and learner throughout the length of the learning process; the influence of an education organization both in planning

and preparation of learning materials and in the provision of student support services; the use of technical media: print, audio, video, or computer to unite teacher and learner and to carry the content of the course...” (p. 10).

Keegan (1988) also included “the provision of two-way communication so that the student may benefit from or even initiate dialogue” (p. 10) in his definition; however, he was referring to two way communication between teacher and student. Keegan’s (1988) fifth characteristic of distance education is the “quasi-permanent absence of the learning group through the length of the learning process” (p. 10). For this study, the definition of distance education includes the physical separation of students from other classmates and the instructor from students throughout the learning process. Keegan’s definition was developed at a time when the means of electronic communication were starting to influence distance education. Keegan could not have predicted the effects of the emerging information superhighway on distance education. Specifically, students could be permanently separated from their classmates during the entire length of the learning process.

Most recently, the Internet has provided another medium for the delivery of distance education through online learning. The Internet provides electronic ways for learning at a distance that do not have to be fully electronic. Blended or hybrid courses are courses that blend “online and face-to-face delivery” (Allen & Seaman, 2008, p. 4). These types of courses deliver a substantial amount of their content online, have “reduced number of face-to-face meetings” and commonly make use of online discussions (Allen & Seaman, 2008, p. 4). The level of “blendedness” of a course can be as little as only

having the course syllabus online, to having key parts of the course online such as class discussions, resources and online quizzes. The number of face-to-face meetings can vary as well, but without required face-to-face meetings, the course is considered fully online. In blended learning, the key criterion is that students still meet face-to-face with a teacher within a physical space. However, this study focuses on fully online distance education, meaning the entire course, the delivery of content, and the entire online course experience is with students and teachers separated physically from each other throughout the learning process.

Paradigm Shifts in Society, Teaching and Learning

Charles Reigeluth (n.d.) and Collins and Halverson (2009) discuss societal paradigm shifts that impact the way we teach and learn. Reigeluth focused on workforce expectations and what this means for the expectations in the classroom. Collins and Halverson (2009) focused on the impact that the paradigm shifts had on teaching and learning through specific components. Charles Reigeluth (n.d.) illustrated Toffler's ideas of the shifts from the agrarian society to the industrial and information society to education and society in general. Each of these societal shifts was accompanied by changes in the way teaching and learning took place. The three major paradigm shifts are the: Agrarian, Industrial and Information Ages. The shift from the agrarian age, characterized by the one-room schoolhouse image of education, transformed into the practice of sorting students, which reflected the competitiveness marked by the Industrial Age. This type of learning focused on what the Industrial Age values in the workplace: bureaucratized organization; autocratic leadership; centralized control; adversarial

relationships; mass production; compliance and conformity; one-way communications; and division of labor (Reigeluth, n.d.). Pedagogy during the Industrial Age was “mass pedagogy” characterized by lectures, in which a small number of teachers transmitted their knowledge to a large number of students that were then tested to measure learning (Collins & Halverson, 2009, p. 97). This is drastically different from what the Information Age organization valued in the workplace: “Customization, Team-based organization, Autonomy and Accountability, Cooperative Relationships, Shared decision making, Initiative, Diversity, Networking, Holism, Process oriented, Total quality” (Reigeluth, 1983, p. 17) and “Customer as ‘king’” (Reigeluth, 1983, p. 17). This shift in society influenced how we teach and learn, specifically what we value in the classroom in order to prepare students for this Information Age.

For Reigeluth (n.d.), living in the Information Age has created different expectations for how we learn such as: “cooperative learning (teams), advanced technologies as tools, teachers as coach facilitators, thinking skills and meaning making, and interpersonal skills” (slide 43). These components are based on the way in which society communicates and works in the Information Age. The shift from teacher-centered to student-centered learning also changes the role of the instructor from one of being the center of teaching, which was characteristic of the Industrial Age (Savery, 2009) and related to a direct transmission model of learning, into one that helps “all learners to reach their potential” (Savery, 2009, p. 146). Student centered learning and teaching is one of the ways to support all learners in reaching their potential.

In “Rethinking Education in the Age of Technology: The Digital Revolution and Schooling in America,” Collins and Halverson (2009) described similar shifts in education through “eras” such as the apprenticeship, schooling and lifelong learning eras, which were explained through different aspects such as responsibility, expectations, content, pedagogy, assessment, location, culture, and relationships. Collins and Halverson (2009) described the Information Age as one that ushers in the era of Lifelong Learning. In the Era of Lifelong Learning, “teenagers and young adults are taking on more responsibility for their own lives and education” (p. 94), and they were also “less willing to accept the expectations of educators” (p. 94) and instead pursued their own goals and interests when it came to learning. This remarkable shift in how people learn had implications for how and what teachers must teach. These eras and how they have evolved are important because they describe how societal changes have impacted teaching and learning and vice versa.

We have come to a place where learners have more choice and control over what they want to learn, how to learn, and even with whom they learn (Collins & Halverson, 2009). They can also access pathways to learning at any time and any place because of the technologies available such as the Internet, computers and mobile devices. Mobile technologies are also deemed important in supporting lifelong learning (Sharples, 2000). Students can use and choose technology that fits their needs and goals for learning. Learners are free to choose what to learn, when to learn and how to learn. The Internet has been deemed a key component of promoting and supporting lifelong learning

(Selwyn, Williams & Gorard, 2001). The Internet and mobile technologies support the learning of almost anything, anywhere, anytime.

The Role of Technology in Higher Education

In 2008, The Economist Intelligence Unit released a white paper on the results of a study sponsored by the New Media Consortium titled, *The Future of Higher Education: How Technology will Shape Learning* (Glen, 2008). The purpose of the survey was to ascertain how executives in higher education and corporate settings felt technology would shape learning. According to the executive summary:

“Technology has had—and will continue to have—a significant impact on higher education. Nearly two-thirds (63%) of survey respondents from both the public and private sectors say that technological innovation will have a major influence on teaching methodologies over the next five years. In fact, technology will become a core differentiator in attracting students and corporate partners.” (Glen, 2008, p. 4)

One of the key roles for new technologies is to create “different mindsets” by offering “opportunities and resources” for knowledge construction through collaboration and discussion within the context of different activities such as learning and working (Fui-Hsiang & Gwo-Dong, 2006, p. 918). As advances in technology and communication developed, new and innovative ways of teaching and learning emerged for distance education (Dabbagh, 2004). The affordances of technologies have also influenced pedagogical practices in distance education environments (Dabbagh, 2004). Online distance education, through the technology tools available, has created a need for

rethinking how teaching and learning is structured, especially when designing materials for online courses. The implication for teachers and learners is that teachers need to be more innovative and creative in the design of materials that focus on the student's own learning rather than the act of transmitting information from the teachers' minds to that of the students'. Teachers must learn how to integrate technology into their teaching in meaningful ways. Learners are now more in control of their own learning and are, to a certain extent, expected to be more creative and innovative as well, especially in taking the initiative when the learning experience does not meet their needs. Students can find and access online tools that do meet their needs.

Technology tools can also support activities that foster lifelong learning such as online discussion forums and online communities. Fui-Hsiang and Gwo Dong (2006) believe that "...increasing the opportunity and value of online discussion in a learning context mediated by technology to facilitate knowledge sharing is vitally important for lifelong learning" (Fui-Hsiang and Gwo-Dong, 2006, p. 918). Online discussion and the technology that supports these activities also support lifelong learning.

One of the interesting aspects of technology is that the designers and inventors of technology tools cannot predict how their creations will be used once they are released into the hands of users. Innovation does not only occur in the creation of a technology or online tool, it also occurs when users begin to use it, and then apply it in different ways. Twitter is a simple tool that allows users to give updates to their friends, who are also connected to Twitter through their individual Twitter profiles. However, no one could have foreseen the numerous and varied ways in which it would manifest itself.

Twitter has revolutionized the way journalism is conducted. For example, the first images of the earthquake in Haiti were uploaded into Twitter for the world to see (Dougherty, 2010). Since the creation of Twitter and its application to journalism, other tools have been developed to assist in creating, and disseminating stories such as Storify. Storify is an online tool that allows linking to different types of online media, including social networking sites to create and tell a story online (About Us, 2012).

Initially, social networking sites were meant to be used for social interaction; however, sites like Facebook, are now used to help connect classmates and arrange group meetings for educational purposes (Madge, Meek, Wellens & Hooley, 2009). In distance education, technology itself, as well as the way people innovate with it, is revolutionizing society.

Social Networking Sites (SNS)

The growth of online social networking sites (SNS) makes it possible for students to create spaces for continued activity and communication without needing to spend weeks designing software that enables them to interact online with their peers. Students interested in continuing their online class conversations can select from an assortment of online tools with a variety of functions. This includes social networking tools. Sites such as Facebook and Ning offer robust options for creating online spaces for discussions, uploading videos and posting links. In addition to Twitter, a tool that allows users to post status updates and share links, there are simpler electronic ways, such as listservs or emailing lists for students to connect outside of their formal online course. Below is a

description of some of the popular social networking tools available that can be used to support students.

Facebook, created by Mark Zuckerberg in 2004, is a social networking tool that has grown in popularity (Facebook Fact Sheet, 2009). According to the website's 34 page, "Facebook's mission is to give people the power to share and make the world more open and connected" (Facebook, About Page, 2009). Facebook facilitates the creation of profiles by users, and then members "friend" others thus creating a social network. Members can share information about themselves, such as journal type entries called "notes," and photo, link and video sharing, to name a few of the basic applications. The key feature is the use of the "Wall" on members' profiles that allows for friends to post messages that can be viewed publicly, depending on the privacy settings of the user. While the main use of Facebook is for social networking purposes, there is some research regarding Facebook for educational purposes (Mazer, Murphy & Simonds, 2007) and educational uses by students (Selwyn, 2007).

Founded in 2003 by Ramu Yalamanchi (Wikipedia, Hi5, 2009), Hi5 is a social network that focuses on an international audience. While similar to Facebook in applications and purpose of use, Hi5 includes avatars and focuses on building an international, global community. On the Hi5 page, the social network describes itself as, "a global destination where young people meet and play. As the world's largest social entertainment destination, our focus is on delivering a fun, interactive, and immersive social experience online to our users around the world" (Hi5, About Us, 2009). Hi5 offers a mobile service in twenty-six languages (O'Neill, 2008).

Sonico, a social network, is similar to Facebook; however, its focus is Latin American countries and Spanish-speaking users (Sonico, Quienes Somos, 2009). It was founded in July 2007 by Rodrigo Teijeiro and boasts over 42 million registrants from the following countries: Brazil, Mexico, Peru, Colombia, Argentina, Venezuela and Spain (Sonico, Hoja de Datos, 2009).

Ning is different from other social networks because it allows users to create their own social networking groups (Ning, About Us, 2009). Founded by Gina Bianchini and Marc Andreessen in October 2004, this tool includes options for blogging, forums, video and link sharing. Ning has the option of creating closed social networks, which sets it apart from Facebook. In early 2010, Ning decided to shut down its free services such as the .edu accounts.

Twitter is a short messaging system that allows user to post messages up to 140 characters in length. Twitter was founded in 2006 (Twitter, About Us, 2009). Users subscribe to each other's "tweets" and thus allow those tweets to be posted on their walls. Users are able to read each other's messages without having to respond. This process is also called micro blogging. In addition to tweeting status updates, and micro blogging, users can also post links.

These social networking tools were created to enable users to interact with others online through multiple methods which mimic face-to-face social interactions. While the most popular social networking tools were not created with the purpose of supporting learning and teaching, students and teachers are now applying them in educational settings. Social networking tools are being used in ways not even anticipated by their

creators. The manner in which social networking tools are applied for educational purposes continues to evolve.

Purpose of the Study/Study Overview

The purpose of the study is to investigate why and how students who enroll in fully online distance courses participate in online activities external to the formal online course (OAEOC), at any point during or after the course with other classmates. The study also delves into what students do in their online activities that take place outside of the course. For this research, OAEOC is defined as any activity pursued by students with classmates of the same online course within an online environment that does not take place within their teacher-sponsored online course “home,” such as a Moodle or Blackboard site, during or after the course. The literature on this topic is scant. Depending on the types of activity and level of student participation, OAEOC can, operationally, resemble manifestations of online informal environments (Bray, 2006), online learning communities (Bielaczyc & Collins, 1999) and lifelong learning (Foley, 2004).

If students meet online after the course has ended for the purpose of continuing to learn and are committed to a culture of learning, this manifestation can then be called an online learning community (Bielaczyc & Collins, 1999). Bray (2006) defines offline and online informal learning as “rooted in daily experiences,” being self-directed, not being organized by “a workplace or other organization,” and as not having a “means to certification” (p. 4). If students gather online simply to exchange resources and learn

from each other, outside of the formal course, then this can be their own online informal learning environment.

Membership in different informal learning environments can support lifelong learning. Lifelong learning is defined as “an all embracing concept incorporating the various stages of a person’s education” (Foley, 2004, p. 143). Potentially, students can gather at any point to exchange information or resources or use each other as experts through online means, during or after the formal course has ended, which can be a form of lifelong learning.

Online activity external to the online course can take different forms depending on the technology tool used. For example, students can become a part of email listservs. Students can create a group within a social network (i.e. a student opens a Facebook group, external to the course on their own and invites classmates). Students can also connect with each other via a social network in which they already hold membership and/or students can simply continue to communicate directly to each other by email as needed outside of the formal course platform. Because students are taking more responsibility for their own learning, it is possible that OAEOC can be solely student-driven, student-lead and student-sustained. This emergent topic is relevant since it holds implications for online course design, students’ lifelong learning, and the life cycle of online communities.

From a practical perspective, understanding more about why online distance students participate in online activity external to the formal course and how such activity occurs may inform instructional designers and instructors on how to design online

courses to support it. Understanding the nature of this phenomenon may also reveal additional ways for continued student learning. If we assume that the OAEOC that is occurring is of the positive type (e.g. encourages and supports different types of activities that enables online communities, extends learning beyond the classroom and opens a path to supporting different forms of lifelong learning), instructors can enact teaching that can support lifelong learning. This includes the formation of online communities that support the goals of members and/or purpose of the communities created; communities that can last far beyond the closing of a distance course. However, the reason students choose to participate in OAEOC may not be related to furthering their learning. Students may participate in OAEOC to further their interactions with online classmates or in order to access resources others may generate. These are all suppositions. OAEOC needs to be investigated in order to ascertain why students chose to or not to participate in OAEOC.

Research Questions

In order to ascertain the nature of students' online activity external to the distance course, the questions below guided the research study.

1. What is the nature of student online activity that is external to the distance course?
 - a. How does the online activity external to the course unfold?
 - b. Why do the distance students participate in online activities external to the distance course?
 - c. What kinds of online external distance course activities get established voluntarily?

- d. What are the technology support systems used for the distant student activities external to the course?
 - e. What do the students do within these technology support systems?
2. How do students' online course experiences influence students' participation in external online course activities?
- a. What is the nature of the interactions occurring within the different discussion forums and chats (if any) during the online course?
 - b. How are the patterns of interaction related to online activity external to the course, if any?

Conceptual Framework for the Study

A conceptual framework is helpful in order to situate the interpretation of the research data collected. A conceptual framework also assists with understanding the phenomena that is being studied. For this research study, the conceptual framework is social constructivism. First, I discuss the basis of social constructivism within the constructivist framework; followed by the meaning of social constructivism and the theoretical underpinnings of social-constructivism that originates from John Dewey, Vygotsky, and Piaget. Then, I will describe the main elements of social constructivism.

Social-Constructivism

The most basic definition of constructivism is that knowledge is “made” and “not found,” and it is “the view that knowledge and truth are products of human enquiry and invention rather than given directly by scripture or nature” (Bakhurst & Shanker, 2001, p.

104). The basis of all constructivist-related theory is that knowledge is constructed by the learners (Jonassen, 1999):

Constructivist conceptions of learning...assume that knowledge is individually constructed and socially co-constructed by learners based on their interpretations of experiences in the world. (Jonassen, 1999, p. 217)

This means that from a constructivist perspective, the student is at the center of the learning process.

The second vital component of constructivist learning is the assumption that learners create/construct knowledge through social means. An implication of knowledge constructed individually by learners and through social means is that knowledge cannot be transmitted from a teacher to the student. Instead, teachers must create experiences that enable students to facilitate the creation of knowledge based on their experiences. In constructivist learning the experiences that students have are vitally important to how they will learn and create knowledge. These experiences need to be “authentic activities,” defined by Brown, Collins and Duguid (1989) “as the ordinary practices of the culture” that are “meaningful” and “purposeful” (p. 34). The authors further explain:

The activities of a domain are framed by its culture. Their meaning and purpose are socially constructed through negotiations among present and past members. Activities thus cohere in a way that is, in theory, if not always in practice, accessible to members who move within the social framework. These coherent, meaningful, and purposeful activities are authentic, according to the definition of the term we use here. (Collins & Duguid, 1989, p. 34)

What gives an experience authenticity is based on the practices and values of a particular group. If the activities reflect the practice, purposes and values of a group, then the activity is authentic. For example, if students are studying art, then a teacher must choose an activity that supports developing the knowledge and skills of artists such as practicing basic drawing. If students are studying journalism, then an internship at a news agency is an example of learning that immerses the learner in opportunities to practice journalism through authentic activities.

Brown, Collins and Duguid (1989) also explain, “The activity in which knowledge is developed and deployed, it is now argued, is not separable from or ancillary to learning and cognition. Nor is it neutral. Rather, it is an integral part of what is learned” (p. 32). Knowledge is inseparable from the activity in which it is learned. Learning is contextual. One of the implications of this is that students may only be able to use knowledge learned in a certain context. Transfer of knowledge learned in one context into a different context come into question.

Vygotsky is most directly linked to social constructivism (Bakhurst & Shanker, 2001). What defines “social” constructivism is the belief that learning is a result of social interaction with others, which originates from Vygotsky’s ideas of culture and social context (1978). In social constructivism, it is the interaction among learners that enables learning. The work of Piaget considered “children as active learners who are able to set goals, plan and revise” (Bransford, Brown & Cocking, 2000, p. 80). Vygotsky also believed in the “active role of learners” (p. 80). However, he emphasized “the role of social environment, included tools and cultural objects, as well as people, as agents in

developing thinking” (p. 80). These ideas support the role of authentic activities (Brown, Collins & Duguid, 1989).

One of Vygotsky’s contributions is the concept of the zone of proximal development (ZPD). He defines ZPD as:

It is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. (Vygotsky, 1978, p. 86)

In order to activate the potential of ZPD, students with varying degrees of knowledge and experiences are needed within a learning environment. Interaction is also needed in order for students to learn from each other. Social interaction is one way in which students can learn from each other and co-construct knowledge. Authentic activities can also assist in this process.

Because social constructivism is heavily influenced by Vygotsky, the emphasis is on students playing a larger role in the learning process, especially those near their counterparts’ zones of proximal development (Vygotsky, 1978). This takes away attention and importance away from the teacher who is no longer the source of learning for all of the students. Instead, the teacher can become a guide, stepping in when needed and even learning from their own students, and alongside their students. Learning is no longer a transmission process from teacher to student but a socially enacted one in which the learning process is shared with all those in proximity.

One of the implications of ZPD is peer collaboration. Peer collaboration is reflective of the expectations of learning in the Information Age—collaboration with others such as peers and experts (Reigeluth, 1983). Vygotsky (1978) also points out that “human learning presupposes a specific social nature and a process by which children grow into the intellectual life of those around them” (p. 88). Vygotsky also writes, “...learning awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in his environment and in cooperation with his peers” (1978, p. 90). Vygotsky ties learning to the context in which learning takes place and the community surrounding the learner. In social constructivist learning environments, learners must interact with one another and with their environment in order to construct knowledge. The interaction can occur through authentic activities designed by the teacher.

In “My Pedagogic Creed” Dewey (1897) writes about similar ideas:

I believe that....the only true education comes through the stimulation of the child’s powers by the demands of the social situations in which he finds himself. Through these demands he is stimulated to act as a member of a unity, to merge from his original narrowness of action and feeling, and to conceive of himself from the standpoint of the welfare of the group to which he belongs. Through the responses which others make to his own activities he comes to know what these mean in social terms. (p. 427-28)

Dewey describes learning as an outcome of “social situations,” which are also a part of the culture of the group in which the learner finds him/herself at the time. Through this

definition, Dewey ties learning to the environment. The learner is surrounded by the necessary tools and is immersed in the values and ideas of those that the learner may interact with during the time in that “social situation.” Dewey also describes interaction with others as being vitally important to the process of learning. Dewey describes learning within a social context. However, he also points to learning that is situated within a social network of a group that assists in guiding the child through the challenges of any social situation the child may encounter. The child tests this situation through his or her actions and from the responses he or she receives—social interaction. Learning is socially situated.

Social Interaction and Learning

In “Why Reflective Thinking Must Be An Educational Aim” Dewey also discusses the idea that people with different types of experiences can bring that knowledge and expertise to any situation or thing (1933, p. 215). Dewey explains, “To a layman a particular body of water may signify only something to wash with or to drink; to another person it may stand for a union of two chemical elements...” (1933, p. 215). Dewey discusses how the environment and what the environment contains can bring about in learning. However, simply being around objects or certain environments is not enough; it is when we interact with it and with others within that environment through social interaction that we can begin constructing our own knowledge.

Expertise can also be shared with others through social interaction. We are not cognizant of what we know until we impart to or share it with others and our ideas/assumptions about the world are tested. “Testing” our assumptions is supported by

social constructivism through social interaction. Social interaction helps us learn and construct, or rather reconstruct, what we know and aids us in the learning process of discovery.

Social interaction can take place within social networking tools and within online learning communities between students and instructors. Additionally, social interaction can take place within online courses, depending on the pedagogical strategies used by the instructor or instructional designer. Understanding the theoretical framework of social constructivism will help inform how and why online students participate in online activities external to their online courses.

Terminology

For the present study, distance education refers to fully online courses with no physical face time with the instructor or classmates throughout the entire learning process. The following terms are defined in order to establish a working understanding of the concepts and ideas discussed for this study.

Blended Learning Systems: the combination of computer-mediated instruction with real-time physical face-to-face instruction (Graham, 2006, p. 5). An example is a class in which students meet physically in a classroom a few times a semester while also meeting online or accessing course documents online. Blended learning systems can have different levels of computer mediated instruction with face-to-face instruction. Blended learning can also be referred to as “web enhanced” when a face-to-face course makes use of a computer mediated instructional component (Miller & King, 2003).

Distance Education: defined as the process of formal education where the instructor and student are not in the same location (Parsad & Lewis, 2008, p. 1). The delivery methods may be synchronous or asynchronous, and make use of video, audio, or computer technologies for communication. This can also include written correspondence or via technology (e.g., CD-ROM) (p. 1). Parsad and Lewis (2008) also point out that the term, distance education, within the literature has been used synonymous with *distance learning* (p. 1).

Digital Content: Subject matter developed and delivered via computer technology (Watson, 2007).

E-learning: Instruction and content delivered via digital technologies, such as online or CD-ROM, or learning experiences that involve the use of computers (Watson, 2007).

Online Identity Information: For the present study, this term is used to describe the tools through which students establish their online identities. For example, Facebook profiles, Twitter handles, and email addresses all comprise a student's online identity and also serve as contact information.

Online Learning: Education in which instruction and content are delivered primarily via the Internet. Online learning is a form of distance learning (Watson, 2007).

Online Distance Learning: Refers to distance learning done entirely through online means (Watson, 2007). Since distance learning is used interchangeably with distance education (Parsad & Lewis, 2008), online distance education is similarly defined.

Online Technology Communication Tools: For this study, technology communication tools refer to any tool that can be used by students for communication purposes.

Examples are Facebook, Twitter, email, blogs, wikis, etc.

Learning Community: A learning community is a group of individuals that seek to collectively share and leverage their expertise in order to bring understanding and knowledge for a common purpose or goal (Kilpatrick, Barrett & Jones, 2003). A classroom of students is an example. If this takes place online, then it is an online learning community.

Lifelong Learning: For this study, lifelong learning is defined as the continual learning processes in every aspect of a person's life (Cohen, 1975; Foley, 2004).

CHAPTER TWO: LITERATURE REVIEW

Online activity external to the online course (OAEOC) is a novel concept related to online learning practices. No research studies examine the actions of fully online students during or after their course experience which leads to their participation in online activities external to the course. My focus for the literature review is to discuss the factors that have assisted in the emergence of online activity external to the course during and after the course. I will then discuss how OAEOC relates to lifelong learning, online communities and informal learning spaces. The use of social networking sites for learning will be the last part of the literature review. I will discuss how students are using social networking tools and how these tools may support OAEOC.

Theoretical Foundation of Distance Education Pedagogy

Despite initial doubts regarding the use of online distance education for teaching and learning, it is widely accepted that students can learn and faculty can teach through online distance education (Simonson, Smaldino, Albright & Zvacek, 2009). Constructivist approaches are not the only ways to design online learning environments, but constructivism is considered to be an approach that supports interactive participatory online environments. Constructivist approaches emphasize the types of interaction that can be supported through distance education tools via the Internet. There are many assumptions of the constructivist learning theory. The first is that knowledge is constructed by learners (Gibson, 1998). The process of meaning-making occurs in the knower making reality exist in the mind of the knower. If each knower has a creation of their own reality, then there can be multiple perspectives (Gibson, 1998). Knowledge is

not only individually based in the head but can be produced by a group as well. If it is created with others, then it is co-created. Interaction also plays a key role in the creation of knowledge because it is through interactions with the environment, people and tools that knowledge is created (Gibson, 1998). An implication is that “knowledge is anchored in and indexed by relevant contexts” (Gibson, 1998). Also, “meaning is also socially negotiated and co-constructed” which then supports that “meaning and thinking are distributed among the culture and community” (Gibson, 1998).

While other learning theories exist, it is constructivist-based theories such as social constructivism that can best support and enable the outcomes desired within online distance education. Online distance courses are expected to be highly social, interactive and participatory in order to be effective. Constructivism, specifically social constructivism, supports this type of online distance learning environment.

Social constructivism fits well with online distance education because interaction is the key for learning in social constructivist learning environments and for online learning. The Internet has changed the way we communicate by allowing everyone to have access to information and to each other through different technologies. Web 2.0 technologies are predicated on participation from users and between users (Greenhow, Robelia & Hughes, 2009). An important part of distance education is the technological tools available for use for learning and teaching within an online environment. Web 2.0 technologies such as blogs, wikis, social networking tools, RSS feeds, and media sharing tools such as Flickr support conversations and interaction among users (Greenhow, Robelia, & Hughes, 2009). Interaction is also one of the affordances of Web 2.0

technologies that can be used to support online distance education. The success of online discussion, online learning communities and social networking tools is predicated on interaction. These different pedagogical techniques can serve as strategies to support distance education. If meaningfully integrated into the online course, they can exemplify social constructivism.

Online distance education environments can support social interaction through different strategies such as online discussion forums, social networking tools and learning communities. Social networking technologies such as Facebook can support social interaction with others.

Approaches to Distance Education Pedagogy

Early distance education pedagogy was largely teacher centered with very limited social interaction between students (Dabbagh, 2004). Technological advances such as the Internet and its technological tools have made it easier to support learning in distance education as a social process (Dabbagh, 2004). Social constructivism supports interactive participatory online learning environments. Different pedagogical strategies exist for learning within online distance education. The use of social networking tools, online forum discussions and online learning communities are approaches that exemplify social constructivist theory. These specific approaches support learning in online distance education environments as well. However, underpinning these approaches is the concept of interaction. Interaction is also a key concept in social constructivism because it is social interaction that supports the construction of knowledge. Distance education pedagogy is predicated upon interaction between learners, instructors, online course

content and technology. Interaction plays a key role in social networking tools, online forum discussions and online learning communities as well. The Internet and its technological tools with appropriate design and pedagogical strategies, allow for interactive learning experiences. Within the context of online learning, online interaction is crucial to supporting learning.

Interaction

Interaction is a concept that is critically important to learning and supports different approaches and strategies to online distance education. According to Palloff and Pratt (1999), interaction is a major factor that separates learning within a “traditional classroom setting” from “computer-mediated distance learning” (p. 5). Collins and Halverson (2009) call the current stage of education the era of lifelong learning and point out that the pedagogy of this era is one reliant on interaction (p. 97). The most basic definition of interaction is “a mutual or reciprocal action” (WordNet Search, 2010). In distance education, a specific definition for interaction depends on the type of interaction. Within education, there are many different types of interactions, which can have varied impacts on distance education.

Moore (1989) outlined three types of interaction that are still relevant today: learner-content interaction, learner-instructor interaction and learner-learner interaction. Moore (1989) defines learner-content interaction as taking place “between the learners and the content or subject of student” (p. 2). An example of learner-content interaction is when students read course materials. For Moore (1989), this type of interaction is the “defining characteristic of education” (p. 2). Learner-instructor interaction is defined as

“interaction between the learner and the expert who prepared the subject material or some other expert acting as instructor” (Moore, 1989, p. 2). An example of learner-instructor interaction is when students receive feedback from the instructor. At the time that Moore wrote these statements, the possibilities for teaching within an online environment were not as developed as they are now. Moore (1989) further explains that the instructor engages in a long distance dialogue with the students via students’ papers—conversation that is strictly learner-instructor and separated by time and physical distance. Learner-learner interaction is interaction “between one learner and other learners, alone or in group settings, with or without the real-time presence of an instructor” (Moore, 1989, p. 4). An example of learner-learner interaction is when students participate in online discussion forums in which they respond to one another. Moore (1989) notes that this type of interaction is (at the time), “a new dimension of distance education, that will be a challenge to our thinking and practice in the 1990s” (p. 4).

As online distance education has developed, so has the way in which Moore’s ideas have changed and been redefined to fit the ways in which students are learning. Jung, Choi, Lim and Leem (2002) outline three types of interaction that are prominent in Web Based Instruction (WBI): academic interaction, collaborative interaction and social interaction. Web based instruction is described as a “media-rich, online environment allowing people to interact with others asynchronously or synchronously in collaborative and distributed environments” (Jung et al., 2002, p. 153). Academic interaction is content centered and “occurs when the learner reads online materials or participants in task-

oriented learning activities” (Jung et al., 2002, p. 154). An example of academic interaction is when students download materials to read required articles.

Collaborative interaction takes place when students work together on “solving problems collaboratively” or when students are “discussing issues that are related to their learning on the bulletin board” (Jung et al., 2002, p. 154). An example of collaborative interaction is when students debate with each other in online discussion boards.

Social interaction, which can also be called interpersonal interaction, happens when “learners get social feedback from the instructor or their peers through personal encouragement and motivation assistance” (Jung et al., 2002, p. 154). An example of social interaction is when students exchange information regarding their work or posts.

Jung et al. (2002) used these three types of interaction to investigate their effects on “learner achievement, satisfaction, participation, and attitude towards online learning in a WBI environment” (p. 155). While there were no significant differences found between the perceived learning outcomes and general satisfaction with web-based instruction when comparing the three types of interaction, there were significant differences when it came to learning experiences between the academic interaction and collaborative peer interaction group (p. 157). The researchers found that “the learners’ satisfaction with the WBI experience was more strongly related to the amount of active interaction with other students than with the amount of interaction with the instructor” (Jung et al., 2002, p. 157).

For learning achievement there were significant differences between the academic and social interaction group (p. 157). The researchers found that “social interaction

between learners and the instructor contributed to increased learning achievement, whereas collaborative interaction among students did not” (p. 157).

In conclusion, social interaction was found to be more related to learning outcomes than learner satisfaction while collaboration among learners was found to be more related to learner satisfaction in a web-based instructional environment (Jung et al., 2002, p. 159). Learner satisfaction in this study was more strongly related to the amount of interaction with their peers than with their instructor. This study points out the importance and influence of social interaction between students in the course, especially the influence that peers have on learners’ experiences within a course and how they perceive their experiences.

Student-student and faculty-student interactions are critical to the learning process (Palloff & Pratt, 1999, p. 5). In distance education environments, learning cannot be a passive process (Palloff & Pratt, 1999). Students must post “their thoughts and ideas to the online discussion (Palloff & Pratt, 1999, p. 6). The process must be an active one in which a “web of learning” is created by the “network of interactions between the instructor and the other participants” (Palloff & Pratt, 1999, p. 6). One strategy for creating and sustaining interaction is through online discussion forums.

Online Discussion Forums

Asynchronous online discussion forums support social interaction between its users. They also support reflection because of the asynchronous nature of communication. Students are allowed more time to think about posts and their responses. In face-to-face discussions, where immediacy and feedback are keys to communication,

students may not have time to reflect. Therefore, online discussions forums can support student reflection.

Online discussion forums have also been shown to improve student performance (Cheng, Pare, Collimore & Joordens, 2010). Cheng et al. (2010) discovered that students with more page views posted more often. In addition, students with above the average number of page views, when compared with other students, improved on their exams when an online discussion forum was implemented into the course midway through the semester (Cheng et al., 2010). Simply reading online posts had a positive effect on students' course performance. Cheng et al. (2010) theorized that it is the "interaction between the posts and their follow-ups are what make the viewing beneficial..." (p. 259). It is when students write follow-up posts that make learning interactive and beneficial for student learning. In this particular study, Cheng et al. (2010) found that when online discussion boards were interactive (there were posts and views) and students participated, online discussion helped students comprehend course materials and improve their course performance.

While online discussion forums can support learning, they can also be valuable tools for online learning communities. Online discussion boards can be the heart of online learning communities because they serve as venues where members interact. Different types of online learning communities exist and are an emerging online practice in distance online learning.

(Online) Learning Communities

Other emerging online distance educational practices are online learning communities. Learning communities have the potential to enact what is considered a positive learning environment. Online learning communities can also support lifelong learning because they can offer supportive spaces that can be modified to fit the needs and goals of the members.

Different types of communities exist. Jonassen, Peck and Wilson (1999) discuss several variations of communities. The first is discourse communities which they define as people who “talk about common interests” (p. 116). Discourse communities are based on the premise that “[p]eople are social creatures who like to talk with each other” (p. 116). Learning is then a social activity through the medium of discourse. The discourse can occur by face-to-face or electronic means. If the discourse takes place online, it can be asynchronous or synchronous.

Another type of learning community is a community of practice. Communities of practice are defined by Wenger (1998a) as illustrating three dimensions: What the community is about, how the community functions, and what capability the community has produced (Wenger, 1998a). What the community is about is described as “its joint enterprise as understood and continually renegotiated by its members” (Wenger, 1998a, p. 2). How the community functions is described as “mutual engagement that binds members together into a social entity” (Wenger, 1998a, p. 2). Finally, what capability the community has produced is illustrated through “the shared repertoire of communal resources (routines, sensibilities, artifacts, vocabulary, styles, etc.) that members have

developed over time” (Wenger, 1998a, p. 2). The capability of each community depends on the abilities of the members that are a part of it, including the goals and interests that drive the community. Each community can be unique.

Jonassen, Peck and Wilson (1999) define communities of practice from the work by Jean Lave which focuses on learning by “becoming a participating member of a community of practice” (p. 117). Lave’s work focused on learning as a social phenomenon that is deeply embedded and intertwined with the real world, specifically within a social context. Communities of practice are examples of 21st century lifelong learning (Camacho, 2005). Within communities of practice, learning is defined within the context of social activity. Jonassen, Peck and Wilson (1999) further explain:

In other words, learning results naturally from becoming a participating member of a community of practice. You cannot do your job without learning about the skills, the knowledge, and the social context that surround that job because the context, to a large degree, defines the nature of the job. (p. 117)

These authors describe the importance of authentic activity for supporting learners in co-constructing knowledge within a social environment. The explanation presented by Jonassen, Peck and Wilson (1999) also supports the ideas of Brown, Collins and Duguid (1989). Jonassen, Peck and Wilson (1999) connect learning to the social context or activity in which it takes place. Wenger (1998b) does as well within the context of communities of practice, which emphasizes “learning as social participation” (p. 4).

A knowledge-building community is also a variation of a community. Jonassen, Peck and Wilson (1999) point out the research of Scardamalia and Bereiter centered on

intentional learning, the pursuit of learning as a goal (p. 118). But it is not the teacher's knowledge building that is the center of this goal but that of the students' own learning. Once again, Jonassen, Peck and Wilson (1999) point out that "[k]nowledge building becomes a social activity, not a solitary one of retention and regurgitation" (p. 118). Social interaction is a part of the learning process. Through this knowledge building framework, technology is the medium which is used for "storing, organizing and reformulating the ideas that are contributed by each community member" (Jonassen et al., 1999, p. 118). Social networking tools are able to provide the type of support needed to establish and support a knowledge-building community.

Learning communities are among the most prevalent types of communities in the literature. Different variations of a learning community exist; however, the defining characteristic of a learning community is that the community is focused on "a culture of learning in which everyone is involved in a collective effort of understanding" (Bielaczyc & Collins, 1999, p. 271). As part of this "collective effort," knowledge is shared, which is "a key component of the formation of operation of lifelong learners as a community" (McAndrew, Clow, Taylor & Aczel, 2004, p. 745). Learning communities support lifelong learning by providing a space for knowledge sharing. These communities can also be voluntary and can form at any time, which means members can access them throughout their lives as needed. Online learning communities can be created through a variety of social networking tools.

Online interaction has been linked to a stronger sense of community (Dawson, 2006), and a sense of community has been related to the concept and practice of creating

online communities that can enable and support learning (Rovai, 2002a; Rovai 2002b). Social presence is a key component of building an online learning community because it supports a sense of community. Social presence is defined as the “measure of the feeling of community that a learner experiences in an online environment” (Tu & McIsaac, 2002). Currently social networking technologies can enable learners to develop their social presence (Gunawardena, Hermans, Sanchez, Richmond, Bohley, & Tuttle, 2009).

The technologies offered through the Internet can support the design of learning communities (Snyder, 2009). Some of these technologies are social networking tools, many of which have already been discussed. However, it is not the technology but how users apply and interact with the technology that can transform a technology into a tool. From a technological perspective, creating online spaces to create and sustain online communities is not an overwhelming challenge because of the different technological options already available, specifically those affordances offered through online social networking tools. The challenge is in the design of curricula that integrates the technology in effective ways to enable and support learning.

Countless examples of online learning communities (OLCs) created out of individual interest exist that are unrelated to formal educational spaces. Online learning communities can include people congregating for a specific goal such as weight loss, (e.g. Weight Watchers, which has a comprehensive online discussion and support space containing a section labeled “community”). Another example is the GNG Gaming Community, which describes itself as a “tight-knit community of adult gamers and PC enthusiasts” (GNG Gaming Community, 2009). The heart of the GNG Gaming

Community is a discussion board. However, these are examples from an informal learning environment, away from a formal educational space; but can there be a space in between? Can there be online learning communities that are created as a result of participating in a formal online course? By this I mean, OLCs are created, not as a requirement by the online instructor, but created because the online students desired their own space outside of the online course. Perhaps, these student-driven spaces can be considered to be a part of their social interactions away from their online classes. These spaces are possible because of the online technological tools available.

These in-between spaces may very well represent another type of online community. The type of community depends on the characteristics of the communities created by individuals such as their goals, interests, products and the technological tools used. What if online students are creating these online spaces to continue their conversations outside of their formal online classroom? Perhaps, they are created to give each other support to cope with a difficult online course? Perhaps, online students are interacting for other reasons. At this juncture, we are unsure why online students are creating these online spaces with their fellow students because there is no research specifically addressing this situation.

Social Networking Tools

Social networking tools can support communities of practice in several ways. Gunawardena, Hermans, Sanchez, Richmond, Bohley and Tuttle (2009) illustrate the different ways in which social networking tools can support a community of practice. Gunawardena et al. (2009) intentionally created their own community of practice to

compose their journal article. Gunawardena et al. (2009) illustrate through the processes described in their article, the many ways which social networking tools can support communities of practice. Through the process enacted as a community of practice to create the article, the authors reflected upon the theories that supported their own learning process while participating in a community of practice and practicing action research.

Gunawardena et al. (2009) used social-cultural, socio-constructivism, and Vygotsky's zone of proximal development to explain their learning processes while writing their article. The authors explain that "learning to navigate an online social networking site challenges the novice and creates a ZPD" (p. 9). This ZPD can be mediated through tutorials, interaction between participants, and help tools. Mentoring between peers and instructor-to-student was also used within the group. The following is a detailed description of an article illustrating how the authors used technology tools to support their goals and purposes, namely creating an article in which they describe the process of applying the theory of community of practice in the use of social networking tools in supporting their goals.

Gunawardena et al. (2009) used the theoretical framework of communities of practice in order to "understand learning among groups of individuals that utilize social networking applications to work towards a common goal" (p. 5). They found that social networking tools fit well within this framework and through the framework were able to explain how social networking tools can support and enable learning through social interaction.

Gunawardena et al. (2009) applied the “three structural elements” of Wenger’s community of practice theory: domain, community, and practice to discuss social networking technologies. The first structural element is the domain. The domain “represents the common ground” of community in which “participants share their ideas, knowledge and stories” (p. 6). For social networking technologies, the domain is represented by the forums that are available to participants for “discussion and interaction” (p. 6). Through engagement in the domain “a shared understanding can develop” (p. 7).

Gunawardena et al. (2009) use Wenger’s definition of community, which is “a group of people who learn and interact together, building relationships that result in a feeling of belonging and mutual commitment” (p. 7). Social networking tools can build community through “dialogue and conversation” (p. 7). Gunawardena et al. (2009) apply social constructionist theory to explain how an individual’s understanding of the world is constructed through a “shared construction of the world” (p. 7). They further explain, “Daily social interaction and relationships are the source of what is true for us. People who are curious about the lives of their peers regularly use MySpace and Facebook to create a shared worldview” (p. 7).

The third structural element is practice. Wenger’s definition of practice, as cited in Gunawardena et al. (2009), is “the specific knowledge the community develops, shares and maintains” (p. 7). This process is influenced by the Web 2.0 technology tools used because “users adjust to the new interactive technological environments, and they will do so either in ways that reveal native cultural values, or reflect the creation of new cultural

norms and conventions” (p. 7). Furthermore, the tools can impact the communication process and how users perceive their own social roles (p. 8). These social networking tools “change how we think, how we learn, and how we interact with each other” (p. 8). These tools “offer ways to participate in interactive dialogue and the means to conduct learning” (p. 8).

Negotiation of meaning is one process that can take place through social networking tools. Wenger as cited by Gunawardena et al. (2009) defines negotiation of meaning as “the process by which we experience the world and our engagement in it as meaningful” (p. 8). Gunawardena et al. (2009) argue that in a social networking environment, negotiation of meaning “takes place as individuals advance their knowledge of a particular subject or process, develop a community with a common history, and create a new cultural historical process” (p. 8). Gunawardena et al. (2009) explain how they were able to use social networking tools for their own goals and purposes. Their process illustrates how social networking tools can support authentic activities, help learners create and co-construct their own knowledge through social interaction within social networking tools. The authors also demonstrate that social networking tools can immerse learners in the culture and values of a community of learners.

Social Networking Sites (SNS) for Teaching and Learning

In July 2012, Facebook boasted approximately 160 million unique visits and as of February 2012 an estimated of 825 million worldwide users (Statista, 2012). More recently, Facebook was rated the top social networking site for November 2012, according to estimated unique monthly visitor data gathered by the site eBizMBA (Top

15 Most, 2012). The popularity of Facebook has brought it to the attention of educators and researchers for the purpose of finding strategies for using Facebook for learning. Because of the popularity of Facebook among college students and Facebook's networked infrastructure, it is feasible for professors to use this social networking tool to create cohorts within online courses and conduct lessons (Roberts & Styron, 2010). In their research on the use of Facebook by university-level students, Madge, Meek, Wellens, and Hooley (2009) found that "Facebook was increasingly used by some students for contacting other students to organize group meetings for academic project work, revision and coursework queries: it became more than just a social network for some students and started to become an informal educational network as well" (p. 148). Towner and Vanhorn (2007) also found that their subjects, college students, used Facebook for similar tasks.

Facebook may also assist with the creation of learning communities. Towner and Vanhorn (2007) concluded that:

Overall, the written responses suggest that while Facebook is primarily used for non-academic purposes, its unique university-connected membership requirement makes it a prime candidate for building learning communities that promote active learning. (p. 12)

Because Facebook connects students, Towner and Vanhorn (2007) argue that through indirect means the social networking site "...creates a sense of community on campus and in the classroom. As a result, students may participate more in the classroom setting" (p. 12-13). The social interaction between classmates on Facebook, whether on campus

or off, can indirectly facilitate a learning community (Towner & Vanhorn, 2007). As of September 2006, Facebook became open to anyone over the age of 13 with an email account. Affiliation with an educational institution was no longer needed to join Facebook.

Social networking tools enable easier options for creating an online space for students' communication at any point during or after the course, which makes social networking tools an ideal candidate for supporting online activity external to the course. This can be accomplished by forming student groups after the course has ended to continue communication and/or even during the course to further discuss readings. One of the implications of this innovative form of online communication and gathering is that it can be solely student-driven, led, and nurtured to evolve in proportionate with the needs and wants of the students. This would be without teacher input, participation or even involvement of the educational institution. The unique part of online distance education informal spaces is that they are not limited by the physical location of the student, and they can develop and evolve according to the needs of those forming these spaces.

Lifelong Learning

For this study, lifelong learning is defined as “an all embracing concept incorporating the various stages of a person’s education” (Foley, 2004, p. 143). Lifelong learning is learning that can occur at any time during the course of a person’s lifetime. With the mobile technologies available and the Internet, lifelong learning can be supported through a myriad of technology tools.

Online activity external to the course can be a type of activity that supports lifelong learning because it extends the learning beyond the formal online classroom. Also, because of the technology tools available, the online activity that occurs external to the online course has the potential for being sustained for an extended period of time beyond the online course ending. By researching online activity external to the course, we may find techniques to support lifelong learning well beyond the end of an online course.

Conclusion

In the Era of Lifelong Learning (Collins & Halverson, 2009), how we learn has changed at a conceptual level. However, the continual evolution of emerging technologies and technological advances has also contributed to how we teach and learn. I have discovered a space within online distance education that has yet to be studied; one in which online students use online tools to create spaces of their own. However, it is not clearly understood why these spaces are created, whether for learning or because of self-interest. We do not know the exact reasons or processes, but these spaces are closely related to their respective online distance course experiences. And, they can emerge during or after the online distance course. This phenomenon is new to online distance education and needs to be investigated because it holds implications for lifelong learning, design of online educational environments and online learning communities.

To that end, I propose the following research questions to investigate this phenomenon:

1. What is the nature of student online activity that is external to the distance course?

- a. How does the online activity external to the course unfold?
 - b. Why do the distance students participate in online activities external to the distance course?
 - c. What kinds of online external distance course activities get established voluntarily?
 - d. What are the technology support systems for the distant student online activities external to the course?
 - e. What do the students do within these technology support systems?
2. How do students' online course experiences influence students' participation in external online course activities?
- a. What is the nature of the interactions occurring within the different discussion forums and chats (if any) during the online course?
 - b. How are the patterns of interaction related to online activity external to the course, if any?

These questions are aimed at understanding online students' creation and participation of online activities outside their formal online distance course (See also Appendix A: Research Matrix).

CHAPTER THREE: METHODS

The following chapter describes the methodology for this study. The case study methodology, a type of interpretive qualitative research, was used for the study. First, I describe the case study method. Then, I describe the research site, participants, and data collection and analysis process for the data sources.

The Case Study

The methodology for the present study is case study. Yin (2003) defines a case study as “an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (p. 13). The “case” is one fully online course whose students developed online activities external to the online classroom. I chose the case study technique because I wanted to study the context of why and how fully online students decided to participate in online activities external to the online classroom (OAEOC). The main research question encapsulates this goal: What is the nature of student online activity that extends beyond the distance course? I suspect the experience and context of their online course experience to be crucial to their decisions in OAEOC engagement.

As part of the case study methodology, three strategies were applied: collecting data from multiple sources of evidence; creating a case study database; and maintaining a chain of evidence (Yin, 1994). The context of the study contains multiple sources of data that were triangulated in order to depict the phenomena and answer my research questions:

1. What is the nature of student online activity that is external to the distance course?
 - a. How does the online activity external to the course unfold?
 - b. Why do the distance students participate in online activities external to the distance course?
 - c. What kinds of online external distance course activities get established voluntarily?
 - d. What are the technology support systems for the distant student online activities external to the course?
 - e. What do the students do within these technology support systems?
2. How do students' online course experiences influence students' participation in external online course activities?
 - a. What is the nature of the interactions occurring within the different discussion forums and chats (if any) during the online course?
 - b. How are the patterns of interaction related to online activity external to the course, if any?

The data were gathered from multiple sources: student interviews, archived online course discussion forums, archived online chats, and archived student lounge discussion forums. The case study database includes researcher case study notes related to interviews and/or data analysis. Developing a case study database establishes reliability for the research study (Yin, 1994). To maintain a chain of evidence, a protocol for the collection of data was established. Memos and notes were marked to ensure cross referencing, including any resulting analysis so that other researchers are able to trace the

evidentiary trail of documents, notes and data collected (Yin, 1994). Maintaining a chain of evidence and using multiple sources of evidence establishes the construct validity of the research study (Yin, 1994). Explanation building is an analytic strategy that analyzes the data of the case study in order to build an explanation regarding the case (Yin, 1994). Explanation building was used for analyzing the research study data.

Researcher's Biography

I am a Hispanic female with a Master's of Science in Instructional Systems Technology. I have been employed with an International Education Entity for several years as an online course assistant. The duties of the course assistant include the uploading and organizing of the instructor's learning materials to the course management system prior to the launch of a course. A major responsibility is to assist students with technical issues related to the use of the course management system. Depending on the instructor and the focus of the course, duties can also include assigning points for activities, reviewing student assignments, and participating in course discussion forums. Course assistants also process the evaluations collected at the end of the course and write the evaluation reports. After instructors have turned in the list of students that have successfully concluded the course, the course assistant creates and sends out certificates of completion. I am a native Spanish speaker and was assigned to assist with courses conducted in English and Spanish.

Over the years of assisting with online courses, I witnessed in some online courses, the phenomenon of fully online students participating in online activities outside the course. In the role of course assistant, I observed that these activities external to the

course were unrelated to the course requirements and occurred online through different online tools such as social networking tools and emerged at different points during the online course (sometimes at the beginning and sometimes not until the course was closed to the online students).

These observations served as the impetus for pursuing this research study in order to ascertain a research-based perspective regarding the emergence of the phenomena. For this study, I observed the above described phenomena in the case study course.

Research Site

The research site is an International Education Entity that trains professional journalists from Latin America and the Caribbean through fully online distance course offerings. The focal case in this study is a single, fully online course that showed evidence of online student activity external to the online course in 2010. The archived course and its students served as the case study. Archived courses are courses that have concluded and are no longer accessible to students. Archived courses were considered because the phenomenon of activity external to the course requires a time lapse between the course ending and the external activity to emerge and possibly sustain itself. The time lapse is needed in order to allow the students to establish the activity external to the course in a natural way.

Selection of Course and Overview of Consent

I used a purposive sample to identify a course as the focus of the research study because the focus of the research study is a specific type of phenomenon: students' online activity external to the online course that is not part of the course requirements for

completion of the online course. To select a single online course, the following processes and criteria was applied. First, a list of all the online courses in which I served as a course assistant was generated. Second, the list was narrowed down by eliminating online courses that had been archived for less than a month and online courses that had been archived for longer than two years. The remaining courses on the list were narrowed down to online courses in which I, through previous personal experience as course assistant, had seen evidence of this behavior emerging. Examples included students mentioning activities external to the course in course forums and/or chats, or through online searches using the course title, which yielded evidence of Facebook or other online groups associated with the course. The focus of the study was a course focused on using online digital tools for journalistic purposes.

Once the course “case” was identified, permission from the International Education Entity’s director to access the contact emails for the students of the course was obtained. I sent an invitation email to those that were enrolled and had logged into the course inviting them to participate in interviews. The email outlined the study and invited them to participate. The email explained the purpose of the study and the requirements of an interview in order to participate. If the student agreed, then she/he contacted me to exchange contact information and arrange for a time and date for the interview to take place via phone or Skype.

Students received a PDF copy of the informed consent form via the introductory email; however, no formal signed informed consent form was collected because a waiver of documentation of informed consent was requested from the university’s Institutional

Review Board because the students were located throughout the globe. The logistics did not allow me to easily gather the physical signed informed consent forms from study participants. Through the copy of the PDF consent form, participants were informed that the interviews would be recorded, transcribed and their identities protected with pseudonyms. Participants agreed to participate in the study when they responded to me with a request to schedule an interview. The consent form was provided in English as well as Spanish.

Research Participants

Participants were online students that were working journalists seeking additional training at the International Education Entity. Typically, the general criteria applied as a guide to accepting students into a course were: a few years of journalistic experience and, at the time of the application to the course, working/freelance journalists; although some exceptions were made for those who were unemployed. Also, applicants needed to indicate they had the time to dedicate to the course.

Out of one hundred possible subjects, fourteen students consented to participate in the study. However, only eleven students completed an interview. The eleven participants were two males and nine females: Joanna, Antonio, Mari, Julissa, Nekko, Thalia, Brenni, Reyna, Ramona, Rosita and Juanita. Interviews were conducted via phone or Skype. All interviews were recorded. However, due to technical difficulties, Julissa's interview was not recorded properly. For Julissa's interview only certain parts of the interview were transcribed. I wrote notes that represented the communication after the improperly recorded interview was completed.

Three students dropped out of the study. The three potential subjects agreed to an interview, however; two scheduled an interview but were unable to meet with me. One participant never responded to my follow up email requests to schedule an interview after the subject responded to the introductory email.

Description of the Selected Course

The course was conducted entirely online through Moodle, a course management system. The selected course focused on digital tools for journalism. The Instructor, who was not the researcher, had extensive journalism training and experience in the topic of the course. The Instructor-created the materials for the course and with the support of International Education Entity staff, content was uploaded, organized, and refined prior to the start of the course. A team of support staff offered technical assistance throughout the course. However, the course was assigned one course assistant, who also served as the main contact and lead support for the course Moodle platform. One of my main duties as the course assistant was to help students manage technical challenges throughout the course in addition to providing general assistance as requested by students and instructor. As the course assistant, I also assisted with processing the end of course evaluations and creating the final course evaluation report.

The course was approximately five weeks long with an additional week at the end of the course. The main content of the course was delivered through several types of formats: PDF files, video lectures/introductions, resources, links and PowerPoint lectures posted by the Instructor. The introductory part of the course opened a few days before the first week and contained several documents including explanation text of the format of

the course, expectations, FAQs, and general forums. Students used these first few days to become familiarized with the course expectations, and create their individual personal profiles for the course, which included a biography and a photo. The opening of the first week marked the formal start of the course.

Each of the five weeks had an opening video created by the Instructor as an introduction to each week's topic. In addition to the video, a required or suggested lecture was included. Also, every week had an introductory text elaborating on the week's topic, usually in PDF format. A class discussion forum for exercises put forth by the Instructor was also part of every week. Although there were no formal chats scheduled, an option to chat was a part of every week for the course. Lastly, a page for links related to the week's topics was also included for each week.

In the introductory area there were three different forum areas: a student lounge themed forum, technical help forum, and a forum for news. These were open through the entirety of the course. For each week, the weekly discussion forum functioned as the gathering point for all discussions, making it, in essence, the online "classroom." The weekly discussions were opened by threads created by the Instructor. All participation in the forums was voluntary. There was only one required exercise in the forums in the last week of the course. The Instructor sent out an email to announce the required exercise, since not all students were actively participating in the discussion forums.

Moodle also provided a text chat function. A chat option was available in the introductory part of the course as well as in each of the five weeks. Students could use any of the chat options at any time for any purpose as needed. There were no formal class

chats scheduled by the Instructor. In order to create a chat session, at least two students had to synchronously log in at the same time/date. If students participated in any chats on their own, chats were archived for later viewing by all course participants.

Moodle provided functionality for the creation of quizzes/exams that could provide multiple choice, true/false, and short answer questions. This function was used to create a final exam. The final exam contained 20 comprehensive, multiple-choice questions. Sixty students attempted the final exam, only fifty-five completed it. However, if the final exam was not completed, students were still able to pass the course by participating in the forums and completing the only required forum exercise. If students did not complete the required forum exercise, they could still pass the course by passing the final exam. Additionally, if students attempted the final exam but did not pass it, then the Instructor took students' forum participation into consideration towards successful course completion. In the event that students failed the final exam and/or did not complete the required exercise, substantial and consistent participation in the weekly discussion forums could result in passing the course at the Instructor's discretion. At the end of the course, the Instructor reviewed students' participation and created a list of students that completed the course. Certificates of completion in PDF format were emailed to those students that satisfied the requirements. No traditional university course credit was awarded for successful completion. The course was archived approximately five weeks after the end date, meaning no students were allowed to enter the course after that date. This allowed students time to download course materials of interest.

In the last week of the course, the course was evaluated through an anonymous formal online evaluation. The evaluation contained multiple-choice and open-ended questions. All of the evaluation data were collected and compiled by the course assistant in an evaluation report. The final report was reviewed by the International Education Entity staff and then shared with the Instructor. The evaluation was archived as part of the course record and used to guide improvements if the course was offered again.

Data Sources

Two primary sources of data were used for the study: interpretive memos and interviews. A primary source was the interpretive memos which I generated from the course content. Interviews of the subjects concerning their experiences with the course and participation or non-participation in activities external to the online course were also a primary source of data. The online course was a secondary source of data.

Data Collection

Interviews and interpretive memos were the two main types of data collected. The course evaluation was also collected. All of the data collected were added to the case study database.

To understand how online external activities to the course emerged from the students' perspective, student interviews were conducted. Eleven interviews were conducted between October 2011 and February 2012. Student interviews were approximately thirty minutes to an hour and a half long. Student interviews included both participant and non-participants in any online external activity to the course. Interview questions were semi-structured (See Appendix B: Interview Protocol). The interview

questions were focused on capturing the students' experiences in the course and how those experiences may have informed their decision to take part (or not) in online activities external to the online course. After the interviews were conducted, they were transcribed. Identifying data were removed and replaced with pseudonyms to keep participants' identities confidential.

Data Analysis

There were two levels of data analysis in this study. First, an interpretive examination of the course data was completed to create the interpretive memos. This interpretive process and memo-writing was considered a form of data analysis. Second, the interpretive memos, interview data and the anonymous evaluation open-ended responses were analyzed using qualitative methods such as open coding.

Writing Interpretive Memos

Interpretive memos are analytic notes written by the researcher. Interpretive memos were written about the following areas of the course: general course page to capture an overview of the course, chats (if any) and all discussion forums, including the general forums and weekly discussion class forums. I focused on any patterns of interactions that emerged from the discussion thread(s) and other patterns that I deemed of interest for purposes of the study. Specifically, I read student posts within a single thread, wrote a memo describing that thread, noting the holistic patterns or conclusions that could be drawn from the postings. Another, different interpretive memo was written to describe trends at the forum level, taking into account all of the threads within a single week. The interpretive analysis emphasized the entire thread holistically and only noted

special elements of interactions that pertained to the research questions. Descriptive indicators within discussion forums, such as the overall number of posts per week, number of posts per thread in each discussion forum, and threads per week were also noted through memos. Additional interpretive memos were written as I deemed necessary. The memos also included my tentative interpretations and thoughts. The memos served as the primary source data for analysis, which represent an anonymized account of activities. These memos formed a trail of evidence and were added to the study database.

Course chat data were collected through interpretive memos. An interpretive memo was generated for each student-chat (archived), including attempts at chatting. Additionally, an interpretive memo that took into account all of the chats for a given week was also generated. Another overall memo was generated that interpreted all of the chats for the entire course. Descriptive data from the chats were also gathered, such as the overall number of chats that took place per week, chat attempts and length of chats, measured through the number of chat text lines.

Coding

The interpretive memos from each section of course content were coded by hand and constantly reviewed. Additional coding was conducted through Nvivo 9, qualitative software. The coded data were then categorized into themes through selective coding. The research questions guided the coding process. The resulting themes from each section were triangulated with themes that emerged from the other sections including the

themes from the interview data. The research questions were answered through emerging themes.

Open coding, defined as “putting labels on pieces of data” (Punch, 2005, p. 207), was used to analyze the interviews, memos and evaluation data. The research questions guided the process of data labeling and categorizing of emerging themes. The themes resulting from the interview data were then triangulated with the data collected from the interpretive memos generated from the course data. Through this process, a picture of the experiences of the online students began to form and the research questions were addressed.

Trustworthiness of Study

In order to establish the trustworthiness of a research study, Lincoln and Guba (1985) suggest the following techniques: prolonged engagement, persistent observation, and triangulation, peer debriefing and negative case analysis (p. 301).

Prolonged Engagement is the “investment of sufficient time to achieve certain purposes: learning the ‘culture,’ testing for misinformation introduced by distortions either of the self or of the respondents, and building trust” (Lincoln & Guba, p. 301). As course assistant of the online course when it was active, I was immersed in the culture of the online course. Additionally, I reviewed the archived data from the online course thoroughly and extensively over the course of months. In addition to the memos I generated, I also took notes describing reflections, hypotheses and/or observations through the data collection and data analyses processes. In order to build trust, I ensured

that participants were aware that their responses would be completely confidential and not be used against them.

Persistent observation is used to “identify those characteristics and elements in the situation that are most relevant to the problem or issue being pursued” (p. 304). I reviewed the raw data collected continuously at different points of the study, making note of elements that required further study. As a result of this practice, additional notes and memos were generated to document my thoughts and continued analysis. These notes and memos became a part of the case study database of documents.

Lincoln and Guba (1985) recommend triangulating data collected by “using different sources, different methods, and sometimes multiple investigators” (p. 307). The use of triangulation eliminates the bias that arises when only one source of data or a single method is applied. Multiple sources were used such as interviews and interpretive memos generated from the archived discussion forums, and chats. A variety of methods for data collection such as interviews, and interpretive memos, was used, and which were analyzed using open coding.

Member checking is another method to establish trustworthiness. Member checking is a process “whereby data, analytic categories, interpretations, and conclusions are tested with members of those stakeholder groups from whom the data were originally collected” (p. 314). I practiced member checking during interviews with subjects by presenting them with interpretations of the interviews for their feedback while the interview was taking place.

Peer debriefing is “a process of exposing oneself to a disinterested peer in a manner paralleling an analytic session and for the purpose of exploring aspects of the inquiry that might otherwise remain only implicit within the inquirer’s mind” (Lincoln & Guba, 1985, p. 308). In this particular case, I was the inquirer. Peer debriefers were two members of the dissertation committee. The main peer debriefer was my advisor. The second debriefer was a member of my dissertation committee. I met with the peer debriefers throughout the data collection and data analysis of the study to discuss emerging findings. The debriefers provided guidance and additional perspectives on the analysis process. Throughout these processes participants’ identities were kept confidential.

Conclusion

To answer the research questions, student interview data and interpretive memos from the course were collected, analyzed and coded to discover the emerging themes related to the research questions. All names of study participants have been changed to pseudonyms. Eleven students, nine females and two males were interviewed: Ramona, Antonio, Mari, Brenni, Reyna, Nekko, Joanna, Rosita, Thalia, Julissa, and Juanita. They came from various countries throughout Europe, Latin America and the Caribbean. They worked in a variety of media including: radio, television, print and digital/online.

CHAPTER FOUR: RESULTS

The following chapter discusses how the online activities external to the online course (OAEOC) germinated in the online discussion forums through the sharing of online identity contact information for technology communication tools such as Facebook, Twitter and LinkedIn, among others. Students' use of the technology communication tools for the purpose of OAEOC is discussed. Lastly, I discuss the online course experience and its influence on how and why students participated or did not participate in the online external activities.

The Nature of Student Online Activity External to the Online Course

Students' participation and interaction through the weekly discussion forums enabled the development of online activities external to the online course. Students who participated in the online course forums mentioned a myriad of tools for connecting with one another outside of the online course platform, such as Facebook, Twitter, LinkedIn, Google Wave and Google Buzz and email. Participant interviews also revealed that some of these tools, such as Facebook, Twitter, email and LinkedIn, were used later to connect outside of the online course with classmates.

Initiation of Online Activity External to the Online Course (OAEOC)

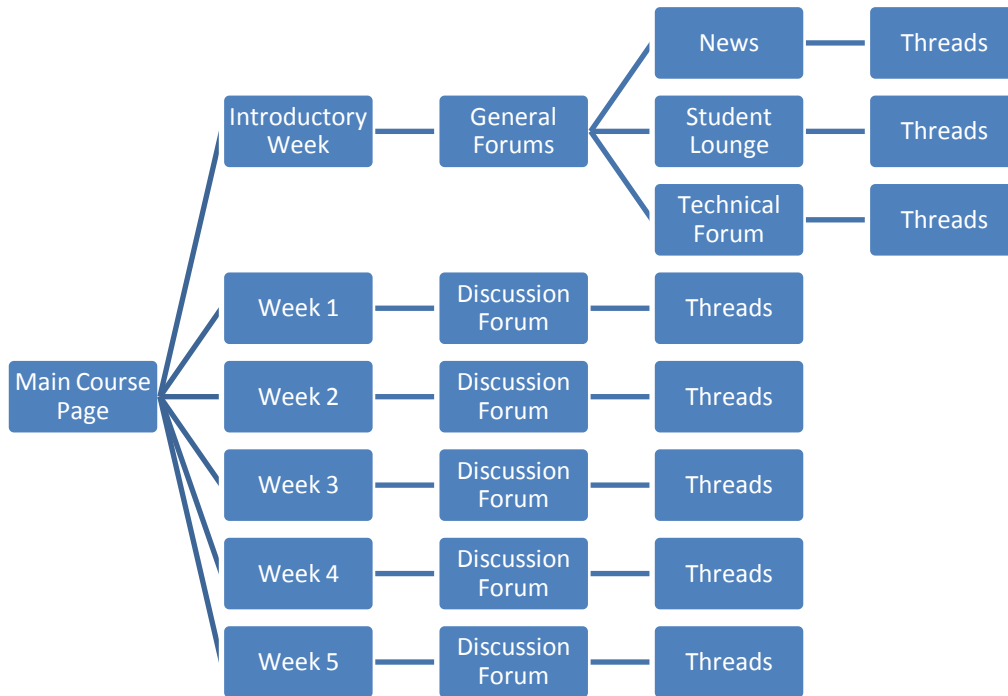
Online activity external to the online course germinated within the optional course activities in the weekly and general discussion forums. It was through online discussion forums that students began sharing their online identity and personal contact information and expressing a desire to connect with other students through Facebook, Twitter, LinkedIn, email, Google Wave, and Google Buzz. Students' interactions within the

course forums were critical to the development of OAEOC. Online discussion forums provided opportunities for interaction among students throughout the course.

Two main areas for discussion forums were organized as part of the course: weekly discussion forums and a general discussion area in the introductory part of the course that included three sub areas: a student lounge forum, technical forum and news/announcements forum. The student lounge area was strictly for the students to discuss any topic. The technical forum was moderated by the course assistant for questions from students regarding the use of Moodle and for general questions about the course. The news/announcements forum was used by the Instructor or course assistant for important announcements. All students were automatically subscribed to the news/announcements forum. The weekly discussion forums for the course focused on practical exercises which the Instructor uploaded at the start of each week. The themes of the exercises focused on the topics for the current week. The focus in the weekly discussion forums was the Instructor-created threads; however, students were not dissuaded from creating new threads in these forums. There was one discussion forum for each week of the course. The course was five weeks long, so there were five discussion forums, each with multiple threads within them (see Figure 1).

Figure 1

Diagram of Course Forums



In the Week 1, 27 students (21 Unique) posted 59 “shares of online identity information” across 6 different threads (See Table 2). For the purpose of this study a “share of online identity information” is any type of personal contact information from social networking tools, email, blog, sites and other online tools used by students. The 59 shares included online identity information for the following tools: Twitter, Facebook (personal profile), Facebook Group link, Twitter list, email, Skype, Gtalk, Second Life, Tumblr, Ning, blog, project/work site, and MSN (See Table 1).

Table 1

Overview of Total Online Identity Information Shares

	Student Lounge	Technical Forum	Week 1 Forum	Week 2 Forum	Week 3 Forum	Week 4 Forum	Week 5 Forum
Twitter	1	1	21	18		2	6
Facebook (personal Profile)			18				5
Facebook Group	1		1				2
Twitter List			1				1
Email		13	4			8	16
Skype			3				
LinkedIn							1
Twine							1
Gtalk			2				1
Second Life			1				1
Tumblr			1				
Ning			1				
Blog			1				2
Project Site			2				
Work Site			2				
MSN			1				
Google Wave						2	
Google Latitude							1
Total	2	14	59	18	0	12	37

Table 2

Number of Threads with Online Identity Information Shares

Discussion Forum	Total Number of Threads in Discussion Forum	Number of Threads with an online identity information share	Total Number of online identity shares across discussion forum
Student Lounge	5	1	2
Technical Forum	15	2	14
Week 1	16	6	59
Week 2	25	8	18
Week 3	16	0	0
Week 4	20	1	12
Week 5	25	5	37
Totals	122	23	142

The development of online activities external to the online course first developed organically from student-student interactions through the optional weekly course discussion forums and student lounge. With the exception of the third week, students shared online identity information shares each week for a total of 142 for the entirety of the course. Student interaction in the forums was critical to develop connections between students. The interactions allowed students to share their online identity information.

Mari explained part of this experience, “Because they [her classmates] are in other countries obviously [why I don’t know them] and it was through the course that we started to contact each other. We exchanged Twitter, Facebook... (*Este porque están en otros países obviamente y fue a través del curso que nos empezamos a contactar, intercambiamos Twitter, este Facebook...*).” Development of activities outside of the online course would not have been possible without interaction in the course forums.

Ramona explained how interactions in the forums created connections between students that allowed for continued interaction outside of the course:

Of course, I think it’s because when we commented in the forums or participated in these activities perhaps we would agree on some point so then we would start to discuss a little more [beyond the course]. It’s the same thing that happens when you meet someone at a gathering—that you always feel drawn to some so you discover this as time passes by and...well with so many, as I was explaining, that perhaps we created or in that moment we were working on something that was similar in a similar medium so then we would collaborate on a piece of data, sharing that information. Someone that lived in another country when I said I was from [name of country] said they had visited [country name]. Or in the case of this person from [country name], I commented that I had family in [name of country]...and well I also got to know people that lived very close to where I live and we didn’t even know each other. We got to know each other through the course. (*Claro es que creo que era por que cuando comentábamos en los foros o participábamos en esas actividades tal vez coincidíamos en algún punto entonces empezamos a conversar un poco más allá. Es lo mismo que pasa cuando conoces gente en una reunión que siempre con alguien tienes más afinidad entonces los descubres a medida que va avanzando el tiempo y...bueno y con muchos encontramos esto que te decía que tal vez habíamos hecho o en ese momento hacíamos algún trabajo que era parecido en algún medio parecido entonces colaborábamos a cerca de un dato compartiendo información. Alguien que vivía en otro país cuando yo dije que vivía en [nombre de país] dijo que conocía [nombre de país]. O con el caso de esta [persona] de [nombre de país] yo le comente que yo tenía familia viviendo en [nombre del país] y ...bueno también encontré gente que vivía muy cerca de mi casa que no nos conocíamos. Entonces nos conocimos a través del curso.*)

Nekko also explained how he and other classmates shared their contact information through the forums, which was important and a clear manner to support online activities external to the online course:

They [his classmates] would share their Facebook and their Twitter. They would just say “I leave you my Facebook profile and Twitter” –the links-- and I said, “Well, I’m going to add them” and I saw that like five [did this] and so I also posted mine [in the forum]. (*Compartían su Facebook, y su Twitter. Nomás decían 'les dejo mi perfil en Facebook y Twitter los enlaces--y decía 'a pues lo voy agregar' y vi como a cinco y también yo puse los míos. Dije pos vamos a compartir Facebook y Twitter. Pos también creo que puse unos enlaces en algún mensaje que haber puesto en un foro.*)

Nekko posted his Facebook and Twitter contact information to be social and to be in contact with other classmates. Seeing classmates sharing their contact information in the forums encouraged others, like Nekko, to share their own.

During the course, students began to interact outside of the online course through different technology communication tools. Evidence from the weekly discussion forums shows that students were connecting or attempting to connect in a variety of ways through: Facebook, Twitter, email exchanges, LinkedIn, Google Buzz, and Google Wave. Students’ use of these tools outside of the course is discussed in the next section.

Using Online Technology Communication Tools for OAEOC

Students’ participation in the discussion forums and interactions with other students allowed students to develop connections with others within the course and create ways for connection to continue outside of the course. Students created a Facebook group and a Twitter list. Students also added classmates to their personal Facebook profiles and followed classmates via Twitter. Some of these activities began during the course and continued after the course ended. I will discuss how the use of online support tools

developed and why they used certain technology communication tools. Reasons for participation and non-participation in online activities external to the online course will also be discussed.

Facebook. A Facebook group was created during the course because the online forum interactions between students generated interest in continuing the contact outside of the course. Students wanted a place of their own, even if they had a student lounge within the formal course. Ramona also explained why the Facebook group was created:

We wanted to create it ourselves so that we could also have there a space where we could share materials--where we could exchange opinions beyond the forums because the forums were oriented to a specific topic, a particular exercise, an activity. Therefore, this Facebook group was like a space where we could discuss everything that we had a desire to talk about outside of the course activities. *(Lo quisimos armar nosotros para tener allí también un espacio donde compartir un material donde podría intercambiar opiniones más allá de los foros porque los foros eran orientados a una consigna a un trabajo particular a una actividad. Entonces ese grupo de Facebook era como el espacio donde poder charlar todo lo otro que teníamos ganas de hablar por fuera de las actividades del curso.)*

For Ramona, the course forums focused on topics dealing with the course, but students desired a place with the option to discuss topics unrelated to the course content. Reyna explained the influence of the forum participation in the creation of the Facebook group:

It was, for example, in the course, participation was via the forums, so it was like sharing simultaneously ideas between us. In Facebook it was like, I have not had this kind of experience before-- it was like continuing a little this exchange of ideas, [and] conversations. *(Es que fue como que por ejemplo en el curso era la participación a través del foro. Entonces era como intercambiar simultáneamente ideas eh entre unos y otros. En Facebook fue como yo no había tenido ningún tipo de conocimiento en este sentido fue como continuar un poco eh este intercambio de ideas, conversaciones.)*

Antonio also explained why he decided to join the Facebook group:

Well, because it was also one way, I thought, to continue sharing with the rest of [my] colleagues information of interest at the margin of the course topics that we were working on. (*Bueno porque era una manera—yo pensaba—porque era una manera también de poder seguir compartiendo con los demás colegas algunas informaciones de interés al margen de lo que están los temas propios del curso que estábamos haciendo*).

Students wanted to continue similar kinds of interactions and exchanges as they had experienced within the discussion forums. Facebook was the technology communication tool that provided the kind of experience the students were seeking to continue interacting outside of the online course.

Given the interest in connecting with other classmates outside of the online course, a Facebook group was created by a student. Antonio reported that Ramona created a Facebook group in the first week of the course. Ramona explained, “Yes, it was during the course that we decided to create it ourselves. It was not an indication of the Instructor. It didn’t have anything to do with an exercise. No. (*Si fue durante el curso y decidimos armarlo nosotros. No fue una indicación de la profesora ni tenía que ver con una tarea. No.*)” The Facebook group was not initiated by the Instructor; instead, it was independent of course requirements, took place outside of the course, and was student-led. Memos show that the Facebook group was created during the first week of the course.

According to Ramona, the students chose Facebook because it seemed that most of the class had profiles in this popular social networking tool. She added, “It was where it would be easiest for everyone to participate. (*Donde era más fácil que todos pudieran participar.*)” Ramona invited classmates to join the Facebook group. Antonio recalls:

In one of the forums [unspecified by Antonio], the person who created the group—Ramona said, ‘I just created a group for the course’ and so everyone who was there, who had a Facebook in that moment or who had created an account—signed up. (*En unos de los foros eh la promot--la que lo creo el grupo que es— Ramona dijo bien, "acabo de crear el grupo del curso y entonces todo el que estaba allí que tenia Facebook para el momento o que lo había creado a la cuenta entro al--sé, se inscribió.*)

Another study participant, Reyna also recalled seeing the invite to join the Facebook group through an unspecified discussion forum. Data from the course memos shows that the Facebook group link was posted once in the Student Lounge forum in the first week of the course, once in the Week 1 discussion forums and in two different threads during the Week 5.

The Facebook group had a wall for posting messages. Mari, during the interview, opened her Facebook profile and checked her Facebook group memberships. She reported that she posted only once, two days after the Facebook group had been created. Mari explained, “...I participated only once to ask how they were and well, to say to keep in contact... (*...participe una vez para decirles que como estaban y que bueno, mantenerlos en contacto...*).” Another student, Reyna joined the Facebook group towards the end of the course but did not interact with others through the group or participate much in the group after joining. She recalled, “I didn’t check much, no. The truth is because at that time, no, no, no I didn’t interact much, truthfully. (*No me fije mucho, no, la verdad no porque en ese momento no, no, no, no interactué mucho la verdad.*)” However, Reyna did interact with others by adding them to her personal Facebook profile. This interaction took place after the course ended and will be discussed later in this chapter.

In addition to joining the Facebook group, students also had the option to add their classmates onto their Facebook profiles as friends. This was not related to the Facebook group since students could add anyone at any time to their personal Facebook profiles without having to be a member of the Facebook group. However, membership in the Facebook group made it easier to find classmates if they were also a part of the group. Interactions also occurred through personal Facebook profiles. Mari added three classmates to her Facebook profile. At the time of the interview, she was still interacting with these classmates. Mari explained how she began to interact with them through Facebook:

I imagine that for Facebook I began to pull the people with whom I'd had the most contact with, to my personal profile [Facebook]. So I have them already and I have more contact with them through my personal profile than through the other one [Facebook group.] (*Yo me imagino que Facebook yo empezado a jalar a las personas con las que he tenido más contacto a mi cuenta personal entonces este ya los mantengo. Yo tengo más contacto con ellos por mi cuenta personal que por la otra [grupo de Facebook].*).

Mari explained the topics of her interactions with fellow classmates, "...and in the beginning, of course, you only talk about the topics of the course and how it's going [with the class] but now [after the course ended] topics are a bit more personal... (*...y al principio claro hablas solamente del tema del curso y que como te va en esto pero ahora es como que a un poco personal el tema...*)."

Once the course ended, the topics switched to more personal and professional in nature for those that were interacting in activities external to the online course.

Antonio explained how Facebook status updates facilitated interaction between other classmates and him:

For those that I added to my Facebook [profile] —the people from the course that I added and that I accepted as a friend in Facebook—every once in a while someone sees one of my status updates and if they have an opinion, they will tell me “this also happens in my country—it happens this way—this or that.” (*A las personas que yo agregue de mi Facebook a las personas del curso que yo agregue que yo los acepte como amigos en Facebook de vez en cuando alguien ve alguna publicación que yo hago y ellos si notan algún tipo—si tienen alguna opinión a este aspecto me dicen ‘en mi país eso si pasa—pasa de tal forma—esto aquello.’*).

Antonio did not specify at what point, during or after the course, the status update exchanges took place. However, he did explain that the classmates that joined the Facebook group created a “collective friendship (*amistad colectiva*),” which then evolved into “individual friendships (*amistades individuales*)” through personal Facebook profiles.

During the course, students used the Facebook group to post questions about the course. Ramona explained, “We would talk about homework from the instructor. We talked about due dates. (*Hablábamos sobre las tareas que nos encargaba la profesora. Hablábamos sobre las fechas.*)”

For Facebook, students created a group and joined it. Classmates also added others to their Facebook profile, independent of the Facebook group. The lives of the Facebook group members were linked to the online course. During the interview Maria was perusing the Facebook group and she noted “...I’m seeing that the Facebook group ended when the course ended. (...*estoy viendo que en el tema de Facebook del curso se acabo cuando se acabo el curso.*)” However, just because the Facebook group ended did not mean that the members of the group stopped interaction and connecting in other ways through Facebook.

Use of Facebook After the Course Ended. After the course ended, Facebook group members added classmates to their individual profiles as friends and continued to interact with classmates through status updates, chat and messaging to continue their connections that developed through the online course. The duration and types of interactions varied. Interactions took place away from the Facebook group.

Topics discussed in the activities external to the online course were different during and after the course ended. After the online course ended, Reyna, Antonio, and Mari continued to use Facebook to interact with classmates. However, the interactions after the course ended changed from discussing topics related to the course to more personal and professional communication. Ramona explained that with time the Facebook group participation and interaction dissipated. She added, “We have continued to stay in touch and continued professional exchanges. We’ve sometimes shared some materials. *(Es que con los que seguimos en contacto hemos continuado el intercambio profesional. En alguna vez hemos compartido material.)*”

Approximately four months after the online course ended, Reyna contacted several students from the class for a personal writing project. Reyna remembered their names and searched for their contact info via Facebook. This was the only direct contact Reyna had with classmates outside of the course. She had also joined the Facebook group but did not interact with others in the group. Reyna sent an email via Facebook three or four classmates, to request their help. She explained the process:

I remembered the names of some of them and I wrote them [via Facebook] ‘Hi, I’m so and so. I am working on this project. I would like your help with this.’ So, it was more than once. They would tell me ‘Look, consult this webpage.’ And then, they would respond, ‘Look, I also remember this. It could help you.’ *(Me*

recordé de los nombres de algunos de ellos y les escribí “Hola, soy tal persona. Mira estoy haciendo tal cosa. Quisiera que me ayudes con esto.” Entonces fue más de una vez, no? Me decían ‘Mira consulta esta página web.’ Y después me escribían ‘Mira sabes que también recuerdo que hay esto. Te puede servir.’)

Reyna contacted classmates from different countries because she wanted to include a variety of perspectives in her writing project. This was the only contact Reyna had with classmates outside of the online course. Reyna did not report further contact after her writing project was over.

Mari also contacted a classmate via Facebook to request some information. She explained, “I asked—just months after the course—I asked them for help in finding some information—and they helped me and it was very useful to me. (*Le pedí—apenas—meses después del curso le pedí que me ayudara a buscar una información—Y me ayudo y de hecho si me fue bastante útil.*)” Mari did not explain the purpose for requesting the information, only that it was very useful to her.

Facebook chat was used by Antonio. Antonio recalls he had an exchange via Facebook chat with a classmate he had added to his personal profile. The Facebook chat was initiated through a response to a status Antonio posted on his personal profile. The exchange resulted in a story written by the classmate regarding an event that occurred in Antonio’s country that was related to a politician from the classmate’s country.

In the case of Antonio, who had sustained interaction with one course classmate outside of class, the topics varied after the course ended. He explained:

It’s about both things—work things and personal issues. In some occasion you can say that we have exchanged information related to informative themes... themes relate[d] to news related in their country that occurred in mine. (Es sobre ambas cosas: sobre cosas de trabajo sobre trabajos, sobre asuntos personales. En alguno casos que puedo decir que hemos intercambiado informaciones

relacionada ah temas informativos--pero fue—han sidos muy encaso--decía a temas relacionados a noticias relacionadas a su país que pasan en el mío.)

The exchange of information pertaining to students' own countries was a theme that carried over from the course interactions and continued after the course ended and into the OAEOC. The topic of the information focused on newsworthy events that took place in their respective countries in which classmates wanted to learn more. In addition to Antonio's example, in which he discussed events happening in his country related to another classmate's country, Mari explained how the topics after the course moved away from sharing digital tools to discussing information related to their respective countries. She explained, "Ah, well, casually, with the few people I am in contact with...we usually ask each other about things that occur within our countries, no? (*Ahhh, pues casualmente con las, con las pocas personas con las que me comunico es me--mas o sea--usualmente preguntamos sobre cosas de lo que pasan en nuestros país, ¿no?*)"

Facebook supported continued student interactions first through the Facebook group, and then, after the course ended and the Facebook group dissipated, through personal Facebook profiles. Participants also reported Facebook status update exchanges that generated direct chat conversations and messaging with classmates. During the course, students discussed topics related to the course in Facebook. After the course ended, the topics of Facebook communication changed to more personal and professional topics. In addition to Facebook, students used Twitter to connect outside of the online course.

Twitter. Twitter is an online social tool that allows users to post short, 140 character messages or updates and to follow other users. Users can control the visibility

of their Twitter account, such as making an account public or restricting visibility to certain people. Use of Twitter between students also developed from the course forums. Throughout the course forums, students included their Twitter handles (those that had them at the time) when they posted comments or answered the exercise threads initiated by the Instructor. Twitter contact info was shared in the technical forum, student lounge, and discussion forums in Weeks 1, 2, 4, and 5. By sharing their Twitter handles through the online forums, students created another medium by which they could interact with classmates external to the course platform.

As mentioned before, Nekko shared his own Twitter handle when he saw other classmates do the same. He also recalled, “In Twitter about five of us added one another. (*En Twitter creo que nos agregamos como unos cinco.*)” Nekko’s Twitter participation occurred during the course, but he did not interact with any classmates via Twitter. Nekko explained, “We only added each other and from there, nothing further. (*Nada mas nos agregamos y de allí no paso.*)” Nekko remarked, “Well, since it’s online you really don’t get to know them. You don’t even have a conversation with them. (*Pues es que como es en línea en realidad nunca los conoces no. Ni platicas a si con ellos.*)” After the course ended, Nekko did not receive any invitations to interact with other classmates outside of the course.

Study participants were also encouraged by a classmate (unnamed by interviewees) to participate in Twitter through an invitation to join a student-created Twitter list/group. Antonio explained that an unspecified classmate created a Twitter list that included a listing of classmates’ Twitter handles. Memos show that the Twitter list

was posted in the weekly class discussion forum by students in Weeks 1, 3 and 5. Classmates could also add themselves to this list and use it as a guide to add more classmates. Mari recalled that a Twitter list/group was announced in a forum [not specified by Mari]. She added herself to the Twitter list/group. During the interview, Mari opened her Twitter account, and said:

They posted it in the forum and they had already created—here I am looking at my Twitter—a list and in that list is my Twitter, and I am followed—it’s my Twitter—and well here Ramona, and [student name], [student name], Nekko and [student name] and from this list I guess is where I got the others. I follow thirteen people.” (*Los pusieron en el foro y de hecho ya habían creado--aquí estoy viendo mi Twitter--una lista y en esta lista es mi Twitter me siguen--es mi Twitter--y bueno acá me sigue Ramona, este [nombre de alumno], [nombre de alumno], Nekko y [nombre de alumno] y en esta lista de la que mi imagino yo eh sacado a los además yo sigo a 13 personas, ¿no?*)

It was through the Twitter list of classmates that she was able to easily find classmates, create her own list and follow them in Twitter. Similar to the Facebook group, it was the students’ sharing of their online identity information through their participation in the class forums that generated interest in sharing Twitter handles and using Twitter as another way to connect outside of the online course. In addition to Twitter and Facebook, email was also used to interact outside of the online course.

Email Exchanges. In several forum threads throughout the course, students posted their contact emails and encouraged others to do the same for different purposes. Students shared their emails in the technical forum, Weeks 1, 4 and 5 (see Table 1). In a technical forum thread, thirteen students posted their emails to share a useful document about searching Google. In Week 4, eight students posted their emails in order to

facilitate membership in Google Wave. By posting contact emails in forum threads, students were creating opportunities to share and connect outside of the course.

In the interviews, Ramona pointed out:

We communicated often, participated in the forums; we began to familiarize ourselves with each one of our classmates who were located throughout Latin America. And, after the course, I stayed in contact with some of them, we exchanged some emails and with one of my classmates we met up personally when she came to visit me from her country. (*Permanentemente nos comunicábamos. Participábamos en los foros fuimos conociendo un poco quien era cada uno de los compañeros que estaban repartidos por todo Latino América. Y luego del curso, incluso yo quede en contacto con algunos de ellos nos intercambiamos algunos correos y con uno de los compañeros nos encontramos personalmente cuando vino de su país al mío.*)

Ramona's example illustrates how forum participation can create strong enough connections that develop into face-to-face meetings. As mentioned by Ramona, she exchanged emails with some of her classmates. She was also the only study participant that met face-to-face with another classmate.

Sharing emails within the forum discussions illustrates students' willingness and openness to connect with others, especially outside of the course. Students had the option to email each other within the Moodle platform, however, they still decided to share their regular email addresses. In addition to email, students posted their contact information for different types of online identity communication tools.

Other Online Technology Communication Tools. In the course forums, additional online identity tools were mentioned for connecting outside of class: Google Wave and Google Buzz. In Week 4, a student-initiated thread was created to invite other classmates to join Google Wave. At the time, Google Wave required invitations from others, so students who had invites, required classmates' emails to send the invites. Eight

students posted their contact info to receive the Google Wave invite. In Week 5, a student-initiated thread focused on Google Buzz. Several students posted information about Google Buzz, such as how to use it. Also, some students revealed in the forum thread that they had already connected with other classmates via Google Buzz.

In the last week of the course, there was renewed interest in staying in contact. In the last week of the course, Week 5, there were five threads in which students posted 37 shares of online identity information and expressed interest in staying in contact. The shares of online identity information included various mediums: email, Facebook, Twitter, blogs, Skype, Second Life, Twine, Twitter list link, and Facebook group link. Students shared the contact information in an Instructor-initiated thread that listed the names of students who had successfully completed the course. In a separate thread, created by the Instructor in the final week, 13 students expressed desire for continued contact beyond the course. Thirteen students shared ten online identity information shares in addition to the Facebook group link and the Twitter list link. As mentioned earlier, students reposted the Facebook group and the Twitter list in the final week.

Student participation and interactions in the general and weekly discussion forums helped students form connections with one another. These connections encouraged sharing of online identity information throughout the duration of the course and also planted a desire to continue contact outside of the online course. Students created a Facebook group and Twitter list. Students also formed connections through their personal Facebook profiles and Twitter. However, not all students participated in these online external activities to the course. It is also important to explore the reasons for

participation and non-participation in online external activities to the course.

Understanding reasons for students' participation and non-participation can assist designers and instructors in creating ways for supporting online activities external to the online course.

Participation and Non-Participation in Online Activities External to the Online Course

Students' participation and non-participation in the external activities of the course were influenced by several factors. For this study, participation in OAEOC is operationally defined as students joining an online group or adding or following others via online technology communication tools such as social networks that allow the students to connect and interact. Reasons for participation included encouragement by classmates, preference for technology communication tools, and desire to continue connections with classmates. Reasons for non-participation included professional workloads, preferences for technology communication tools, lack of time, and lack of interest to continue interaction/connection with classmates. The following section discusses reasons for participation and non-participation in online external activities to the course in further detail.

Reasons for Participation. Participants reported various reasons for participating in activities external to the online course. Nekko, who added classmates to his Facebook and/or Twitter accounts, took part in these activities to be “social” and to “be in contact with colleagues.” However, he did not interact with classmates any further than adding classmates to his personal Facebook profile or following classmates in Twitter. Similar to

Nekko but via Facebook, Reyna joined the Facebook group but had no further interaction in the group. She joined before the course ended because of invites posted in the discussion forums from other classmates to join the group.

Before the course ended, Antonio also joined the Facebook group and later added seven classmates to his personal Facebook profile as friends. He decided to participate because “Well, because I thought it was a way... for one to continue sharing with the other colleagues some information of interest at the margins of what we were doing in terms of the topics of the course. (*Bueno porque era una manera--yo pensaba--porque era una manera también de uno poder eh seguir compartiendo con los demás colegas eh algunas informaciones de interés al margen de lo que están los temas propios del curso que estábamos haciendo.*)” Antonio reflected on the process of joining the Facebook group and then adding classmates to Facebook personal profiles, “To say it in fewer words: I would say that we created a collective friendship in the [Facebook] group and then later we created individual friendships through our personal profiles [on Facebook]. (*Para decirlo con pocas palabras: yo diría que hicimos un amistad colectiva en el grupo y después hicimos unas amistades individuales a través de nuestras cuentas personales.*)” However, when it came to Twitter, Antonio had a different experience. He added two classmates to his Twitter, but Antonio did not interact much with them because “I particularly do not use it much. (*Yo particularmente no lo uso mucho.*)” Antonio’s low use of Twitter did not enable opportunities for him to interact with his classmates via Twitter.

Ramona created the Facebook group because she wanted a place of her own away

from the online course to discuss other topics not related to the course. She explained, “This Facebook group was a space where we could talk about everything else that we wanted to talk about outside of the activities of the course. (*Entonces ese grupo de Facebook era como el espacio donde poder charlar todo lo otro que teníamos ganas de hablar por fuera de las actividades del curso.*)” She participated in the Facebook group because she wanted a place to discuss topics outside of the course.

Students participated in activities external to the online course because they wanted to continue the connections they had formed inside the online course. They also wanted to continue interacting and sharing information with their classmates. However, there were also students that did not participate in online activities external to the course. I discuss the reasons for non-participation in the following section.

Reasons for Non-Participation. Joanna, Thalia, Rosita and Juanita did not participate in online activities external to the online course. The most highly cited reason for non-participation was that some students were not aware that online activities external to the online course were taking place. Joanna was unaware that these activities were taking place and did not participate in the online activities external to the course. Joanna also rationalized her non-participation by explaining she did not participate enough in the forums in order to make enough contact with classmates. Joanna explained:

This is what happened with me: since I did not participate much in the forums—I would see that many would share resources, some from the same country. They would share governmental links, or links about statistics, between those of the same country but no, I wasn’t able to interact that much in the forum, so I also didn’t make much contact [with others]. (*No, yo pase por esto: que como no yo no participaba mucho en los foros yo veía que muchos se, se pasaban como recursos, o mismo de, del mismo países, se pasaban como links de gobiernos, o de sobre de fuentes, sobre algo a si o de, o de estadísticas entre, entre pares del*

mismo país pero no, no...no logre o sea no, no interactué mucho en los foros entonces tampoco, tampoco hice como mucho, mucho contacto.)

Joanna admitted that if she had been invited or had been aware of the activities external to the online course such as the Facebook group, she would have participated in them. With the number of threads each week, it is likely that low or non-participating students, like Joanna, would also have missed the invitation to the OAEOC. Participation in the forums was not a requirement to pass the course or obtain the certificate. Therefore, students who did not participate in the forums were unaware of the activities occurring outside of the course. Also, if students did not participate in the discussion forums, they also did not have an opportunity to form connections with their classmates via the forums.

Thalia cited several reasons for not participating in any online activity external to the course. She did not have Internet at home and was only able to access the course around her work schedule at her office, which affected having any kind of consistent participation. When Thalia arrived early to work, she would take advantage of the small amount of time to access the course around her work hours. She would also work on the course during her lunch time. Thalia would also stay after work to spend time on the course. She was not consistent in her participation. Thalia explained:

I would enter today and then would enter again on Tuesday. I would suddenly enter next Saturday or a week would pass by without me entering [into the forums]. So no, entering the forums was not very consistent—I do have to point that out to you. *(Entraba hoy y volvía entrar como por allí el martes. De pronto entraba el otro sábado. O pasaba una semana y no había entrado. Entonces no, mi ingreso al foro no era muy constante. Eso sí tengo que reconocértelo.)*

Thalia's interactions with classmates occurred through the course forum and through the course email system. Thalia's interactions with classmates occurred solely within the course platform. She described her interaction via course email:

When one of them would email me asking me about journalism in my country I would respond but it was all through the course. Then after the course, no I did not have any contact again with anyone. They didn't even invite me to be a part of a social network or other activity outside [of the course], no. *(De pronto cuando alguno me escribía haciéndome una consulta sobre cómo era el periodismo aquí en [name of country]la respondía pero digamos todo era dentro del contexto del curso. Y luego del curso no, no volví a tener contacto con nadie más. Ni me invitaron a hacer parte de una red social o de alguna actividad fuera, no.)*

Thalia also admitted to arriving a bit late to the forum discussions. She felt discouraged from participating when she saw that other classmates had already posted similar thoughts or opinions to her own. Thalia described her experience:

I would plan to be there each week. Although I need to recognize that at times I arrived very late to the forums or many times in the forums there were topics that did not call my attention. Or, that don't, I don't know, like they don't call your attention to post an opinion. Or, or many times you would arrive and already someone had posted an opinion similar to what you were thinking. So, at that point, you censor yourself a bit. So, you can say that with the forums yes, there were times when I wasn't as—I wasn't as driven. I wasn't very dedicated. *(Procuraba estar cada semana. Aunque debo reconocer que hay veces llegaba muy tarde a los foros o muchas veces en los foros hay temas que no te llaman la atención. O que no se te, no sé cómo que no te llama la atención opinar. O, o muchas veces uno llegaba ya había alguien que opinaba algo muy parecido a lo que tu pensabas. Entonces allí uno como se auto censura un poquito. Entonces digamos que con los foros si--hay veces no era como tan--la verdad no era como tan viciosa. No era como tan dedicada.)*

Another reason cited for non-participation was lack of time to dedicate to the course, such as in Rosita's case, who explained, "Well, because of time—I think because of that more than anything—that I didn't have the opportunity to interact as I would have liked. *(Bueno por el tiempo--yo creo que por eso fue más que nada o sea que no tuve la*

oportunidad de interactuar a si como me hubiera gustado.)” Rosita also cited her workload made it difficult to dedicate time to the course. By not participating enough in the course, Rosita did not have an opportunity to interact with classmates, which as others have reported, was helpful in forum forming connections that extended beyond the online course. Also, in Rosita’s course experience there was no invitation to join in the activity external to the course. She recalled, “There was no suggestion, at least a straightforward one, to interact via Facebook with other classmates. (*O sea pero no, no, no ni dentro de lo que fue el curso no. No hubo ninguna sugerencia de bueno al menos a si expresa de interactuar por medio del Facebook o sea con los otros compañeros.*)” Rosita and Thalia’s reasons for non-participation were also influenced by their workload.

Juanita did not participate in external activities because in her experience the course was too short to develop a connection with anyone. While she was a student in the International Education Entity’s course, Juanita was also taking a longer online degree program. Juanita compared these two experiences and felt her inability to form connections was due to the length of the International Education Entity’s course. She explained, “The course [International Education Entity’s course] was so short that I didn’t [get to] know anyone. (*En el curso como fue tan corto no conozco a nadie.*)” Juanita did develop friendships and connections in the longer online degree program that was unrelated to the online course by the International Education Entity. For Juanita, the lack of a face-to-face component affected negatively one’s ability to form connections and friendships.

From the study participants’ experiences, certain patterns emerged related to

participation and interaction related to online activities external to the online course.

These patterns are discussed in the following section.

Patterns of Participation and Interaction in OAEOC

Four patterns emerged related to participation in the online activities external to the online course: (a) no participation, (b) joined an online technology communication tool but did not interact with classmates, (c) joined an online technology communication tool and interacted with classmates online, and finally, (d) joined an online technology communication tool, interacted with classmates online and interacted face-to-face with another classmate from the online course. Each of the patterns is discussed in the following section.

The first pattern is no participation in OAEOC. As previously discussed, Thalia, Juanita and Rosita did not participate in any online activities external to the course. They did not participate for a combination of reasons: workload, lack of interest in OAEOC, inconsistent forum discussion participation, or no knowledge that OAEOC was even taking place.

The second pattern is students joining an online technology communication tool but not interacting with classmates. Nekko and Mari joined the Facebook group or added classmates to their individual Facebook profiles, but then did not have any further interaction or exchange. Nekko added some classmates to his personal Facebook profile, but no further interaction or exchanges were pursued with them in Facebook. During the course, Nekko added classmates to his Twitter to follow them but he did not recall interacting with them through re-tweets or Twitter messaging. He had no further direct

interaction or exchanges with them. Mari joined the Facebook group and only posted once but did not participate any further in the group. Mari had no direct interaction with classmates. Ramona, who created the Facebook group, also added classmates to her Twitter but since she did not use Twitter as much, sustained interaction and further exchanges with classmates via Twitter were absent. Antonio had a Twitter account. He followed two classmates but did minimal participation in Twitter, and he did not interact with them via re-tweets or Twitter messaging.

The third pattern involved a student joining an online technology communication tool and interacting with classmates online, such as Antonio's experience. Antonio, who was active in Facebook, had a sustained connection with a classmate that started during the course and still existed on the day of the interview. He met a classmate during the course. Antonio later added that classmate as a Facebook friend. In Facebook, both exchanged comments on Facebook posts and also have Facebook chats. Antonio, at the time of the interview, still interacted with this classmate through Facebook.

The final pattern involved students participating in OAEOC, interacting with classmates, and also meeting a classmate face-to-face. Ramona added classmates to her personal Facebook profile and continued to interact with certain classmates. She also exchanged emails with an unspecified number of classmates. Ramona's interactions culminated in a face-to-face meeting with a classmate that visited her. At the time of the interview she was still in contact with some of the classmates she had added to her personal Facebook.

Forum Discussion Participation Influenced OAEOC

Participation in online external activities to the course was also influenced by to what extent subjects participated in the online discussions forums. Participants that self-reported a high degree of participation in the course forums were more likely to participate in online activities external to the course. Ramona self-reported as being one of the most active participants in the discussion forums. She participated in the forums every day. Ramona described her activities, “I answered exercises. I would read what my classmates comment and if I had an opinion regarding what they said I would also respond to those posts. (*Contestaba ejercicios. Leía lo que comentaban mis compañeros y si tenía alguna opinión respecto a lo que ellos decían, también respondía a esos mensajes.*)” It was Ramona who created the Facebook group, sustained a connection with at least one other classmate which culminated in a face-to-face meeting. Antonio, who also reported a high degree of participation in the discussion forums, was still interacting with at least one classmate at the time of the interview. He joined the Facebook group and added classmates to his personal Facebook profile.

Several students’ inconsistent pattern of participation in the course discussion forums hindered their desire or ability to take part in activities external to the course. This was the case for Nekko, Joanna, Rosita, Thalia and Juanita.

In contrast to Ramona’s consistent active participation, Nekko, only did what he needed to do in the forums and did not make any effort to interact with fellow classmates. Nekko’s limited participation in the course forums was acceptable since consistent participation in the discussion forums were not mandatory for passing the course. Nekko

only added classmates to his personal Facebook profile and to his Twitter to be “social,” but did not interact with them in any manner after adding them. He was not aware that a Facebook group had been created. This is probably due to Nekko’s inconsistent participation in the forums. He tried to interact each week in the discussion forums. However, as he explained, due to his work schedule, this was not always the case: “Sometimes I had lots of work and one week would pass and I would say ‘oops!’ But then I would have this one without doing anything and then a second one. I would then read what I had not read. (*A veces que tenía mucho trabajo y pasaba una semana y digo oops pero este tengo ahora una semana sin hacer nada y luego la segunda ya. Ya leía lo que no había leído no.*)” And while Nekko posted comments in the threads, Nekko reported he did not get to know any of his classmates during the course.

Joanna, who also fell a little behind on participating in the course forums, had challenges with the schedule that she kept during the course. She explained:

It seemed to me that the other participants had daily participation that perhaps I was not always able to have. Yes, weekly, but not daily, so I sometimes arrived like late to the questions and answers and I would arrive late to the forum so I didn’t participate because of that. Once in a while [I would participate] –I don’t think I participated much. (*Me pareció que los otros participantes estaban como que tenía una participación diaria que yo quizás yo a veces no podría tenerla. Si semanal pero no diaria entonces llegaba como tarde a las preguntas y a las respuestas y llegaba como tarde al foro entonces no participaba por eso. Alguna que otra vez--creo que no participe mucho.*)

Because she did not have a schedule in which she was able to participate with her classmates at a similar schedule, Joanna decided to focus on answering the exercises instead. She explained her rationale, “So then, I preferred to dedicate myself to the exercises, search and then later look at the forum to see how others had found the answer

or suggested other links or things like that. (*Entonces, prefería dedicarme al ejercicio, buscar y después ver en el foro como los otros habían encontrado la respuesta o sugerían otro links o otras cosas.*)” Instead of making an effort to interact with fellow classmates through comments and posts, she instead focused on how other classmates had already found the answer and explored the tools posted. Because of this different focus, Joanna did not interact with other classmates via the weekly discussion forums. Joanna’s lack of participation in the forum did not allow an opportunity to form connections with classmates.

Rosita did not participate in any activity external to the course. She was also not aware of the Facebook group. Participation in the class discussion forums by Rosita seemed to be sporadic as she described it: “I tried to enter into all of the discussions, but I didn’t enter all of them because of my work schedule. But yes, I tried to do it. I entered now and then again like that in the course. (*Este trate de entrar a todas las discusiones pero no entre a todas las discusiones por mis horarios del tiempo. Pero si, si trataba de cumplir. Entre una que otra vez a si en el curso.*)” Because she was unable to participate in the discussion forums as much as she would have liked due to her busy work schedule, Rosita was unaware of the OAEOC taking place and did not participate in activities external to the course.

In the case of Thalia, who did not have a Twitter account and only used Facebook to keep in contact with close family and friends, participation in activities external to the course, was challenging. Also, as she explained earlier, while she tried to participate in the forums in a consistent manner, it was not always the case. Not only was

Thalia unable to participate in a consistent manner, when she did arrive at the forums, it was late and others usually posted similar ideas or comments to what she would have posted. This discouraged Thalia from sharing her own ideas in the forums. She also felt that sometimes forums contained topics that she found unappealing and/or did not pique her interest. Because of these experiences, Thalia felt discouraged from participating in the forums, which kept her from opportunities for connecting with her classmates within the course and participating in activities external to the course. Her lack of connection in the online course forums offered Thalia no reason to attempt to continue connecting with others outside the course. Thalia pointed out: “Also, I did not have a close friendship with some of the participants of the course. (*Y tampoco pues digamos eh no tenía una relación de amistad cercana con algunos de los participantes del grupo.*)” Thalia’s inability to access the course in a consistent manner and therefore participate in the course forums consistently, kept her from developing connections with classmates. The lack of connections did not encourage her to keep interacting with classmates in activities external to the course.

Juanita believed that the course was too short to develop any meaningful connection beyond the course. She elaborated on this belief with the following comment, “It’s rare, really, that through these type of activities that a strong link could be made. It could be that you could maintain it in the moment that the activity takes place but it could be that afterwards you don’t. (*Es raro, de verdad que a través de este tipo de actividades se haga un lazo fuerte. Puede que lo mantengas en el momento en el que se da la actividad pero puede que luego no.*)” Her forum participation was limited to the main

forum exercises and no participation in the student-created threads. This was intentional as she only wanted to participate in the main forum discussions posted by the Instructor. She explains, “But no, on those [student lead forum threads] I didn’t, I didn’t connect myself too much. I always connected with the forum—the main forum [instructor lead forum threads]. (*Pero no, a esos [foros de los alumnos] no me, no me conecte demasiado. O sea siempre me conectaba con el foro, con el foro principal [foros por el instructor.]*)” She is a unique case compared to the other students because, while she was taking the course, one other colleague from her workplace was taking the course simultaneously. Juanita revealed that she would discuss the course with this colleague. Because of this face-to-face interaction, Juanita may not have felt a great need to connect with other classmates through online activities external to the course.

The importance of the online course experience was vital to students forming connections through their participation in the discussion forums. Participation in the online course discussion forums allowed students to form connections with others and develop them outside of the course through technology communication tools. The online discussion forums are discussed in the following section.

The Online Course Experience

Students had the opportunity to interact with one another through the two main online discussion areas: general discussion forums in the introductory week of the course and the weekly discussion forums. The online discussion forums acted as the ‘classroom’ for the course. In this section, I describe the types of threads created in the discussion forums. The number of posts per threads are presented and the significance of the results

within the context of the students' professional journalistic lives. Threads with the highest posts focused on practical exercises that were applicable to journalistic tasks. Because the exercises were relevant to students' lives and careers, students were more apt to participate in the forums.

Student participation in the forums enabled interaction between students and allowed them to make connections with classmates. Through forum participation, students shared their online identity information, which facilitated the creation of online activities to the course such as a Facebook group. The importance of the discussion forums and the relevant exercises were critical to the development of OAEOC.

The Nature of Interactions in the Online Course Discussion Forums

The nature of the interactions taking place in the different forums and chats assisted in understanding how the students' online course experiences influenced the development of online activities external to the course. Table 3 describes the number of threads started by the Instructor and by students. Overwhelmingly, the instructor-initiated threads outnumbered student-initiated threads for every week of the course. However, as illustrated in Table 4, student posts overwhelmingly outnumbered instructor posts throughout the weekly forums. The most common type of thread was related to the weekly exercises. This is logical since the main purpose of the forum discussions was to discuss the weekly exercises posted by the Instructor at the beginning of each week. Each weekly discussion was opened by the Instructor with exercises related to the weekly topic.

Table 3

Number of Threads Started by Instructor and Students

Course Week	Total Number of Discussion Threads	Instructor-Initiated Threads	Student-Initiated Threads
1	16	14 (87.5%)	2 (12.5%)
2	25	12 (48%)	13 (52%)
3	16	12 (75%)	4 (25%)
4	20	16 (80%)	4 (20%)
5	25	17 (68%)	9 (36%)

Table 4

Number of Posts in Weekly Forum Threads

Course Week	Total Number of posts	Posts by Instructor	Posts by Students
1	436	10 (2.29%)	426 (97.7%)
2	394	13 (3.29%)	381 (96.7%)
3	286	7 (0.69%)	279 (97.5%)
4	367	10 (2.72%)	357 (97.2%)
5	289	13 (4.49%)	274 (94.8%)

Popular Discussion Threads Focused on Exercises Relevant to Students' Lives.

The most popular threads based on number of posts by students were threads with practical and useful topics or exercises related to students' daily work. The discussion forums were optional so creating relevant exercises were critical to engaging students in the online forums. One of the objectives of the online course was to train journalists in using digital tools for application in their daily work tasks. For Reyna, the best part of the course was to "...learn these new [digital] tools so that I can apply them to journalism. (...saber este nuevo tipo de herramientas para usarlas en periodismo.)" The course met this goal by creating relevant and practical exercises that taught students skills and familiarized them with digital tools that they could use before the course ended. Anonymous responses to the course evaluation revealed that students were applying the digital tools they had learned in the course:

I learned lots of digital tools in the course, most of all those linked to mathematical operation and data visualization, which I am already using in my job. *(Con el curso conocí muchas herramientas, sobre todo las vinculadas a operaciones matemáticas y visualización de datos, que ya las estoy usando en mi trabajo.)*

Not only did I learn the latest digital tools for journalistic practice but I also practiced using some of the most important and latest ones, some of which I was able to gradually incorporate into my work routine, making it easier. *(No sólo conocí las herramientas más nuevas, digitales, para el ejercicio periodístico, sino que practiqué usando alguno de los más importantes y actuales, los cuales pude incorporar paulatinamente a mi rutina de trabajo, facilitándomelo.)*

Well, I got to know a lot of applications and websites that are currently very helpful for my profession and for reporting and more. *(Bueno, conocí muchas aplicaciones y sitios web que actualmente me son de gran ayuda para mi profesión y para la elaboración de reportajes y demás.)*

The most popular threads were tallied for each week. Popular threads were defined as those with the highest number of student posts. Instructor posts were not included in the count. In the first week, the top three threads with the most posts focused on search engines. Two of the threads had 46 posts and the third highest had 43. The threads were exercises posted by the Instructor. Anonymous evaluation responses revealed several students found the use of search engines extremely important to their journalistic work:

It [the course] provided valuable information search engine tools for my job. It was very specific regarding the use of Google and other search engines. It was very practical, so much so that it has been of the most complete courses that I have taken. (*[El curso] Me suministró útiles herramientas de búsqueda de información para mi trabajo. Fue muy específico sobre el uso de Google y de otros buscadores. Fue muy práctico, por lo que ha sido de los cursos más completos que he llevado.*)

I learned a lot of new tools, ways to make better use of time at work; how to do more productive searches... I learned a lot about the Internet and I found many ways to utilize the Internet in favor of journalism. (*He aprendido muchas herramientas nuevas, formas de hacer mejor uso del tiempo en mi trabajo, formas de realizar búsquedas más productivas... Avancé mucho en mi conocimiento de la Internet y encontré muchas maneras de utilizar la Internet en favor del periodismo.*)

Practically everything [was applied to daily work] . . . but mainly information searches, official information, photo archives and cross referencing of data for investigation... Video conversion in you tube with free tools was interesting, also uploading them, something that I will apply shortly... (*Prácticamente todo. pero principalmente la búsqueda de datos, información oficial, de fotos de archivos, y cruzamiento de datos para una investigación...La conversión de videos en you tube con programas gratuitos es interesante, como también subir los mismos, algo que aplicaré en el corto plazo...*)

Thalia found two topics important for her journalistic work: “The topic of filtering Google searches. There was a digital tool that fascinated me and it was the one about how

to send large photos files. This has been great for me. (*El tema de las búsquedas más específicas en Google. Hubo una herramienta que me fascino y es en los portales para enviar fotografías de gran tamaño. Eso ha sido, para mí, lo máximo.*)” She continued to describe how great this digital tool was for her work:

For me it was very useful for when I need to send photographs when I am in another location in my country working and I have to send photographic material. Oh! That has been for me extremely useful. It is a tool that I quickly started using because I also get large files so when I get the email with the link I am not afraid to open it – how to manage it—how to download the files. Oh, that! I loved it! (*Entonces para mí ha sido de gran utilidad sobre todo cuando tengo que mandar fotografías cuando estoy en otro lugar de [nombre de país] trabajando y tenemos que mandar material fotográfico. Uy! Eso ha sido para mí de gran utilidad. Es una herramienta con la que, con la que me relaciono muy fácil porque a mí también me llegan materiales en alta capacidad entonces cuando que me llegue el correo con el enlace no me da medio abrirlo. O sea como manejarlo. O sea como descargar el material. Eh, eso, uy! Me gusto muchísimo.*)

For the second week, the thread with the highest posts had 38 posts and focused on the use of hash tags in Twitter. There was another 36-post thread focused on the use of Facebook for news searches. The third thread with the most posts had 34, and it was about comparing two resources dedicated to image searches. Journalistic work requires the use of photographs and images, so finding tools that assist in this task are invaluable in carrying out their daily work tasks.

For the third week, the thread with the highest posts had 44 posts and focused on the use of a database to search for property owners. The second highest thread had 41 posts and also focused on a U.S. governmental database. The third most popular thread had 37 posts and focused on searching archived web pages. For the fourth week, the thread with the highest posts had 40 and focused on adding text to a graphic. The second

highest had 36 posts and focused on creating a logo graphic. The third thread with the most posts had 35 and dealt with using a tool to convert documents.

All of the most popular threads contained exercises that helped students learn how to use tools by simulating similar tasks and skills that they needed to accomplish their journalistic work in their professional lives. The discussion forums were not mandatory. However, because the exercises were relevant to students' lives; this generated interest and participation.

Joanna discussed the usefulness for searching databases and more importantly for her, learning how to filter Google searches:

Lately, for example Google search, which is one of the ones that everyone uses as a Google search engine but that in this course how to filter your searches was much easier. I refine them [searches] much more. I know how to find much easier and to avoid millions of pages in my results. *(Últimamente por ejemplo la búsqueda de Google son como que todo el tiempo son digamos como uno que mas usa como buscadores Google pero quizás en ese curso como filtrar mucho mas la búsqueda fue mucho más fácil. Yo las filtro mucho más. Sé cómo encontrar mucho más fácil que no me salgan mil millones de páginas....)*

Antonio in addition to finding tools to present data visually, he also pointed out that creating mosaics was also useful for him:

So, what I liked the most from the course were the tools for presenting information from data--ways to present information in graphs. I use the tools that create photographic mosaics a lot. *(Entonces, de lo que más me gusto del curso-- las herramientas para presentar informaciones basadas en datos. Es decir, las tablas, las formas de presentar, es de posible una de las que más uso--las herramientas de presentar en tabla. Las herramientas de composición de mosaico fotográfico las uso bastante.)*

In Week 5, the thread with the highest posts had 70 posts by 46 students. This was the thread with the most posts in this week's forum but also for the entire forum discussion. The thread was the only required exercise in the course and the only thread in

which more than one student posted several times. There were two threads with 24 posts, which made them the second most popular threads for the last week. One thread focused on creating mosaics and another on editing photographs.

Overall, the last week had the least number of posts. The topic for the last week of the course focused on the semantic web and less practical concepts such as the semantic web and how the Internet functions. These topics were not as practical as earlier topics such as using online tools and search engines. Two students, Antonio and Joanna discussed how much they disliked the final week because it was not as practical as what they had experienced earlier. For Joanna, this was the week she liked the least because she described herself as being “more pragmatic (*más pragmática*),” and the week was more focused on theoretical concepts. Antonio never understood the last week. He also considered the last week less practical:

Perhaps it was because it wasn't something that we're currently facing. It was the semantic web [least liked topic] which was something that I tried to understand. I more or less got the idea of a web oriented more towards knowledge than information, something more intuitive as the instructor explained. However in that moment I couldn't find any practical utility for it—that was the part [that I liked the least]. (*Quizás fue porque no fue algo que tenemos que afrontar actualmente. Pero lo de la web semántica eh, como que fue algo que yo trate de entenderlo eh o más o menos capte la idea de una web dirigida mas al conocimiento que la información algo mas intuitivo como decía la instructora pero de por sí como que aun al momento actual como que no le encontraba la utilidad práctica--eso te puedo decir que esa parte.*)

Not every exercise may have had relevance to students in the moment they were taking the course. However, Ramona pointed out that she was glad she completed some of the exercises that at the time for her were not practical. She explained:

I can't complain about anything [about the course] because even those exercises that were not that fun I later understood that they were very useful because for

example there were exercises about math which I don't like at all but it was useful for me to do them [exercises] because at a certain point I had to do something connected to math for my job. *(No, no me puedo quejar de nada [sobre el curso] porque incluso aquellos ejercicio que no me divertían tanto luego entendí que eran muy útiles porque por ejemplo había unos ejercicios vinculado con matemáticas que no es mi fuerte no me gusta pero me sirvió hacerlos porque de hecho en algún momento necesite este hacer alguna cosa vinculada con matemáticas para mi trabajo.)*

Threads with exercises that focused on tasks of high relevancy, practicality and usefulness for journalistic work resulted in the most popular threads. By creating exercises that engaged students in posting in the forums, the Instructor was able to create a space for students to interact with one another in the online discussion forums. As I have previously discussed, students that reported high degree of participation in the online discussion forums were more likely to participate in online activities external to the online course. The exercises encouraged students to participate in the forums and therefore, offer students opportunities to interact with their classmates and form connections. It was these connections between students that created interest in continued interaction outside of the online course through online technology communication tools such as Facebook and Twitter, among others.

Conclusion

The development of student activities in spaces external to the course were initiated and supported through the interactions of students within the online course forums. The main types of activities established voluntarily by students outside the course occurred through Facebook and Twitter. Students that reported consistent participation in the online course forums were more likely to participate and interact with classmates in online activities external to the online course. However, relevant exercises

in the discussion forums engaged students to participate. Student participation in the forums allowed for interaction with classmates and sharing of online identity information that facilitated the creation of OAEOC. When the online course ended, participant interactions in the Facebook group also ended. However, participants continued to interact in different ways with classmates through their Facebook personal profiles and through other online technology communication tools, such as Twitter, and LinkedIn where they had established connections.

CHAPTER FIVE: DISCUSSION

The following section discusses the research study's trustworthiness, limitations, implications, and future research paths.

Instructor Role in Supporting Participation in Online Discussion Forums

One of the challenges in online discussions is creating a setting in which students are motivated to participate. Literature discusses the importance of the instructor role in supporting students' participation in online discussion forums (Salmon, 2002; Palloff & Pratt, 1999). The results of the present study have revealed a paradox. In the present study, the interactions in the forums were overwhelmingly student-driven. Three percent of the posts were by the Instructor while 97% of posts were by students. Despite the low participation of the Instructor, students continued to post and interact throughout the course. A possible explanation is the manner in which the Instructor participated in the course: creating discussion threads centered on professionally relevant exercises, posting only when necessary and/or creating social presence through opening video lectures and posts. These reasons are hypotheses and need to be further researched.

Further research on the role of the instructor in online discussion forums is important because of the recent interest in massive online open courses (MOOCs) (Pappano, 2012). A concern of MOOCs is the challenge of instructor-student interaction because of the massive size of MOOCs, which can include thousands of students. The current study illustrates that even with extremely low instructor participation in online discussion forums, there is evidence of students engaged in the online discussion forum activities. Further research is needed to determine how student-student interactions

develop when there is low instructor participation in courses with high number of students. While the online course for the present study did not have thousands of students as typical MOOCs do, at the time the online course was offered, the acceptance of 100 students was considered a high number. The Instructor's use of relevant exercises to engage students in interaction with other students in the discussion forums served as an effective way of facilitating discussion without the need for constant instructor scaffolding. Relevant exercises may serve as a useful pedagogical strategy for MOOCs to encourage interaction between students in discussion forums without need of high participation from the instructor.

Supporting Discussion Forum Participation through Relevant Exercises

Professionally-relevant exercises helped engage some students in the course forum discussions. Mondays were the days when the Instructor posted the video introduction for the week and posted the exercises in the online discussion forum area for the week. Antonio described how he felt every Monday morning, "...I was anxious waiting for the Monday to come around so that I could start commenting [posting]... (*...estaba ansioso por que llegara el lunes para volver a comentar...*).” The weekly forum discussions were not a requirement to obtain the certificate, yet students participated each week. Those students who participated seemed to do so because of the relevant practical exercises posted by the Instructor. The threads with the most student participation (i.e., posts) concerned topics focused on the use of search engines and tools for formatting and sending large files. The exercises provided relevant and current digital tools that students, most of whom were working journalism professionals, could readily

and immediately apply to their day-to-day work tasks and professional lives. At a midsize Midwestern University, Decker and Cox (n.d.), surveyed students and then conducted focus groups to find out what students thought about online discussion. Decker and Cox (n.d) discovered the online discussion topic must be relevant, “Questions that have relevancy to the students, whether in their immediate lives or that they can connect to their future, will elicit higher participation” (p. 5). For the present study, the practical useful exercises drew students to complete the exercises and post about their experience and/or outcomes. By posting in the forum discussions, students had opportunities to interact with other classmates and possibly form connections. Student connections in the online course forums were the source of OAEOC. Although not a research question for the present study, student participation in discussion forums and student-student interactions could lead to the development of an online community.

Online Learning Communities

A learning community is a group of individuals that seek to collectively share and leverage their expertise in order to bring understanding and knowledge for a common purpose or goal (Kilpatrick, Barrett & Jones, 2009). The online course in the present study might be perceived to be a learning community because students came together for the purpose of learning about digital tools for journalism. Social presence is defined as the “measure of the feeling of community that a learner experiences in an online environment” (Tu & McIsaac, 2010). A key part of creating social presence is interaction. The development of community within an online course begins with interaction. A future research topic could involve examining the degree to which online courses, such as the

one studied here, contain characteristics of learning communities and the relationship of these characteristics to the possible existence or development of OAEOC.

Privacy and Sharing within an Online Course Platform

The fact that students formed OAEOC, which drew them into other online environments that are not sanctioned by the sponsoring educational institution, may raise privacy concerns for instructors and administrators. Student privacy is an issue that educational institutions maintain through the Family Educational Right and Privacy Act (FERPA), “a Federal law that protects the privacy of student education records” (US Department of Education, 2012). The law also gives certain rights to students, such as reviewing their school records and requesting an amendment if there is inaccurate information contained in them. FERPA also governs learning management systems (LMS) (e.g. Moodle and Blackboard) that are maintained and administered through a formal educational institution. FERPA does not govern online activities external to the online course that are not formally sponsored or supported by an educational institution. However, due to the seamlessness of technology communication tools, students that participate in OAEOC may assume that they are still operating under a FERPA-regulated privacy and protection. General technology community tools, like Facebook, LinkedIn, and Twitter, have their own terms of use and privacy rules. Students enrolled in online course management systems like Blackboard and Moodle, can contact other classmates via the LMS platform without making their contact information public. However, throughout this online course, there were many examples of students posting personal online and offline identity information like email, physical addresses, and even cell phone

numbers within the LMS discussion forums, viewable by any classmate visiting the thread. While students can self-disclose this personal information, instructors cannot, by FERPA law, release this type of personal information to classmates. Technically, for students to connect with each other in technology community tools outside an online course system, students need to explicitly share their personal online identities and/or contact information with others. Students in online classes may mistakenly believe that their subsequent online activities external to the online course, such as posts to public sites like Facebook or LinkedIn, are protected, kept private or away from public view, much like their contributions to a university-sponsored LMS. Unfortunately, assurance of privacy cannot be guaranteed and is governed by social networking tools such as Facebook and Twitter. Any tool that is not housed within the official university course LMS platform may not be secure. Students who are less familiar with online environments may not understand this distinction. Therefore, instructors might need to make it explicit to students that their privacy and rights to privacy may be at risk if they connect outside of the online course using tools that are not housed or managed by the education institution.

According to the National Association of Graduate Admissions Professionals (NAGAP) Social Media Report (2012), “Standard policies were much more common for social networking sites (42%) [e.g., Facebook] than free online applications (20%) [e.g., Youtube, Google Docs] but most universities did not currently have policies or procedures in place for either category” (pg. 9). Over 90% of those that had policies,

reported that “FERPA played a role in their procedures regarding personal student information and how it is shared online” (pg. 11).

Student information in online activities external to the course may not be protected under FERPA, especially if the OAEOC are not on university servers. Students need to be made aware of their privacy, especially when they are sharing personal information. If instructors want students to interact outside of the online course, they should clarify that any external activity outside of the official course platform is not subject to university rules and policies. Each social networking tool has its own policies and practices regarding privacy and sharing of users’ information. Any student using online tools must be well versed in 21st century literacy skills. The New Media Consortium (2005) defines 21st century literacy skills as:

...the set of abilities and skills where aural, visual and digital literacy overlap.

These include the ability to understand the power of images and sounds, to recognize and use that power, to manipulate and transform digital media, to distribute them pervasively, and to easily adapt them to new forms. (p. 2)

However, Jenkins, Clinton, Purushotma, Robison and Weigel (2007) point out:

...the new media literacy should be seen as social skills, as ways of interacting within a large community, and not simply an individualized skill to be used for personal expression. (p. 19)

Students cannot be superficial users of digital tools and the Internet. Students must develop the skills to become conscious of their choices so that they can make informed decisions but they also become active participants. To this end, the way

teaching is enacted must also change to support the development of these skills in students.

Trustworthiness

To establish construct validity, multiple sources of evidence were used such as interview data, online chats, and data from discussion forums (Yin, 1994). Additionally, a chain of evidence was maintained through the building of a database of the data collected including researcher notes, memos and notes of analysis. Trustworthiness of the research study increases as more time is spent at the site. As a course assistant, I spent an estimated ten to fifteen hours per week over a period of nine weeks within the research site, the online course, when the course originally took place, including two weeks creating the course and two weeks concluding the course. Course preparation tasks included copy editing, formatting and uploading content. Course conclusions tasks included preparing the evaluation report and sending certificates. I revisited the content of the course and analyzed the data collected for the present study, adding to the time spent with the research site.

The generalizability of the research study is dependent upon the reader. This case study is specific to an online course within a certain context: five weeks long, fully online, and targeted at journalists learning online tools for journalism work. The reader can extract the relevant information and outcomes based on their own experiences and purposes by reading the study. Some outcomes of the study can be relevant to the field of online distance education, journalism educators, and the use of social networking tools to support lifelong learning.

Limitations

A limitation of the study is that the I did not collect information on individual students as they participated throughout the online course. Data from the course were collected and analyzed at the group level after the course was completed and archived. The small sample of research study participants, eleven, was about 10% of the total students accepted into the online course. To mitigate these limitations, different sources of data were used in order to assist in building the case study.

A challenge for this research study was the availability of study participants. The study participants were working journalists, whose schedules were prohibitively full. The following excerpts depict the difficulty in recruitment and establishing interview times.

Antonio was able to participate in an interview because his daughter was with a babysitter and his wife was traveling. Antonio explained further:

And you must know, that for example, it is difficult for an active journalist to connect to a long chat—to be in the editorial room because regularly, for example, I work at a place that has three or four daily broadcasts. They are about an hour long. We receive a lot of news leads via phone. In the morning there's only seven journalists working the beat. We are only two people in charge of the department, one does not have time. For example, if I had tried to have this conversation with you, in addition to having to battle against the noise and with the phone and everything else, from the editing room, I would also have had to be aware that I would be interrupted a lot. It would've been an issue if it [the research interview] was taking place all morning. I would not have been able to answer all of your questions. *(Y tú sabes que por ejemplo es difícil para un periodista activo conectarse a durar mucho tiempo en un chat eh de estar en redacción porque regularmente en por ejemplo en el que fue de redacción que yo trabajo es de un medio con tres emisiones con cuatro emisiones diarias. Eh, entre media hoy una hora en cada una. Eh, que recibe muchas denuncias telefónicas--que tiene--en la mañana nada mas hay siete perio--siete equipo de periodistas en la calle-eh y todo eso. Y nada mas somos dos personas al cargo del departamento uno no tiene tiempo---por ejemplo si yo hubiera tratado de tener esta conversación contigo además de tener que estar luchando con el ruido y con el teléfono y con todo lo demás eh, desde de la redacción también hubiera tenido*

que tener pendiente que iba tener muchas interrupciones. Hubiera asido un asunto que si era la mañana entera no pudiera podido contestar todo tu cuestionario.)

Joanna had a broken leg and was recovering at home. She pointed out, “Sometimes, for example, I have a schedule that is super complicated because I work in a newsroom but not today because I have a broken leg.... (*A veces por ejemplo yo tengo un horario que esta híper complicado acá que trabajo en un noticiero ahora no porque estoy con mi pierna rota...*).” Finally, there was a student who agreed to participate in the study but was not able to do the interview, even after rescheduling twice. Despite the small number of study participant interviews, the value of this present study and its contributions to the field of online learning, especially as it pertains to the population of working journalists, cannot be underestimated.

Implications

The findings of the present study hold implications for practice and learning. For practice, strategies are discussed to encourage OAEOC. For learning, OAEOC within the context of learning communities is discussed. OAEOC assists students in their process of lifelong learning.

Practical Ways to Encourage OAEOC

Through planning and instructional design, instructors and designers can work to support online activities external to the course through the goals and objectives of the online course instructor. If an instructor wants students to create their own activities outside of the course with other classmates, the instructor can serve as a model. The instructor can model sharing and connecting through social networks by sharing their

own online identities within the course. A course needs to impart the discovery of knowledge in a manner that students feel the knowledge is useful and practical and is valuable far beyond the ending of the course. As the current research study has demonstrated, students' online experiences can influence their willingness to participate in online activities external to the course. The interactions with classmates assisted in forming connections and germinated a desire to continue connecting external to the course. In the present study, providing relevant exercises helped students engage in course discussion forums, however, other pedagogical strategies can include group discussions (about five participants) to allow students to know each other (Decker & Cox, (n.d.). Through online activities such as joining online social networks, students can extend their online course experiences and support their own lifelong learning.

OAEOC for the Support of Life Long Learning

OAEOC is an untapped strategy for supporting students' lifelong learning. For this study, lifelong learning is defined as the continual learning processes in every aspect of a person's life. As part of a person's continual learning processes, different tools can be used to support learning activities. In distance learning, these can be the Internet and any set of digital tools students find useful to attain their learning goals. The life of an online course may end when the course closes and is no longer available for access. However, online students' abilities to communicate and continue the conversation beyond the closing of a course (for those that participated in these activities) extend the experience of the online course. In the present study, students took ownership of their

course experience and extended it through online social networking tools by creating a group in Facebook and establishing a Twitter list.

Student-created online groups can also become a learning community that can support lifelong learning goals of its members. Online learning communities can also support lifelong learning because they can offer supportive spaces that can be modified to fit the needs and goals of the members. In the example of the Facebook group, students came together for the purpose of continuing similar conversations as to what they were experiencing in the online course and to share information about the online course. Eventually, the course ended and so did the Facebook group; however, Facebook, as a technology tool, continued to support individual student's self-directed learning and professional goals. For example, Reyna completed a writing project by soliciting classmates' assistance via Facebook messages. Antonio helped a classmate with a story idea and Mari was able to solicit information she needed through Facebook as well. When OAEOC brings together students for a common purpose and makes use of members' expertise, then these student-created groups can serve as a type of community for its members.

Future Research

As a result of this study, I envision two different future research inquiries. The first inquiry would be guided by the following research questions: a) Is there a relationship between the existence of a learning community in the formal online course and the creation/sustenance of online activities external to the online course? b) How does the culture created by the students in the online course transfer to the established

online activities external to the course? c) How does the instructor role influence the development of a learning community? In addition to inviting all of the students in the online course to participate in interviews, I would obtain the permission to gather individual data from the online course for those that are interviewed. The goal would be to “follow” interviewees’ experiences in the online course and create individual case studies of students. Data analytics for the interview participants would be requested to also track their activities in the course and create detailed cases. This would allow me to reconstruct the students’ experiences as they participated in the creation of artifacts, socially constructed knowledge with others and developed their own online presence and sense of identity within the course.

The second research inquiry compares two online courses with specific characteristics. The first course follows similar pedagogical practices as in the current study, and the second course’s discussion activities would be mandatory and joining a social networking tool at the end of the online course would be highly recommended by the instructor. The guiding research question is: In what ways do the two courses differ in terms of discussion quality and participation in online activities external to the course? Data would be gathered through participant interviews, online course materials, and discussion forums. The goal of these two research studies is to explore the importance of sense of community and the pedagogical strategies that can be used to support it in addition to how sense of community can influence or support online activities external to the online course. As discussed earlier, researching the target population is a daunting challenge because of journalists’ hectic lives.

Conclusion

This research investigated why and how students who enroll in fully online distant courses participate in online activities external to the formal online course (OAEOC) at any point during or after the course with other classmates. As the analysis of the research process concluded, another important question emerged: What motivated the students to continue interacting throughout the online course, and continue connecting throughout the online external activities to the course, and for at least one student, culminate the initial online contact with another classmate into a face-to-face meeting? Perhaps, the face-to-face meeting is not a culmination but just another facet of the same experience: human connection. The answer may not rest solely on the technology tools or the pedagogical strategies but the unique person-to-person connections made between students that make all the difference in motivating students to keep nurturing those connections through whatever means are available to them in the present moment.

The research study is likely the first to focus on this specific phenomenon; therefore, more studies are needed to expand on different aspects of the phenomena such as the role of the instructor, pedagogical strategies that engage students in creating OAEOC and the different online tools used to support OAEOC. The continued growth of online learning, the popularity of MOOCs and the continual emergence of online technology tools will influence how OAEOC takes shape and continues to manifest.

APPENDIX A: RESEARCH MATRIX

Research Question	Data Sources	Specific data to answer this question	Analysis Required	What will this allow me to say?
General Question 1: What is the nature of student online activity that is external to the distance course?	Student Interviews, Online Course Archives, Memos	Student perceived course experiences, Memos	Interpretive memos	The nature of the student online activity external germinated through X, Y and Z.
<i>Sub question 1a:</i> How does the online activity external to the course unfold?	Student Interviews	SIQ7a-f, 8a,8b, 9a-f, Student perceived course experience	Interpretive memos	As the course unfolded, over half participated in the main forum discussions each week and they realized that they wanted to communicate outside of the course. One student decided to create a FB group and invited others. Gradually as word spread, more joined the FB group.
	Online Course Archive	Forum Discussion/ Archived Chats	Interpretive memos	During the last week, several students lamented the course ending and other students suggested keeping in contact after the course end.
<i>Sub question 1b:</i> Why do the distance students participate in online activities external to the distance course?	Student Interviews	SI Q8, 8b, 9b,9c	Open Coding	Student cited several reasons for continuing to communicate after the courses ended such as X, Y, Z. (I'll then add quotes, further explanation.)
	Online Course Archive	Forum Discussion/	Interpretive memos	The discussions revealed to main reasons: students wanted to continue discussing the

		Archived Chats		course topics and keep in contact for future networking.
<i>Sub question 1c:</i> What kinds of online external distance course activities get established voluntarily?	Student Interviews Online Course Archive	SI Q8a,8c, 9a-c Perception of participation in online activity external to the distance course Forum Discussion/ Archived Chats	Open Coding Interpretive memos	Twelve of the twenty-two students that joined the FB group agreed to join the group prior to the course ending after discussing several other options. In the last week of the course, several students discussed gathering outside of the course because they discussed the benefit of continued interaction.
<i>Sub question 1d:</i> What are the technology support systems for the students' online activities external to the course?	Student Interviews Online Course Archive	SI Q8c & 9d Technology Choice Forum Discussion/ Archived Chats	Open Coding Review of forums/ Interpretive memos	After discussing several options, students agreed to use one online tool for communication. Students discussed establishing an email list serve and Facebook as options but ultimately decided on Facebook.
Sub question 1e: What do the students do within these technology support systems?	Student Interviews	SI Q8d,f&g, 9e	Open Coding	Through interviews students revealed that the technology support systems were used mainly to exchange resources on topics of interest and to network.
<u>General Question 2:</u> How do students' online course experiences influence students' participation in external online	Student Interviews	SI Q7a-f, 8b,9b	Open Coding	Of those that did participate in the external activity, three main course experiences influenced a student's participation: 1) participation in answering the weekly exercises 2) chatting with others in the student lounge and 3) and desire to continue communicating

course activities?	Online Course Archive	Archived Forum Discussion/ Archived Chats	Interpretive memos	with other students in the course. The top three themes of the archived forum discussions centered on networking, sharing resources and answering assignment questions.
<i>Sub question 2a:</i> What is the nature of the interactions occurring within the different discussion forums and chats (if any) during the online course?	Online Course Archive	Archived Forum Discussion/ Archived Chats	Interpretive memos	For the first week, all except the formal discussion forum, dealt with students greeting each other or the instructor. In the first week, the formal discussion forum for the course had some posts dealing with introductions of students; however the majority of the posts were answering the week's assignment.
<i>Sub question 2b:</i> How are the patterns of interaction related to online activity external to the course, if any?	Archived forum discussion, student chats	Archived Forum Discussion/ Archived Chats	Interpretive memos	[This might look very similar to 2a.] Overwhelmingly, those that participated in online external activity also participated in the weekly forums as compared to those that did not participate in the course and online external activity to the course. In interviews, subjects mentioned the high participation of other students in the forums made them want to stay connected beyond the course.

Data Sources: Student interview questions (SIQ), course forum discussions (CFD), forum themes/topics and archived chats.

APPENDIX B: INTERVIEW PROTOCOL

Distance Student Semi-Structured Interview Questions

- 1) Please take a moment to think back to course <insert course name>. What do you recall most vividly from the course?
- 2) How many online courses have you taken prior to taking this course?
- 3) Can you describe your social networking experiences prior to starting this course?
- 4) Why did you decide to apply for the online course?
- 5) Please describe your ability with computers.
- 6) Please describe your ability with the Internet.
- 7) Please describe your experiences as an online student during the course.
 - a. How often did you participate in the forum discussions?
 - b. Did you review all the course materials for each week?
 - c. How many hours a day/week did you spend on the course?
 - d. From where did you access the course from?
 - e. What was the best part of the course?
 - f. What was not the best part of the course?
- 8) During the online course, did you participate in any online activity outside of the course, with others from the same course, which was not a regular part of the course? [If the subject says they did not participate in online activity external to the course during the course, then I will continue with question 9.]
 - a. If so, how did this begin? How are you communicating?

- b. Why did you decide to communicate within an online environment outside of the course while the course was taking place?
 - c. What technology did you decide to use for this communication?
 - d. What kinds of exchanges or activities did you participate in or see others do?
 - e. Did you continue to participate with others now that the course has ended?
 - f. If yes, what kinds of exchanges or activities did you participate in?
 - g. If yes (to question e), what kinds of exchanges or activities did you see others do?
 - h. If not, why not?
- 9) Did you participate in any online activity external to the course with other students from the same course after the course ended? [If the subject says they did not participate in any online activity external to the course after the course ended, then I will continue with question 10.]
- a. If so, how did this begin? How are you communicating?
 - b. Why did you decide to participate in this online activity?
 - c. Prior to the course ending did you already agree to continue being a part of an online activity after the course ended that would be outside of the course?
 - d. What technology did you decide to use for activity, if you did?
 - e. How are you communicating with others now that the course has ended?
 - f. If not, why not?

- 10) If you did not participate in any type of online activity external to the course with other students from the same course, why did you decide not to participate?
- 11) Did you know the online activity existed?
- 12) Is there anything else you would like to add about your online course experience?

APPENDIX C: IRB APPROVAL LETTER



OFFICE OF RESEARCH SUPPORT

THE UNIVERSITY OF TEXAS AT AUSTIN

P.O. Box 7426, Austin, Texas 78713 (512) 471-8871 -FAX (512) 471-8873
North Office Building A, Suite 5.200 (Mail code A3200)

FWA # 00002030

Date: **04/19/11**

PI(s): **Rachel E Barrera** Department & Mail Code: **CENTER FOR TEACHING & LEARNING**

Title: **Extending the Online Distance Course: Online Student Activity beyond the Online Classroom**

IRB EXPEDITED APPROVAL: IRB Protocol # 2011-01-0021

Dear: **Rachel E Barrera**

In accordance with the Federal Regulations the Institutional Review Board (IRB) reviewed the above referenced research study and found it met the requirements for approval under the Expedited category noted below for the following period of time: 04/19/2011 - 04/18/2012. *Expires 12 a.m. (midnight) of this date.*

Expedited category of approval:

- (1) Clinical studies of drugs and medical devices only when condition (a) or (b) is met. (a) Research on drugs for which an investigational new drug application (21 CFR Part 312) is not required. (Note: Research on marketed drugs that significantly increases the risks or decreases the acceptability of the risks associated with the use of the product is not eligible for expedited review). (b) Research on medical devices for which (i) an investigational device exemption application (21 CFR Part 812) is not required; or (ii) the medical device is cleared/approved for marketing and the medical device is being used in accordance with its cleared/approved labeling.
- (2) Collection of blood samples by finger stick, heel stick, ear stick, or venipuncture as follows: (a) from healthy, non-pregnant adults who weigh at least 110 pounds. For these subjects, the amounts drawn may not exceed 550 ml in an 8 week period and collection may not occur more frequently than 2 times per week; or (b) from other adults and children², considering the age, weight, and health of the subjects, the collection procedure, the amount of blood to be collected, and the frequency with which it will be collected. For these subjects, the amount drawn may not exceed the lesser of 50 ml or 3 ml per kg in an 8 week period and collection may not occur more frequently than 2 times per week.
- (3) Prospective collection of biological specimens for research purposes by Non-invasive means.
Examples:
 - (a) hair and nail clippings in a non-disfiguring manner;
 - (b) deciduous teeth at time of exfoliation or if routine patient care indicates a need for extraction;
 - (c) permanent teeth if routine patient care indicates a need for extraction;
 - (d) excreta and external secretions (including sweat);

- (e) uncanalulated saliva collected either in an un-stimulated fashion or stimulated by chewing gumbase or wax or by applying a dilute citric solution to the tongue;
 - (f) placenta removed at delivery;
 - (g) amniotic fluid obtained at the time of rupture of the membrane prior to or during labor;
 - (h) supra- and subgingival dental plaque and calculus, provided the collection procedure is not more invasive than routine prophylactic scaling of the teeth and the Process is accomplished in accordance with accepted prophylactic techniques;
 - (i) mucosal and skin cells collected by buccal scraping or swab, skin swab, or mouth washings;
 - (j) sputum collected after saline mist nebulization.
- (4) Collection of data through noninvasive procedures (not involving general anesthesia or sedation) routinely employed in clinical practice, excluding procedures involving x-rays or microwaves. Where medical devices are employed, they must be cleared/approved for marketing. (Studies intended to evaluate the safety and effectiveness of the medical device are not generally eligible for expedited review, including studies of cleared medical devices for new indications).
Examples:
- (a) physical sensors that are applied either to the surface of the body or at a distance and do not involve input of significant amounts of energy into the subject or an invasion of the subject's privacy;
 - (b) weighing or testing sensory acuity;
 - (c) magnetic resonance imaging;
 - (d) electrocardiography, electroencephalography, thermography, detection of naturally occurring radioactivity, electroretinography, ultrasound, diagnostic infrared imaging, doppler blood flow, and echocardiography;
 - (e) moderate exercise, muscular strength testing, body composition assessment, and flexibility testing where appropriate given the age, weight, and health of the individual.
- (5) Research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for non-research purposes (such as medical treatment or diagnosis). (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.101(b)(4). This listing refers only to research that is not exempt).
- (6) Collection of data from voice, video, digital, or image recordings made for research purposes.
- (7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies. (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.101(b)(2) and (b)(3). This listing refers only to research that is not exempt).
- Use the attached approved informed consent.
- You have been granted a Waiver of Documentation of Consent according to 45 CFR 46.117 and/or 21 CFR 56.109(c)(1).
- You have been granted a Waiver of Informed Consent according to 45 CFR 46.116(d).

Responsibilities of the Principal Investigator:

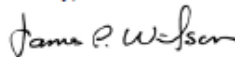
1. Report immediately to the IRB any unanticipated problems.

Responsibilities of the Principal Investigator:

1. Report immediately to the IRB any unanticipated problems.
2. Submit for review and approval by the IRB all modifications to the protocol or consent form(s). Ensure the proposed changes in the approved research are not applied without prior IRB review and approval, except when necessary to eliminate apparent immediate hazards to the subject. Changes in approved research implemented without IRB review and approval initiated to eliminate apparent immediate hazards to the subject must be promptly reported to the IRB, and will be reviewed under the unanticipated problems policy to determine whether the change was consistent with ensuring the subjects continued welfare.
3. Report any significant findings that become known in the course of the research that might affect the willingness of subjects to continue to participate.
4. Ensure that only persons formally approved by the IRB enroll subjects.
5. Use only a currently approved consent form, if applicable.
Note: Approval periods are for 12 months or less.
6. Protect the confidentiality of all persons and personally identifiable data, and train your staff and collaborators on policies and procedures for ensuring the privacy and confidentiality of subjects and their information.
7. Submit a Continuing Review Application for continuing review by the IRB. Federal regulations require IRB review of on-going projects no less than once a year a reminder letter will be sent to you two months before your expiration date. If a reminder is not received from Office of Research Support (ORS) about your upcoming continuing review, it is still the primary responsibility of the Principal Investigator not to conduct research activities on or after the expiration date. The Continuing Review Application must be submitted, reviewed and approved, before the expiration date.
8. Upon completion of the research study, a Closure Report must be submitted to the ORS.
9. Include the IRB study number on all future correspondence relating to this protocol.

If you have any questions contact the ORS by phone at (512) 471-8871 or via e-mail at orsc@uts.cc.utexas.edu.

Sincerely,



James Wilson, Ph.D.
Institutional Review Board Chair

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